

UM-Flint Course Catalog • 2005-2007

## 2 THE UNIVERSITY OF MICHIGAN-FLINT

## THE MISSION OF THE UNIVERSITY OF MICHIGAN-FLINT

The University of Michigan-Flint, one of three campuses of the University of Michigan, serves the citizens of the city of Flint and the surrounding region. We are committed to the highest standards of teaching, learning, scholarship, and creative endeavors. Our urban location affords us an opportunity to provide a University of Michigan education to students with varied life experiences. The community is invested in our University, and together we work to enhance the cultural, economic, intellectual, and social vitality of the city and region. Rooted in the historic tradition of excellence of the University of Michigan, we offer bachelor's and graduate degree programs in the liberal arts and sciences and in a number of pre-professional and professional fields.

The mission of the University of Michigan-Flint is to be the leading university in our region by:

- Educating all students in an environment that emphasizes literacy, critical thinking, and humanistic and scientific inquiry, while guiding their development into thoughtful and productive citizens and leaders.
- Facilitating student participation in the learning process and promoting individual attention to students through small class size and an involved faculty and staff.
- Assuring that faculty and staff give all those in our diverse student population the necessary guidance, support, and encouragement to achieve their academic goals.
- Enabling faculty to achieve high quality scholarship in areas of basic and applied research and creative activity.
- Promoting respect and understanding of human and cultural diversity.
- Collaborating with local and regional educational institutions and other public and private organizations to provide access to academic programs; advance economic, cultural, and artistic interests; and enhance health and education in our region.


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Katherine E. White, Ann Arbor
Mary Sue Coleman, ex officio

## Policy Against Discrimination

The University of Michigan-Flint, as an Equal Opportunity/Affirmative Action employer, complies with applicable federal and state laws regarding non-discrimination and affirmative action, including Title IX of the Education Amendments of 1972 and Section 504 of the Rehabilitation Act of 1973. The University of Michigan is committed to a policy of nondiscrimination and equal opportunity for all persons regardless of race, sex, color, religion, creed, national origin or ancestry, age, marital status, sexual orientation, disability, or Vietnamera veteran status in employment, educational programs and activities, and admissions. Inquiries or complaints may be addressed to Human Resources and Affirmative Action, The University of Michigan-Flint, Flint, Michigan 48502-1950; (810) 762-3150.

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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 $\mathbf{3 0 0}$ to $\mathbf{4 9 9}$ are usually advanced undergraduate courses.

Courses numbered $\mathbf{5 0 0}$ 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:
$f \quad$ fine arts
$h \quad$ humanities
$n \quad$ natural science
$s \quad$ social sciences
Area option requirements form a part of the General Education Requirements. (See the "General Education" section for a complete listing of area options.)

Immediately following the number of credits or the General Education Requirement symbol is the designation for an area option requirement, also in italics:
ar analytic reasoning
cs cultural studies
$f l \quad$ foreign language
$v i \quad$ values inquiry
$w c$ foundations of western civilization
The italicized number immediately following the area option (e.g., ar2) gives the specific number of the category in which this course is found.

## 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 $A B C>N, A B C C->N$, $A B C D>N$, and $A B C D D->N$ 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/wc2.

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 $A B C>N$.

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 wc2 indicates that it fulfills a requirement in category 2 of the Foundations of Western Civilization area option.

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 |
| ART | Art |
| AST | Astronomy |
| BIO | Biology |
| BUS | Business |
| CAS | College of Arts and Sciences |
| CHM | Chemistry |


| CIS | Computer Information Systems |
| :--- | :--- |
| COM | Communication |
| CPL | Comparative Literature |
| CRJ | Criminal Justice |
| CSC | Computer Science |
| DAN | Dance |
| ECN | Economics |
| EDU | Education |
| EGR | Engineering |
| ENG | English |
| ENV | Environmental Studies |
| FOR | Foreign Languages |
| FRN | French |
| GEO | Physical Geography |
| GER | German |
| HCR | Health Care |
| HED | Health Education |
| HIS | History |
| HON | Honors |
| INT | International and Global Studies |
| ITL | Italian |
| JPN | Japanese |
| LAT | Latin |
| LIN | Linguistics |
| MES | "Middle Eastern" Studies |
| MGT | Management |
| MTH | Mathematics |
| MTP | Medical Technology |
| MUS | Music |
| NUR | Nursing |
| NSC | Nursing Support Course |
| PHL | Philosophy |
| PHY | Physics |
| POL | Political Science |
| PSY | Psychology |
| PTP | Physical Therapy |
| PUB | Public Administration |
| RPL | Resource Planning |
| RTT | Radiation Therapy |
| RUS | Russian |
| SAT | Substance Abuse Treatment |
| SCI | Science |
| SOC | Sociology |
| SPN | Spanish |
| SWK | Social Work |
| WGS | Theatre |
| Women's and Gender Studies |  |
|  |  |

## ACADEMIC CALENDAR*

| SUMMER TERM 2005 |  |  |  |
| :---: | :---: | :---: | :---: |
| June | 23 | Thursday | Open registration begins |
|  | 27 | Monday | Classes begin |
| July | 1 (10:30 p.m.) | Friday | Holiday recess begins |
|  | 4 | Monday | Holiday- Independence Day |
|  | 5 | Tuesday | Classes resume |
| August | 15 | Monday | Classes end |
|  | 16-17 | Tues-Wed | Examinations |
| FALL TERM 2005 |  |  |  |
| August | 29 | Monday | Open registration begins |
|  | 31 | Wednesday | Classes begin |
| September | 5 | Monday | Holiday- Labor Day |
| November | 22 (10:30 p.m.) | Tuesday | Thanksgiving recess begins |
|  | 28 | Monday | Classes resume |
| December | 12 | Monday | Classes end |
|  | 13 | Tuesday | Study day |
|  | 14-17, 19-20 | Wed-Sat, Mon-Tues | Examinations |
|  | 18 | Sunday | Commencement |


| January | WINTER TERM 2006 |  |  |
| :---: | :---: | :---: | :---: |
|  | 3 | Tuesday | Open registration begins |
|  | 9 | Monday | Classes begin |
|  | (classes cancelled, university open) |  |  |
| February | 25 (10:30 p.m.) | Saturday | Spring recess begins |
| March | 6 | Monday | Classes resume |
| April | 24 | Monday | Classes end |
|  | 25 | Tuesday | Study day |
|  | 26-29, May 1-2 | Wed-Sat, Mon-Tue | Examinations |
| May | 7 | Sunday | Commencement |

## SPRING TERM 2006

| May | 3 | Wednesday | Early registration begins |
| :---: | :---: | :---: | :---: |
|  | 8 | Monday | Classes begin |
|  | 27 (10:30 p.m.) | Saturday | Holiday recess begins |
|  | 29 | Monday | Holiday- Memorial Day |
|  | 30 | Tuesday | Classes resume |
| June | 26 | Monday | Classes end |
|  | 27 | Tuesday | Study Day |
|  | 28-29 | Wed-Thur | Examinations |
|  | SUMMER TERM 2006 |  |  |
| June | 27 | Tuesday | Open registration begins |
| July | 3 | Monday | Classes begin |
|  | 3 (10:30 p.m.) | Monday | Holiday recess begins |
|  | 4 | Tuesday | Holiday-Independence Day |
|  | 5 | Wednesday | Classes resume |
| August | 19 | Saturday | Classes end |
|  | 20 | Sunday | Study Day |
|  | 21-22 | Mon-Tues | Examinations |

## ACADEMIC CALENDAR*

|  |  | FALL TERM 2006 |  |
| :--- | :--- | :--- | :--- |
| August | 28 | Monday | Open registration begins |
| September | 30 | Wednesday | Classes begin |
|  | $1(10: 30$ p.m. $)$ | Friday | Holiday recess begins |
|  | 4 | Monday | Holiday- Labor Day |
| November | 5 | Tuesday | Classes resume |
|  | $21(10: 30$ p.m. $)$ | Tuesday | Thanksgiving recess begins |
| December | 27 | Monday | Classes resume |
|  | 11 | Monday | Classes end |
|  | 12 | Tuesday | Study day |
|  | $13-16,18-19$ | Wed-Sat, Mon-Tues | Examinations |
|  | 17 | Sunday | Commencement |


| January | 3 | Wednesday | Open registration begins |
| :--- | :--- | :--- | :--- |
|  | 8 | Monday | Classes begin |
| Monday |  |  |  |
| (classes cancelled, university open) |  |  |  |

## SPRING TERM 2007

| May | 2 | Wednesday | Open registration begins |
| :--- | :--- | :--- | :--- |
|  | 7 | Monday | Classes begin |
|  | $26(10: 30$ p.m. $)$ | Saturday | Holiday recess begins |
|  | 28 | Monday | Holiday -Memorial Day |
| June | 29 | Tuesday | Classes resume |
|  | 25 | Monday | Classes end |
|  | 26 | Tuesday | Study Day |
|  | $27-28$ | Wed-Thur | Examinations |

## SUMMER TERM 2007

| June | 26 | Tuesday | Open registration begins |
| :--- | :--- | :--- | :--- |
| July | 2 | Monday | Classes begin |
|  | $3(10: 30$ p.m. $)$ | Tuesday | Holiday recess begins |
|  | 4 | Wednesday | Holiday- Independence Day |
| August | 5 | Thursday | Classes resume |
|  | 18 | Saturday | Classes end |
|  | 19 | Sunday | Study Day |
|  | $20-21$ | Mon-Tuesß |  |

*This calendar is subject to revision.

## Introduction to the University

## Educational Objectives

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 40 concentration programs (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 , 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 Nursing, the Master of Science in Health Education, 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 MichiganFlint 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, IL 60602-2504, (312) 263-0456. Accreditation has also been awarded to various University of Michigan-Flint programs by the American Chemical Society, the International Association of Management Education, the National Association of Schools of Music, the National League for Nursing Accrediting Commission, the Commission on Collegiate Nursing Education, the Commission on Accreditation in Physical Therapy Education, the Council on Social Work Education, and the Council on Accreditation for Nurse Anesthesia Educational Programs.

As part of the accreditation process, the University of Michigan-Flint must design and implement assessment measures and report the results of the assessment process to its accrediting bodies and the public at large. Faculty members, as part of their academic positions, and students, in pursuit of their academic degrees, are expected to participate in the assessment process as implemented in their respective academic units. Information on assessment plans, including goals, methods and outcomes is available at http://assessment.umflint.edu.

## History

The establishment of the University of Michigan-Flint may be traced to 1944, when a University of Michigan Extension Office opened in Flint at the request of the Flint Board of Education. In 1946, University of Michigan President Alexander Ruthven advocated the establishment of "strategic centers" around the state to relieve enrollment pressures on the Ann Arbor campus. At the same time, certain key citizens of Flint, already planning the Flint Cultural Center, were also interested in the idea of higher education in the area. In 1947, the Regents of the University approved funds to explore the possibilities for higher education in Flint.

The Flint community responded with enthusiasm to the study, which called for the establishment in Flint of a four-year liberal arts college comparable to the College of Literature, Science and the Arts on the Ann Arbor campus; the city of Flint would supply the buildings and the land. In 1955, the Board of Regents approved the recommendation of University of Michigan President Harlan Hatcher for the creation of the Flint College of the University of Michigan, an upper-division program offering the junior and senior years of a four-year college education.

Charles Stewart Mott donated funds for a classroom and office building, and the Sponsors Fund of Flint donated funds for operating expenses. Agreements were made to share some facilities with the Flint Junior College (now Mott Community College). On May 20, 1955, Governor Williams authorized the enabling state appropriations for the establishment of the Flint College. An advisory planning committee was established in Ann Arbor, and its report recommended a liberal arts college with education and business administration components. In March 1956, David M. French was appointed as the first Dean of the Flint College of the University of Michigan, and the college
opened its doors on September 23, 1956, with 167 junior students. A senior year was added the following year.

As time passed, there was a call for major changes in the college. Initiative for change came from the Flint Board of Education, who proposed to the University of Michigan that it expand the senior college to a four-year institution. The Board of Regents adopted the proposal in 1964. In 1965, the first freshman class was admitted, making the Flint College the first four-year University of Michigan program offered outside Ann Arbor.

In 1970, the North Central Association of Colleges and Schools accredited the Flint College. In 1971, the Regents officially changed the name of the institution to the University of Michigan-Flint. That same year, University of Michigan President Robben Fleming appointed the first Chancellor of the University of Michigan-Flint, William E. Moran.

Chancellor Moran commissioned an Academic Planning Board to develop a master plan for the University of Michigan-Flint. The Board identified major areas of program development for the University, including professional and career-oriented programs which responded to needs in the University's service area.

Subsequent chancellors continued planning for the future growth of the university. These plans led to the establishment of graduate degrees, new academic units, new service units, WFUM-TV, our public broadcasting facility, and the physical expansion of the campus into downtown Flint and north of the Flint River. Today a faculty with over 370 full- and part-time members serves the 6,188 students who attend the University of Michigan-Flint.

Adapted from Partnership for Progress: A Strategic Plan for the University of Michigan-Flint

## Facilities

The facilities of the University of Michigan-Flint are housed on the 72-acre Riverfront Campus located on the north and south banks of the Flint River. Adjacent to the central business district, the Riverfront Campus affords students easy access to transportation, parking, and to downtown Flint. The carefully landscaped campus contains major green spaces, including Willson Park on the south edge of campus, and the river edge adjacent to Flint's Riverfront Park, a park and recreational area along the banks of the Flint River. Within easy walking distance of the campus is the Flint Cultural Center, which includes the buildings of the Charles Stewart Mott Community College, the Flint Institute of Arts, the Flint Institute of Music, Whiting Auditorium, Bower Theatre, Longway Planetarium, Sloan Museum, Arthur H. Sarvis Center, Pierce Cultural Center School and the Flint Public Library.

Initially, the Flint College of the University of Michigan occupied the Mott Memorial Building (MMB) on East Court Street, built in 1956 and made possible by a generous grant by Charles Stewart Mott in memory of his parents.

The Classroom Office Building (CROB), the first building on the Riverfront Campus, in October 2000 was renamed David M. French Hall, in honor of the University's founding dean. French Hall contains general purpose classrooms, faculty offices, a teaching theatre, and music instruction and practice space.

The Harding Mott University Center (UCEN) opened in October 1979. Constructed largely with private funds, it contains food services, conference facilities, lounges, a games room, an art gallery, and a theatre. It also contains facilities for counseling, health services, and student activities. The University Center provides a wide range of social, cultural, educational, and recreational programs for the campus and the community.

Built with a grant from the Charles Stewart Mott Foundation, the Recreation Building opened in August of 1982. This facility contains a multi-purpose gym, racquetball courts, exercise and
weight training areas, a running track, and a number of multipurpose areas. The Recreation Building also provides access to the natatorium complex in the Harding Mott University Center, which includes the pool, whirlpool, sauna, shower, and locker rooms.

In late summer 1988, the University of Michigan-Flint occupied the William R. Murchie Science Building (MSB). Students in the natural sciences, computer science and mathematics now enjoy up-to-date classrooms and laboratory facilities. The building also contains faculty offices and research spaces. With the opening of the Murchie Science Building, the University of Michigan-Flint relinquished control of the Mott Memorial Building to Mott Community College.

In fall 1991, the University of Michigan-Flint occupied the University Pavilion, the structure on Saginaw and Kearsley built in 1985 as a festival marketplace and formerly called the Water Street Pavilion. Housed in the building are administrative offices, student services facilities, a bookstore, and food vendors.

The Frances Willson Thompson Library opened in late fall 1994. Funded by generous contributions of the Thompson family and other private donors, the Library is a beautiful building facing the riverfront. In addition to its regular book and journal collections, the Library houses several special collections, the Henry H. Crapo Room, the Genesee County Historical Collection, and the Coleman J. and Lois R. Ross Learning Resource Center.

Acquisition of the 1.98 acre North Bank Center took place in February 1999. The C. S. Mott Foundation provided funding and the State of Michigan supplied $\$ 3.0$ million in appropriations for health and safety renovations. The North Bank Center houses University Outreach Administration, a dance studio and a ballroom that seats 400 .

Acquisition of the 25 -acre property north of the Flint River took place in 1997. Ground was broken for the new William S. White Building in October 1999 and classes began in Fall 2002. The five-story structure is home to the School of Management, the School of Health Professions and Studies, the Art Department, Communications Department, TV28, (the public television station began broadcasting in 1980 and provides instructional, educational and cultural programming for the greater Flint area), Urban Health and Wellness Center, Early Childhood Development Center, multi-media classrooms and computer labs.

## 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
The 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 maximum of 62 credits is accepted in transfer from an accredited two-year college. Up to 75 credits may be transferred from an accredited four-year institution. It may be possible; however, for 90 credits from any of the schools or colleges of the University of Michigan to be counted.

Any student who has completed 62 credits from a community college may not attend a two-year college to receive additional credit. Any student who has completed 75 credits from a four-year institution may not attend another four-year institution for additional credit. Exceptions to this policy can be considered only by petition to the appropriate Academic Standards Committee.

## 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 $\mathrm{C}(2.0)$ 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. 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. Either the Test of English as a Foreign Language (TOEFL) or the Michigan English Language Assessment Battery (MELAB) is necessary to meet this requirement. Such students must obtain a score of at least 550 on the TOEFL (above a 213 on the computerbased scale) or 85 percent on the $M E L A B$ in order to qualify for admission.
D. Upon admission, a notarized statement from the financial sponsor verifying that the student has at least $\$ 18,000$ per academic year (excluding transportation to and from abroad) to cover living and educational expenses while attending the University of Michigan-Flint. No financial aid is available to international students.

## Admission Procedures

Application Deadlines

Fall (September classes): Priority Deadlines:
Freshmen
Transfer Students
November 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 9,10 th 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<br>375 Harding Mott University Center<br>(810) 762-3431<br>Fax: (810) 762-3023

New Student Programs/Orientation Coordinator: 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 mandatory 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, foreign languages, and mathematics are offered in the Academic Advising Center ((810) 762-3085). Freshmen take English, math, and chemistry placement tests during orientation while transfer students should contact the Academic Advising Center.

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 late charges are 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 bill (E-Notification or paper bill) does not relieve any student of responsibility for payment.

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

1. during the first or second week of classes is assessed a $\$ 50.00$ withdrawal fee plus the Registration Fee.
2. during the third through sixth week of classes is assessed one-half the tuition plus fees.
3. after the sixth week of classes is assessed full tuition plus fees.
B. During the Spring or Summer, a student who withdraws
4. during the first or second week of classes is assessed a $\$ 50.00$ withdrawal fee plus the Registration Fee.
5. during the third week of classes is assessed one-half the tuition plus fees.
6. after the third week of classes is assessed full tuition plus fees.
7. 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 one year from the end of the semester being appealed. Information and fee appeal forms may be obtained from Student Accounts, 264 Pavilion.

## Information on Residency Classification for Admission and Tuition Purposes

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 all applicants for admission or enrolled students, even those who believe they are Michigan residents, understand they may be asked to complete an Application for Resident Classification and provide additional information to document
their residency status. We realize that the outcome of a residency determination is a critical factor for many students in their enrollment decision. Please read these guidelines carefully so you understand how a residency determination is made and how to verify your eligibility for resident classification.

## A Michigan resident? You may still need to file a residency application.

If you believe you are a Michigan resident and any of the following circumstances apply, you must file an Application for Resident Classification and be approved to qualify for in-state 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're 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.

## How and where do I file a residency application?

Residency applications and in-person assistance are available at the Residency Classification Office, Office of the Registrar, 413 E. Huron St., Ann Arbor, MI, 48104-1520, phone (734) 7641400. Business hours are 8 a.m. -5 p.m. weekdays.

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

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

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.

## What documents do I need to file for residency classification?

Along with the completed Application for Resident Classification form, you must provide 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 request additional documentation. 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. 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.

## More on residency classification guidelines.

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 2002 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 sections A and B of this document. Meeting the criteria to be placed in an "eligible" category doesn't guarantee 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 classified as a resident by filing an Application for Resident 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 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 other applicable Guidelines (see section B) are met:

- both parents (in the case of divorce, one parent) permanently domiciled in Michigan as demonstrated by permanent employment, establishment of a household, and 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:

- 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 C 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 taxes.
- possession of a Michigan driver's license.
- voter registration in Michigan.
- possession of a Permanent Resident Alien visa.
- continuous physical presence for one year or more.
- statement of intent to be domiciled in Michigan.


## B. ELIGIBILITY CRITERIA FOR RESIDENCY

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. Dependent Students

For U-M 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.

## 2. 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 U-M 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 for Education or Training

If you are domiciled in Michigan immediately preceding an absence from the state for full-time enrollment at a college or university or for a formal, full-time medical residency program, medical internship or fellowship, you are presumed to retain your eligibility for resident classification provided: (1) you have maintained significant ties to the state during your absence (e.g., your parents remain domiciled in Michigan, you continue to maintain for personal family use the home that was previously your principal residence in Michigan, etc.), (2) you sever out-ofstate ties upon returning to Michigan, and (3) you have not claimed residency for tuition purposes elsewhere.
c. Absence for Employment and Personal Development to Enhance Qualifications for a Degree Program.
The University recognizes the vital role of nonacademic and work experience in your education, and many graduate programs require or recommend that you have up to three years of relevant work experience before applying. If you were domiciled in Michigan immediately preceding an absence from the state of 3 years or less, and the absence was for employment or personal development activities undertaken for the purpose of enhancing qualifications for a degree program, you may return to the University as a resident for admission and tuition purposes provided: (1) you have maintained significant ties to the state during your absence (e.g., your parents remain domiciled in Michigan, you continue to maintain for personal family use the home that was previously your principal residence in Michigan, etc.), (2) you sever out-of-state ties upon returning to Michigan, and (3) you have not claimed residency for tuition purposes elsewhere.

## d. Temporary Absence of Less Than One Year

If you have been domiciled in Michigan immediately preceding other absences from the state and you return within one year, you are presumed to retain eligibility for resident classification provided: (1) you have maintained significant ties to the state during your absence (e.g., your parents remain domiciled in Michigan, you continue to maintain for personal family use the home that was previously your principal residence in Michigan, etc.), (2) you sever out-of-state ties upon returning to Michigan, and (3) you have not claimed residency for tuition purposes elsewhere.

## 3. 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:

- Permanent Resident Aliens (must be fully processed and possess Permanent Resident Alien card or stamp in a passport verifying final approval by filing deadline for applicable term.)
- Refugees (I-94 card must designate "Refugee.")
- A, E (primary), G and I visa holders. (Based upon current law, these nonimmigrant visa classifications are the only ones that permit the visa holder to establish a domicile in the United States.)


## 4. One Year Continuous Physical Presence

If you are unable to demonstrate establishment of a domicile in Michigan as defined by the University's Guidelines, you will be required to document one year of continuous physical presence in the state as part of your efforts to demonstrate eligibility for resident classification in any subsequent application. The year to be documented will be the year immediately preceding the first day of classes of the term for which residency is sought.

The year of continuous physical presence in the state is never the only criterion for determining eligibility for resident classification and, in itself, will not qualify you for resident status (see sections A 1 and B 1, 2, and 3 for additional eligibility criteria).

If there is a significant change in the circumstances regarding your presence in Michigan and you can clearly demonstrate that you have established a permanent Michigan domicile, you may be eligible for resident classification prior to the passage of one year of physical presence in the state and are encouraged to submit an Application for Resident Classification for any subsequent term in accordance with the applicable filing deadline.

To demonstrate the year of continuous presence in Michigan, you will need to document actual physical presence through enrollment, employment, in-person financial transactions, etc. Having a lease or a permanent address in the state does not, in itself, qualify as physical presence. Short absences (summer vacation of 21 days or less, spring break, and the break between fall and winter term) will not jeopardize compliance with the oneyear requirement. However, in evaluating an absence, its nature will be assessed to determine whether it is contrary to an intent to be domiciled in Michigan. If you are absent from the state for periods of time other than those mentioned above or fail to document your presence at the beginning and end of the year, you will not meet the criteria for the one-year continuous physical presence requirement.

## C. Special provision for active duty military Personnel Assigned to Michigan

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.

## D. How can I appeal?

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 part 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 already have 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.

## QUESTIONS?

For questions on Residency Regulations, please contact:
Residency Classification Office
Office of the Registrar
413 E. Huron St.
Ann Arbor, MI 48104-1520
Phone: (734) 764-1400

## 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. The University also 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.

## Financial Aid

277 University Pavilion
(810) 762-3444

## Director: Lori Vedder

Assistant Director: Barbara Banks
Financial Aid Officers: Susan DeGalan, Shawn Griffin, Linda Grimshaw, Kelli Hoppe, Mary Horgan, Louanne Snyder

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.
C. 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 early 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.

## 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:

1. 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 credit hours in which they enroll on a cumulative basis.
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 students 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.

## 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.

William D. Ford Federal Direct Loan Program (Stafford Loans): Loans are available to students and their parents under this Federal Loan Program. The following is a brief description of each type of loan, and the eligibility requirements. A separate loan application is not needed. Students need only complete the financial aid application materials required by the Office of Financial Aid to be considered for all types of federal aid at UM-Flint. 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, 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-\$2625; Grade level 2 - \$3500; 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 3\% (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 - $\$ 10,000$. The interest rate is variable with a cap of $8.25 \%$ and is the borrower's responsibility. A $3 \%$ (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 3\% (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 statesupported 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. 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

Following is a list of scholarships and awards established specifically for the University of Michigan-Flint by generous and concerned friends. Scholarships are available to recognize and support academic excellence, activities, service to the university or community, or 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 and Scholarship Office.

## General Scholarships

Alumni Scholarship for Excellence: Established by the University of Michigan-Flint Alumni Society to recognize academic achievement of dependent children, spouses or grandchildren of alumni. The scholarship is a non-renewable award. Students enrolled full-time in a degree program, whose parent, spouse or grandparent has received either an undergraduate or graduate degree from the University of Michigan-Flint are eligible. A minimum 3.5 GPA is required. Interviews by alumni may be required.

Clarice Jean Averill Social Work Scholarship: Applicants must be juniors or seniors enrolled in the Social Work program with a minimum cumulative 3.0 GPA. The recipient will have demonstrated a commitment to the study of Social Work and volunteerism.

Bank One Scholarship: Applicants must submit a cover letter expressing their interest in being selected as a scholarship recipient. Selection preference will be given to students who plan to pursue a career in banking. Applicants must be enrolled fulltime School of Management student or College of Arts and Science majoring in Economics. Applicants must have completed a minimum of 40 credit hours, and have maintained a cumulative 3.2 GPA.

Fleming A. \& Marian E. Barbour Scholarship Fund: For fulltime students who have completed 60 credit hours, which includes a minimum of 10 credit hours in Chemistry and a minimum of 10 credit hours in Biology. Applicants must have attained a minimum cumulative 3.5 GPA and detailed letter of recommendation from one of their UM-Flint instructors. Scholarship recipients must maintain a minimum 3.5 GPA each semester.

Harry H. Blecker Scholarship Fund: For full-time chemistry majors with at least junior standing and a minimum 3.0 GPA. Financial need is taken into consideration.

Everett L. and Viola E. Bray Scholarship: For residents of the state of Michigan attending the University of Michigan-Flint who are in good standing in their junior, senior or graduate years and
who intend to teach upon completion of their education. Financial need may be a consideration in making the awards.

Odell Broadway Scholarship: Established with contributions honoring Odell Broadway, who was devoted to community service and helping others. For African-American women with dependents living in the greater Flint area who have had their education interrupted or delayed for five years or longer. May be full- or part-time students enrolled for a minimum of six credit hours per semester. Interviews may be required.

Sylvester Broome Jr. Scholarship: Established with contributions honoring Sylvester Broome Jr., who was dedicated to involvement in the community, government service, and encouraging the development of our area youth. For AfricanAmericans living in the greater Flint area who have participated in school and/or community service activities. Transfer students and those with associate's degrees are encouraged to apply. Applicants must have generally maintained a minimum adjusted GPA of 3.0. Interviews may be required.

Diane Brown, CRNA Scholarship: This merit-based scholarship is created to assist qualified individuals with the cost of tuition, and to help promote the profession of Nurse Anesthesia. Scholarship recipients must be second year program students. Scholarship recipients must maintain a "pass" grade in their clinical practicum. Scholarship recipients must have participated in professional health care organizations and/or community activities.

Margaret Anne Burd-UAW Local 599 Memorial Scholarship: For full-time students enrolled in the College of Arts and Sciences, the School of Education and Human Services, or the School of Health Professions and Studies whose parent has been a member in good standing of UAW Local 599 for at least five years. Financial need is a consideration. A minimum 3.0 GPA is required.

Mary A. Cooper Book Award: This award was established in memory of Professor Mary Alice Cooper, a founding member of the Education Department at UM-Flint. It provides a maximum of $\$ 100$ each semester for the purchase of books. Applicants must be admitted to a UM-Flint education program and must demonstrate financial need.

James H. and Sara Burnham Memorial Scholarship: For married junior or senior students in good standing whose circumstances demonstrate financial need. Preference given to students concentrating in engineering, science, nursing, or education. Full or part-time students may apply.

Beatrice and William Caldwell Scholarship Research Award: For students enrolled in the College of Arts and Sciences who are presenting their research at conferences. The scholarship award is intended to provide travel-related expenses. Awards are competitive and based on the progress and merit of the student's research. For more information, contact the CAS Dean's Office.

Kathryn Carl Education Scholarship: For students who are pursuing degrees in education. Applicants must be residents of the city of Flint or have graduated from a high school in Genesee County. Students must be enrolled full-time with a declared major in education, have at least a 3.0 GPA , and have completed a minimum of 54 credit hours. Financial need will be considered.

Betty Bishop Catto Scholarship Fund: Financial assistance for full- or part-time students who are physically challenged or have a learning disability. At least a 2.0 GPA is required. Applicants must
be a Michigan resident and submit a Declaration of Disability form.
Chancellor's Scholarship: Awarded to graduating high school seniors who have distinguished themselves through exceptional academic achievements. All admitted students will be considered, and first consideration will go to students who applications for admission are received before the application deadline. Awards are renewable up to three additional years if recipients continue to meet enrollment requirements. Contact the Office of Admission and Recruitment for further information.

Citizens Bank Scholarship: Applicants must submit a cover letter expressing their interest in being selected as a scholarship recipient. Selection preference will be given to students who plan to pursue a career in banking. Applicants must be enrolled full-time School of Management student or College of Arts and Science majoring in Economics. Applicants must have completed a minimum of 40 credit hours, and have maintained a cumulative 3.2 GPA .

Professor Robert H. Cojeen Scholarship: Scholarship awards are merit-based, and applicants must be full-time School of Management students who have a minimum cumulative 3.5 GPA. Applicants must have completed a minimum of 40 credit hours, and must attain junior standing ( 55 or more credits) at the time the scholarship is distributed.

Christopher W. Croner Memorial Scholarship Fund: For students pursuing studies in resource science with a major in physical geography including the study of geology. Students must be enrolled full-time with a minimum 3.0 GPA.

Kelly S. Dahl Social Work Scholarship: Applicants must have been admitted to the Social Work Program with a minimum of 55 credit hours completed and 3.0 GPA, including at least two Social Work courses.

Caroline Maxine Duesberry Scholarship: For full-time students enrolled in the University of Michigan-Flint Teacher Education Program with a minimum 3.00 GPA. Applicants must submit proof of acceptance to the Teacher Education Program with the Scholarship Application.

Walter R. and Bertha F. Dunlap Memorial Fund: For full-time students enrolled in an undergraduate program with a minimum 2.5 GPA. Students must be Michigan residents. Financial need is considered.

Dupuis and Ryden Accounting Scholarship Award: For accounting majors with a 3.5 or better GPA, and who have two semesters or less remaining toward their undergraduate degree.

Economics Scholarship Fund: For economics majors with a 3.2 or better GPA, and who have completed at least 12 credit hours of Economics classes at the University of Michigan-Flint.

Faculty/Staff Scholarship: For full- or part-time, graduate or undergraduate students. A cumulative GPA of at least 3.5, sophomore or higher standing, and a minimum of 23 credit hours earned at the University of Michigan-Flint are required. Any faculty/staff member may nominate a student by writing a letter of recommendation. Awards are based on academic achievement, goals and character.

Cyrus Farrehi M.D. Scholarship: For pre-medicine majors planning to pursue a career in health sciences. A minimum 3.7 GPA is required.

Flint Association of the University of Michigan Alumnae Scholarship: Established to provide assistance to to women whose education has been postponed or delayed by at least $21 / 2$ years. Students must be degree candidates with a minimum 2.5 GPA and an interview may be required.

Flint Bowling Association Scholarship: For students at the University of Michigan-Flint who are residents of Genesee County and who demonstrate financial need. Preference is given to students who are members, or are related to members of the Flint Bowling Association.
Flint Federation of Women's Clubs Scholarship: Established in 1996 by the remaining seven members of the Flint Federation of Women's Clubs. The mission of the Federation is to promote service to the community. Awarded to full-time students with a 3.00 GPA and completion of 55 credit hours. The recipient must demonstrate a commitment to promoting the mission of the Women's Center at the University.

The Flint Journal Scholarship Fund: For students enrolled for a minimum of nine credit hours who have demonstrated writing experience for a college, university or high school publication, or for a professional, trade or community publication. A minimum GPA of 3.2 is required. Preference is given to communication, English and business administration majors. Letters and examples of work are required.

Flint Rock and Gem Club Scholarship: For juniors or seniors with a declared major in geology or one of the earth science fields, or education majors seeking certification as earth science teachers. Financial need is a consideration.

Fran Frazier Student Travel Scholarship: Funds to assist students' participating (conference registration, travel, hotel accommodation, meals, immunization, passports, and insurance) in local, state, national, and international conferences. Applicants must have a minimum 3.0 GPA.

Ralph M. and Emmalyn E. Freeman Art Scholarship: For art majors with a minimum 3.5 GPA.

Emmalyn Ellis Freeman Master of Science in Biology Scholarship: Applicants must be fully admitted into the Master of Science in Biology Program with a minimum cumulative GPA of 6.0 as a UM-Flint graduate student. Applicants must have completed at least two graduate level courses in Biology at UMFlint, including at least one core course (BIO 501, 502a or 503). Priority will be given to students who are nearing completion of the MS in Biology Program.

Ralph M. and Emmalyn E. Freeman Computer Science, Engineering Science, and Physics Scholarship: For juniors majoring in Computer Science, Engineering Science, or Physics with a minimum 3.2 GPA.

Ralph M. and Emmalyn E. Freeman Chemistry Scholarship: Applicants must be majoring in chemistry at University of Michigan-Flint, with a minimum 3.5 GPA.

Ralph M. and Emmalyn E. Freeman Distance Learning Scholarship: For sophomores with a 3.5 minimum GPA. Recipient must be enrolled in at least one online course.

Ralph M. and Emmalyn E. Freeman Education and Human Services Scholarship: For juniors admitted to the School of Education and Human Services with a minimum 3.5 GPA.

Ralph M. and Emmalyn E. Freeman Master of Arts in Education Scholarship: Applicants must have successfully completed 18 graduate credit hours in the Master of Arts Education Program and a minimum 7.0 GPA on a 9.0 point scale. A letter is required with application addressing career goals and commitment to excellence in teaching.

Ralph M. and Emmalyn E. Freeman Foreign Languages Scholarship: For foreign language majors with a 3.5 minimum GPA. Applicant must have completed one 300 level foreign language course at UM-Flint.

Ralph M. and Emmalyn E. Freeman Graduate Program Scholarship: For graduate students with a minimum 3.5 GPA, and earned a minimum of 12 hours of graduate credits at UMFlint. Must submit two letters of reference from faculty members.

Ralph M. and Emmalyn E. Freeman High School Programming Contest Scholarship: Awards will be made to designated High School Programming Contest scholarship recipients who attend University of Michigan-Flint, following graduation from high school.

Ralph M. and Emmalyn E. Freeman Honors Program Scholarship: For juniors or seniors enrolled in UM-Flint Honors program. Applicant must have attended UM-Flint since their freshman year.

Ralph M. and Emmalyn E. Freeman International and Global Studies Scholarship: Designated for enrolled UM-Flint students who plan to participate in study abroad courses sponsored and lead by UM-Flint faculty and approved by the International and Global Studies Program Committee. Applicants must have a minimum of a 3.0 GPA and have completed at least 24 credit hours before studying abroad. Honors Program students are not eligible for this scholarship.

Ralph M. and Emmalyn E. Freeman International Student Scholarship: Applicants must be enrolled as full-time international students, seeking a degree at UM-Flint, and have a minimum of a 3.0 GPA. Applicants must hold an appropriate nonimmigrant visa issued by the United States Immigration and Naturalization Service that permits the holder to seek a degree to completion from UM-Flint. Citizens of the United States, Michigan residents, refugees lacking visa status and non-citizen permanent residents are not eligible for this scholarship.

Ralph M. and Emmalyn E. Freeman Mathematics Scholarship: For Juniors and Seniors with a minimum 3.5 GPA. Must have completed at least twelve credit hours at UM-Flint. Completion of multivariate calculus and the introductory proof course are required.

Ralph M. and Emmalyn E. Freeman Master of Public Administration Scholarship: Applicants must have received full admission into the Master of Public Administration Programs and have completed 12 graduate hours with a GPA of 6.0. Letters of reference required from two faculty members, at least one from a graduate program faculty member.

Ralph M. and Emmalyn E. Freeman NetPlus! MBA Scholarship: For students enrolled in the second year of the NetPlus! MBA program. A minimum GPA of 7.0 and completion of at least 12 graduate credit hours in the NetPlus! MBA program is required. Applicants must also be enrolled for at least 6 NetPlus! MBA credit hours at the time of application.

Emmalyn Ellis Freeman Nurse Practitioner Scholarship: Applicant must be enrolled in UM-Flint Nurse Practitioner Program who has completed a minimum of 11 credit hours. A minimum GPA of 7.0 is required.

Ralph M. and Emmalyn E. Freeman Philosophy Scholarship: For philosophy majors with a minimum 3.5 GPA.

Ralph M. and Emmalyn E. Freeman Psychology Scholarship: For psychology majors with a minimum 3.5 GPA.

Ralph M. and Emmalyn E. Freeman School of Management Scholarship: For students accepted to the School of Management with a minimum 3.5 GPA .

Ralph M. and Emmalyn E. Freeman Social Work Scholarship: For juniors majoring in social work with a minimum 3.5 GPA.

Ralph M. and Emmalyn E. Freeman Sociology, Anthropology, and Criminal Justice Scholarship: This scholarship is intended to support sociology, anthropology, and criminal justice majors at junior status with a minimum 3.2 GPA.

Ralph M. and Emmalyn E. Freeman True Blue Scholars: Applicants must be currently enrolled at UM-Flint with a minimum of 12 credit hours per academic year and 3.0 GPA and complete a True Blue Service Scholar Application.

Emmalyn Ellis Freeman Women's Center Scholarship: For single parents with a minimum 3.5 GPA.

Ralph M. and Emmalyn E. Freeman Writing Specialization Scholarship: For full-time sophomore, junior or senior English majors with a specialization in writing or technical writing with a minimum 3.2 GPA.

David French Memorial Scholarship: The scholarship is available to UM-Flint students majoring in Political Science. Applicants must have completed 25 credit hours with a cumulative 3.0 GPA.

Leon Friedman, M.D. Scholarship: For health science majors with a minimum GPA of 3.0. Applicant must be a graduate of Carmen Ainsworth High School.

Marilyn Venton Furr Nursing Scholarship: Designated for UM-Flint students enrolled in the UM-Flint/Hurley Medical Center Bachelor of Science Nursing Program who have completed a minimum of 25 credit hours at UM-Flint and have a minimum cumulative GPA of 3.3. Applicants must be enrolled in at least one clinical Nursing course at a Hurley Medical Center site.

Jeffrey F. Garfield Scholarship Fund: For entering or continuing University of Michigan-Flint students with a declared major in Theatre or Music. Talented applicants must have a recomputed 3.25 GPA if entering as freshmen or a minimum 3.00 grade point average as continuing or transfer students. Financial need will be a consideration. Scholarship is renewable, but recipient must submit a new application.

Genesee County Medical Society Alliance Nursing Scholarship: Established to give financial assistance to students who are pursuing a Bachelor of Science Degree in Nursing. Applicants must be admitted to UM-Flint's BSN program and have a minimum 3.00 GPA. Recipients must reside in Genesee, Lapeer or Shiawassee County. Awards will be based on financial need.

Eugene W. Geniesse Sr. Science Scholarship: For full-time science majors who have completed at least two years of college credit with a minimum 2.5 GPA. Awards are based on academic achievement and financial need. Awards may be renewable if a minimum 3.0 GPA in all science and mathematics courses is maintained, and application procedures and deadlines are followed for re-application.

Richard Gilder Scholarship Fund: For history majors with a minimum of 60 credit hours and 3.0 GPA. Preference given to students whose coursework indicate an emphasis of American History and whose career goals include pursuing a profession that focuses on American History (teaching, archiving, museum work, etc.).

The Nick and Sharon G. George Student Research Fund: Applicants must have completed a minimum of 55 credit hours. Applicants must complete a student research application form and submit a written statement in which they have outlined the proposed research project: its goals, value, progress to date, and any other potential funding sources. Applicants must submit a letter of recommendation from a UM-Flint faculty member sponsoring the student research.

Natalie Ann Graham Scholarship: Applicants must reside in Genesee County with a minimum of 55 credit hours completed at UM-Flint. Preference will be given to students who have had a delay in completing their education and who are highly motivated to completing their degree requirements.

Graduate Student Grant: Support is available for a graduate student admitted to and enrolled in a University of Michigan-Flint graduate program who demonstrated a financial need to initiate or continue graduate studies.

Jessica Hagemeister, CPA Scholarship: For students enrolled in the School of Management with a major in accounting. Applicants must be non-traditional students, 23 years of age or older, who have a minimum GPA of 3.0 and live in Genesee County.

Jo Hashbarger Scholarship: Established by the Zonta Club of Flint II for women students attending the University of MichiganFlint who have completed at least 84 credit hours, 2.86 GPA , and have demonstrated commitment to community service.

Heritage Scholarship Award: Is awarded to graduating high school seniors based on, but not limited to, academic merit and financial need. Grade point average, academic course load, standardized test scores, rank in class, personal essays and recommendations are reviewed in the selection process. Awards are renewable up to a total of four years if recipients continue to meet GPA, enrollment and credit requirements.

Edgar B. Holt Scholarship: Established with contributions honoring Edgar B. Holt, a leader in the Flint community devoted to advocating human rights. For Black students attending UMFlint full time with a minimum 3.0 GPA. Applicants must have demonstrated leadership skills and a commitment to community service and the promotion of human rights. Awards may be based on financial need, letters of reference and an interview.

India Scholarship: Applicants must be currently enrolled at the University of Michigan-Flint. Applicants must submit a cover letter addressing their academic and career goals, and their interest in receiving this scholarship. Recipients must have a minimum 3.0 GPA.

Harold and Agape Kallis Scholarship: For full-time students with a minimum 3.0 GPA who are residents of Genesee County.

Monica Karnes Memorial Scholarship Fund: Established by Monica Karnes' family and Phi Sigma Iota, Rho Rho Chapter, to provide financial assistance to currently enrolled full- or part-time students. Students should have a minimum 3.0 GPA and must have completed at least one 300 -level foreign language course at the University of Michigan-Flint. Selection is based on demonstrated commitment to foreign language study.

The David and Sharon Krueger Student Research Fund: Applicants must have completed a minimum of 55 credit hours. Applicants must complete a student research application form and submit a written statement in which they have outlined the proposed research project: its goals, value, progress to date, and any other potential funding sources. Applicants must submit a letter of recommendation from a UM-Flint faculty member sponsoring the student research.

Michael J. Kulick Memorial Scholarship: For students with a declared major in resource science who have completed at least 55 credit hours and who have at least a 3.0 cumulative GPA.

Linn Family Scholarship: For students who have completed a minimum of 70 credit hours and have a declared major in accounting. Students must be residents of Genesee County, enrolled full-time, and have a minimum 3.2 GPA. Financial need is considered. Scholarship recipients are strongly encouraged to contribute to the Linn Family Scholarship Fund within a reasonable length of time after entering the profession.

M Club of Greater Flint Scholarship Fund: Applicant must be currently enrolled at the University of Michigan-Flint undergraduate with at least 12 credits earned and have a minimum 3.0 GPA. The Scholarship and Grants Committee of the Faculty Council select recipients.

Mary I. Sharpe Marchman Scholarship: For University of Michigan-Flint nursing students, enrolled in the four-year degree program. Scholarships are available to students who have completed a minimum 25 credit hours and maintain a cumulative 3.0 GPA. Scholarship is based on academic achievement, and not on financial need.

Floyd J. McCree Scholarship: Established with contributions honoring Floyd J. McCree, who was an advocate for social causes and social justice, a dedicated public servant and committed to helping others. For African-Americans living in the greater Flint area who have participated in school and/or community service activities. Applicants must have generally maintained an adjusted GPA of 3.0. Selection is based on academic records, cover letters and recommendations. Interviews may be required.

Victoria McKenze University of Michigan-Flint Student Government Council Scholarship: Applicants must be UM-Flint students with a minimum of 55 credit hours, and have a cumulative 2.5 GPA. Applicants must have demonstrated campus leadership qualities that have significantly contributed to and enhanced the quality of life for students at UM-Flint. A cover letter and two letters of reference are required.

Leonard A. and Zelpha E. McKinnon Scholarship: Available to full- or part-time students who have at least a 3.5 GPA , are Genesee County residents, and have participated in school and/or community activities. Letters of reference are required. Selection is based on academic record, community service, essay and recommendations.

Zelpha E. McKinnon Science Scholarship: Available to biology and chemistry majors who have completed at least 55 credit hours of course work, including organic chemistry. Applicants must be current residents of Genesee, Lapeer, or Shiawassee counties and have a minimum 3.5 GPA.

Juan E. Mestas Scholarship for Community Engagement: Established by Chancellor Juan E. Mestas to honor UM-Flint students who have distinguished themselves for their community engagement, participating as students in activities that address the needs and improve the quality of our neighboring communities. Candidates must be in good academic standing at UM-Flint and must be nominated by members of the UM-Flint faculty, staff or student body.

Michigan Scholar Award: Is offered to less than 3 percent of the high school seniors who apply for admission to the University of Michigan-Flint. Typically, the GPA for those being considered is 3.9 or higher or the composite ACT score in the 30s. Recipients of the Michigan Scholar Award receive a full tuition scholarship for full-time enrollment and book stipend for four years. Contact the Office of Admissions and Recruitment for further information.

Carl and Sarah Morgan Graduate Student Scholarship: Established in 1996 with a gift from the Morgan Trust to the University of Michigan-Flint. This scholarship is designated to provide financial assistance for UM-Flint graduate students. Applicants must be in a graduate program and have earned a minimum cumulative 3.30 GPA based on a 4.00 scale as an undergraduate, or have a minimum cumulative $\mathrm{B}+$ average as a UM-Flint graduate student.

Werner Nartel: Available to full- or part-time students who are Genesee County residents and have a minimum 3.0 GPA. Financial need is a consideration.

Jeanetta \& Charlie Nelms Scholarship: Applicants may be fulltime or part-time students, either undergraduate or graduate standing. Applicants must have a minimum 3.0 GPA. Applicants must have demonstrated a commitment to leadership, community involvement, and scholarship. Scholarship awards are based on financial need.

Conny E. Nelson Memorial Scholarship Fund: Established in memory of Conny E. Nelson, Chancellor of the University of Michigan-Flint, 1980-83. The scholarship helps support study in a non-North American country for students who have completed their sophomore year. Awards are based on academic achievement and merit of proposed study.

David A. Page, CPA Scholarship Fund: For Accounting majors with a minimum 3.0 GPA. Applicants must be non-traditional, 25 years of age or older, Genesee county residents.

Charles and Larue Pemberton Health Care Program Scholarship: To assist students pursuing a degree in the Health Care Program at the University of Michigan-Flint who have returned to college after their education has been postponed or interrupted by a period of at least 30 months. Applicants must have completed at least 55 credit hours, have a minimum 2.8 cumulative GPA, and have completed at least six credit hours at the University of Michigan-Flint. Financial need may be a consideration.

Charles and Larue Pemberton Nursing Scholarship: For fullor part-time nursing students. RN applicants must be accepted into UM-Flint's BSN program. UM-Flint/Hurley Medical Center BSN candidates must have completed one semester of nursing clinical with a minimum 2.8 GPA.

Wanda L. and M. Harry Piper Grant Fund: Financial assistance to full- or part-time students whose pursuit of a University degree has been postponed or interrupted for at least two years. Students must maintain a 2.0 GPA and show financial need.

Annie Mae Pointer Scholarship: For full-time AfricanAmerican with at least junior standing and a minimum 2.5 GPA. Financial need is a consideration.

Dom Polski Cultural Center Scholarship: This scholarship provides financial assistance for students whose parents or grandparents have been members of Dom Polski of Flint. Applicants must secure documentation from the Dom Polski that a parent or grandparent has been either a voting or associate member of Dom Polski Club or Dom Polski Cultural Center of Flint for a minimum of 5 years. A cover letter must be submitted which explains the significance of their Polish heritage and interest in being selected for this particular scholarship. Recipient must maintain a minimum 3.0 GPA. The Dom Polski Cultural Center Board will review the applications and select the scholarship recipient. The scholarship is renewable; must reapply.

Virginia K. Polzin, CRNA Memorial Scholarship: This meritbased scholarship is created to assist qualified individuals with the cost of tuition, and to help promote the profession of Nurse Anesthesia. Scholarship recipients must be second year program students. Scholarship recipients must maintain a "pass" grade in their clinical practicum. Scholarship recipients must have participated in professional health care organizations and/or community activities.

Timothy E. Purman, CPA Scholarship: For students enrolled in the School of Management with a declared major of accounting. Applicants must be residents of Genesee County, and nontraditional students who have experienced a minimum of a threeyear absence from enrollment in school.

Akhila \& Rajamani Scholarship: For full time students employed on UM-Flint campus with a minimum 2.0 GPA. Financial Need is a consideration.

Charles Erickson Rachor Memorial Scholarship: For students enrolled in the UM-Flint School of Management MBA program who are Genesee, Lapeer or Shiawassee county residents. Financial need is a consideration.
G. Radhabai and A. V. Rajagopal Scholarship: For students who have a minimum 3.3 adjusted GPA and are enrolled for at least six credit hours. Selection is based on outstanding academic achievement and participation in school and/or community service activities. This fund also provides a scholarship award for a junior or senior with a declared major or minor in computer science who has demonstrated academic excellence in computer science and who has provided exceptional service to the Computer Science Department.

Joe Roberson Endowed Scholarship Fund: Applicants must be residents of Genesee County, and admitted to the University of Michigan-Flint with a minimum 3.0 GPA.

Rotary Club of Flint Scholarship: For students who have graduated from a Flint or Genesee County high school in the past two years after attending these schools for at least the final two years of their high school education. A minimum 3.25 adjusted GPA, involvement in school and/or community service activities, and the intent to remain in the Flint/Genesee County area after completion of college are required.

Pamela J. Royston Accounting Scholarship: The scholarship is available to accounting majors with 55 credit hours completed and 3.0 GPA. Preference is given to returning students working on a first degree.

Thomas P. Ryan and Thomas P. Ryan Jr. Memorial Scholarship Fund: For full-time UM-Flint students enrolled in the School of Management. Applicants must have completed a minimum of 40 credit hours and maintained a cumulative 3.0 GPA.

Horace T. Sanders Social Work Scholarship: For University of Michigan-Flint Social Work majors who have completed a minimum of 50 credit hours and have a minimum cumulative 3.00 GPA. Students must state in the Scholarship Application why they chose the field of Social Work and their career goals in the field. Financial need is not a consideration.

Kathleen A. Schneberger Scholarship Fund: For students who are at least 25 years old, who have completed 30 or more credit hours with a minimum 2.5 cumulative GPA and are enrolled for at least six credit hours. Awards are based on financial need. Preference is given to females.

School of Management Student Research Fund: Applicants must have completed a minimum of 55 credit hours. Applicants must complete a student research application form and submit a written statement in which they have outlined the proposed research project: its goals, value, progress to date, and any other potential funding sources. Applicants must submit a letter of recommendation from a UM-Flint faculty member sponsoring the student research.

Gerald and Sharon Schreiber Research Fund: Applicants must have completed a minimum of 55 credit hours. Applicants must complete a student research application form and submit a written statement in which they have outlined the proposed research project: its goals, value, progress to date, and any other potential funding sources. Applicants must submit a letter of recommendation from a UM-Flint faculty member sponsoring the student research.

SEIU Local 591 Scholarship: Designated for UM-Flint students who are current members of SEIU Local 591, or the spouses, children or grandchildren of current or former Local 591 SEIU members. Applicants must have a minimum GPA of 2.0 and submit documentation that verifies that they are current SEIU Local 591 members, the spouses, the children or grandchildren of a current or former SEIU Local 591 member.

SEIU Local 591 Scholarship for Mott College Transfers: Designated for Mott Community College transfer students who are current SEIU Local 591 members, or the spouses, children or grandchildren of a current or former SEIU Local 591 member. Applicants must have a minimum GPA of 2.0 and submit documentation that verifies that they are current SEIU Local 591 members, the spouses, children or grandchildren of a current or former SEIU Local 591 member.

Woodrow W. Skaff Scholarship: Applicants must be full-time UM-Flint students who have a cumulative 3.0 GPA , and are residents of Genesee County. Scholarship awards will be based upon financial need.

Ernestine R. Smith, Ph.D. MPH Physical Therapy Scholarship: Available to second and third year UM-Flint Physical Therapy students who have a minimum GPA of 3.3.

Lavoy C. Smith Memorial Scholarship: For Native American and Black students who have behaviorally demonstrated a consistent and high level of commitment to community and school activities, and volunteer work. Students must have successfully completed a minimum of 12 credit hours with a minimum 3.0 GPA. Preference is given to full-time students.

Social Work Leadership Scholarship: For Social Work majors with at least junior standing and a minimum 3.0 GPA.

Barbara Sprague, CRNA Scholarship: This merit-based scholarship is created to assist qualified individuals with the cost of tuition, and to help promote the profession of Nurse Anesthesia. Scholarship recipients must be second year program students. Scholarship recipients must maintain a "pass" grade in their clinical practicum. Scholarship recipients must have participated in professional health care organizations and/or community activities.

Colonel T.B.W. Stockton Scholarship: Applicants must be a junior undergraduate or graduate status with a declared major in history. Financial need is a consideration in awarding the scholarship.

## Esther C. Stone Graduate Student Scholarship for Academic

 Excellence Scholarship: For students admitted to a University of Michigan-Flint graduate program who have completed all prerequisite courses and have a minimum of twelve hours of graduate credit. In addition to the Scholarship Application, students must submit a maximum one page personal statement as to why they qualify for the award, two letters of reference from faculty familiar with their academic work, and transcripts. The application deadline is May 1.Esther C. Stone International and Global Studies Scholarship: Designated to support students participating in approved study abroad courses sponsored and lead by the University of Michigan-Flint faculty and approved by the International \& Global Studies Program Committee. Applicants must have completed at least 24 credit hours at UM-Flint prior to participating in the IGS Program. A minimum cumulative GPA of 3.0 is required. Application deadlines are determined by the director of the IGS Program.

John and Dorothy Stout Scholarship Fund: Established by the Bishop Class of the First Presbyterian Church (U.S.A.), Flint, in honor of John and Dorothy Stout. The scholarship is awarded to a member of the church who is a resident of Genesee County attending the University of Michigan-Flint. Awards are based on good citizenship, scholastic attainment, and need.

Student Government Council Service Scholarship: Intended to recognize those students who demonstrate a commitment to maintaining a keen balance in their academic, social and volunteer pursuits. Current SGC members and those who served within the previous twelve months are not eligible for this scholarship.

Virginia Hoover Thompson Scholarship Fund: Designated to assist academically talented English majors, and encourage and support their scholarly activity and international travel. Applicants must be full-time students who have completed a minimum of 55 credit hours, and attained a minimum 3.5 GPA. Applicants must submit a cover letter in which they outline their career goals and aspirations. This scholarship is based on scholastic merit, and not on financial need.

Reinhard Thum Scholarship: For students with at least sophomore standing and a minimum 3.5 GPA. A letter of recommendation is required along with a cover letter detailing major areas of interest, achievements, challenges and goals.

Dominic Tomasi Memorial Scholarship: For students who are residents of Genesee County enrolled full time at either the Ann Arbor or Flint campus, and who have participated in varsity sports and extracurricular or community service activities. Selection is based on character, which reflects positively on the University of Michigan-Flint, activities and financial need.

David C. Tucker, CPA Scholarship: Applicants must be enrolled in the School of Management with a major in accounting. Applicants must be residents of Genesee County, minimum 3.0 GPA, and non-traditional students who have experienced a minimum of a three-year absence from enrollment in school. Scholarship award is based on financial need.

Virginia J. Tucker and Julie M. Patterson Scholarship: For women students whose education has been delayed or interrupted for at least five years, with preference given to full-time students. Financial need is a consideration.

Undergraduate Research Grant: For part-time or full-time undergraduate students currently enrolled in a degree program. Each participating student will need to provide a cover sheet and transcript. The proposed project cannot be conducted as part of any assigned requirements of a course. Students should enroll in an independent study in conjunction with their proposed project. Although this grant program is intended to fund independent projects, these projects must be conducted under the supervision of a University of Michigan-Flint faculty member. The endorsement of a faculty advisor is necessary.

## The University of Michigan Club of Greater Flint Student

 Research Fund: Applicants must have completed a minimum of 55 credit hours. Applicants must complete a student research application form and submit a written statement in which they have outlined the proposed research project: its goals, value, progress to date, and any other potential funding sources. Applicants must submit a letter of recommendation from a UMFlint faculty member sponsoring the student research.The University of Michigan-Flint Alumnae Association Student Research Fund: Applicants must have completed a minimum of 55 credit hours. Applicants must complete a student research application form and submit a written statement in which they have outlined the proposed research project: its goals, value, progress to date, and any other potential funding sources. Applicants must submit a letter of recommendation from a UMFlint faculty member sponsoring the student research. Preference will be given to non-traditional students, both men and women.

The University of Michigan-Flint Rackham Graduate Fellowship Program: For students who have completed all prerequisites and at least six hours in the MLS or MPA program,
with preference given to students who have completed at least 12 hours in the program. Fellowships are awarded competitively based on academic performance and recommendation of the program faculty. Students must be enrolled for a minimum of three credit hours. Fellowships pay tuition for up to six credits for one term. For more details, contact the Office of Graduate and Special Programs.

University Scholar Award: Is awarded to transfer students with intent and potential to complete their education with the University of Michigan-Flint. Preference is given, not limited, to students who have completed an Associate's Degree or has over 50 transferable credits. This award includes full tuition and fees for two years. Contact the Office of Admission and Recruitment for further information.

Urban League of Flint/University of Michigan-Flint Scholarship: Provides recognition and financial aid assistance to outstanding Black students. Awards are made to graduating high school seniors who will be attending UM-Flint. Students must have a minimum 3.0 GPA , or be in the top $10 \%$ of their graduating class with a minimum ACT score of 20 . The scholarship is renewable for up to a total of four years if the student remains enrolled full-time, successfully completes at least 21 graded credit hours each academic year, and remains in good academic standing. Students should apply through the Urban League of Flint.

Harold M. Utley Memorial Scholarship Fund: Awards are based on financial need, school and/or community service activities, and scholastic attainment. Students must have a 3.0 cumulative grade point average.

Carl R. Vann, Ph.D. Memorial Scholarship Fund: The scholarship was established to recognize students who have a zest for learning, have demonstrated willingness to challenge the status quo in the pursuit of knowledge and inspiring others. Applicants must be currently enrolled Health Sciences and Administration students with a minimum of 55 hours completed and established 3.0 GPA.

Kenneth B. West Scholarship: For juniors or seniors who are majoring in History at UM-Flint with a minimum GPA of 3.0.

West Flint Optimist Club Academic Scholarship: For full-time students who are residents of Genesee County, have demonstrated leadership skills in school and community activities, and have a minimum 2.7 GPA if entering freshmen, or a minimum 2.5 GPA if current or transfer students. Financial need is considered.

Westwood Heights Lions Club Scholarship: For residents of the Westwood Heights Lions Club service area. Selection is based on family income, and requires a cumulative minimum GPA of 3.0 and at least sophomore standing. Awards are renewable, based on need and availability of funds.

Ann Lande Weinstein Scholarship: Applicants must be returning female students whose education was interrupted by a minimum of five-years. Applicants must have complete 85 credit hours of course work and have a minimum 3.0 GPA.

Barbara Davis White Memorial Scholarship Fund: For full-time juniors or seniors majoring in mathematics or science who intend to make a career in those fields, and who have at least a 3.0 GPA. Selection is based on financial need and academic achievement.

Myron and Margaret Winegarden Scholarship: Established to provide financial assistance for deserving students who share an
appreciation of foreign language and international studies. Applicants must be full-time students with a minimum of 3.0 GPA. Financial need is not a consideration.

Hazel Wood Scholarship Fund: For full-time transfer students who are residents of Genesee County. A minimum 3.2 GPA is required and financial need is considered.

Dr. Douglas L. Wright Memorial Scholarship: Applicants must be full-time, African-American University of MichiganFlint students who have achieved junior standing and have maintained a GPA of 3.0 based on 4.0 scale for all completed course work. Applicants must have recognized leadership skills, and a demonstrated commitment to community service and the promotion of human rights. Financial need is a consideration in awarding this scholarship.

Lillian B. and Bruce E. Wright Memorial Scholarship: For adult returning students at the University of Michigan-Flint with a major or minor in political science or public administration, or who have been actively involved in the political process at the local, state or national level. A minimum 3.0 GPA is required.

David G. Zick Scholarship: For currently enrolled University of Michigan-Flint students with a declared major in Physics or Engineering. Applicants must have completed their sophomore year and have minimum cumulative 2.7 GPA. Financial need is a consideration. Scholarship is renewable, but recipient must reapply.

Francine Zick Student Research Fund: Applicants must have completed a minimum of 55 credit hours. Applicants must complete a student research application form and submit a written statement in which they have outlined the proposed research project: its goals, value, progress to date, and any other potential funding sources. Applicants must submit a letter of recommendation from a UMFlint faculty member sponsoring the student research.

## 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 fulltime 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.

## 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 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 Accounting/Cashier, Room 261 University Pavilion
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 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 firsttime 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 $\mathrm{E}, \mathrm{F}$ 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 Center, and notify the Office of the Registrar of any change.

A student who seeks a major in programs outside their current school must first obtain admission to the program through the Office of Admissions. 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.

## Transfer Within the University of Michigan-Flint

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 are the academic units of the University of Michigan-Flint.

A student who seeks to transfer from one unit to another must file an Application for Intra-Campus Transfer, available from the Office of Admissions. The requirements for admission to each unit are printed elsewhere in this Catalog.

## 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. The maximum credit transferable from a community college is 62 ; the maximum transferable from another four-year institution is 75 credits.

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 Education and Human Services; in 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.edulits/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 Affirmative Action Coordinator or the Dean. Formal
complaints must be filed with the Affirmative Action Coordinator.

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.
2. 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).
2. 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 nondiscriminatory 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.
5. 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.
3. 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.
4. 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.

6. 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.
7. 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.
8. 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.
10. 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.
12. Damage, destruction or vandalism of University property or property belonging to another.
13. Illegal entry into University facilities.
14. 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.
16. 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.
18. Tampering with fire or other safety equipment, or setting unauthorized fires.
19. 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.
2. 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.
3. Attempts will be made to resolve disputes informally through interviews and counseling.
4. Complaints which cannot be resolved informally, or upon the written request of either party, will be referred for hearing.
5. 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.
b. 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.
c. 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 statement.
- 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.
e. 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.
8. 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.
9. 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.
11. 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:

1. 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.
2. 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.
3. 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.
6. 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.
11. Combined Sanctions. A combination of the sanctions described above may be imposed.
12. 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 Records

In carrying out their 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 the student a number of rights concerning records. Each office having student files must, by law, make these records available to the student upon request, limited only by regulations stated in the pertinent federal law (the Family Rights and Privacy Act
of 1974). A copy of this law is available for inspection in the Office of the Registrar, 266 University Pavilion.

Only two offices have records on all students. The Registrar's Office maintains information pertaining to enrollment (registration) and official academic records (transcripts). The Student Accounts Office ( 264 University Pavilion) maintains information about charges assessed and payments made. Students have the following rights concerning their records:

1. The right to inspect and review all material in their file(s) except:
a. Professional mental health treatment records to the extent necessary, in the judgment of the attending physician or professional counselor, to avoid detrimental effects on the mental health of the student or of others. These records may, however, be reviewed by another physician or professional counselor upon the student's request.
b. Financial information furnished by parents in support of an application for financial aid.
c. Confidential letters of recommendation that were placed in a student's record prior to January 1, 1975.
d. Confidential letters of recommendation concerning admission, employment, or honorary recognition, for which the student has signed a waiver of access.
e. Personal notes made by a faculty member or counselor that are used only by that person and not shared with others.
f. Materials in any admission file, formed before admission to, and enrollment in, the University of Michigan-Flint.

Students must file a written request if they wish to review their records. Often the response will be immediate, but in many cases students should expect to wait several days; in no case may the response be delayed more than 45 days from the date of the request. Once this request has been filed, the record may not be purged of nonexempt material. Copies of material will usually be made upon request. Students may have to wait several days for copies, and should expect to be charged for copies made. Copies of transcripts from other colleges or universities previously attended will not be issued; rather, the student will be advised to send for them from the appropriate school.
2. The right to a hearing: Students have the right to request a hearing if they feel that:
a. They have been improperly denied access to their records.
b. Their records contain information that is inaccurate or misleading.
c. Information from their records has been improperly released to third parties.
3. The right in most instances to control access to information in their records by persons or agencies outside the University. Within the University, information from records will be made available to those staff members who demonstrate a need for the information consistent with their responsibilities and official functions for the University, and consistent with normal professional and legal practices. Except for public information (see below), persons outside the University, including parents and/or spouse, will be given information from records only:
a. When the student authorizes it in writing; or
b. In conjunction with the student's application for or receipt of financial aid; or
c. 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
d. When disclosure is required in a health or safety emergency or by federal or state law or by subpoena. If information from the student's record is subpoenaed, that individual will be notified as quickly as possible.

The Office of the Registrar keeps records of all requests for non-public information from a student file made by persons outside the University. These records become part of the files and as such are open for inspection.

Federal law requires that the University designate what it regards as public information (Directory 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 any and all of the items designated as public information not be released without the student's written consent.
The University of Michigan-Flint has designated the following as public information in accordance with the law:

- Name;
- Address, home address, and telephone;
- Department, class level, and major field;
- Dates of attendance at the University;
- Degrees received with date, honors, and awards;
- Previous schools 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.

Generally, requests come from prospective employers who want to verify dates of attendance and degrees received, or from friends and relatives who are trying to locate a particular student. 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.

If students do not want the University to release public
information, they should complete a "Request to Prevent Disclosure of Directory Information" form at the Registrar's Office.
4. The right to file a complaint: If a student feels that there has been a violation of the rights afforded under the Family Educational Rights and Privacy Act of 1974, a complaint must be filed in writing to:

The Family Policy Compliance Office
U.S. Department of Education

400 Maryland Avenue, S.W.
Washington, D.C. 20202-5901
Telephone (202) 260-3887
Questions about policies and procedures regarding student records within the University of Michigan-Flint should be directed to:

Office of the Registrar
Room 266 University Pavilion
The University of Michigan-Flint
Flint, Michigan 48502-2186
Offices at the University of Michigan-Flint where student records are kept include:
Academic Advising Center, 285 University Pavilion
Admissions and Recruitment Office, 245 University Pavilion
College of Arts and Sciences Department Offices
Office of Extended Learning, 240 David M. French Hall
Financial Aid Office, 277 University Pavilion
Graduate Programs Office, 221 David M. French Hall
Library, Frances Willson Thompson Library
Nursing Program, 2180 William S. White Building
Office of the Registrar, 266 University Pavilion
Public Safety Office, Hubbard Building
School of Health Professions and Studies,
2205 William S. White Building
School of Management, 3139 William S. White Building
Student Accounting, 264 University Pavilion
Student Development Center, 264 Harding Mott University Center Student Life, 375 Harding Mott University Center
Vice Chancellor for Student Services and 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
516 David M. French Hall, (810) 762-3234
Educational Opportunity Initiatives
280 Harding Mott University Center, (810) 762-3365
Human Resources
219 Harding Mott University Center, (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: Grant Burns (762-3405)
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, Fling 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.

## Center for Advising, Retention and Transition 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: Dr. Johnny W. Young
Academic Advisors: Jeffery Dobbs, Margaret Golembiewski, Aimi Moss, Jo Ann Shabazz
Administrative Assistant: Barbara J. Peckham
The Center for Advising, Retention and Transition Services (CARTS) 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. CARTS 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 Academic Advising Center. 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 Academic Advising Center 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.

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

- 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 Center for Advising Retention and Transition Services assists students in selecting courses to meet their general education requirements and certain program requirements and makes referrals to appropriate support services. The Academic Advising Center 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 CARTS.

## Office of the Ombuds

237 University Pavilion
(810) 762-3434

Ombuds: Rob Montry
Executive Secretary: Katie Tesmer
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 Ombudsman Association (TOA) 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
Interim Director: Clara Blakely

Administrative Assistant: Bertha Otler-El

The Women's Educational Center (WEC) is dedicated to supporting the achievement, well-being, and active participation of diverse women students, staff and faculty at UM-Flint. In addition, the WEC serves as an educational resource for women in the geographic region. All women are welcome at the WEC.

The WEC offers direct services, including support, peer counseling, referrals and advocacy. The WEC has study groups, and workshops on such varied topics as how to balance school, work and family, how to manage stress, how to apply for scholarships, and how to strengthen negotiating skills. Small emergency grants for students who qualify are available through the Critical Difference Fund, administered by the WEC. The Moms on Campus Network is organized through the WEC and holds monthly meetings.

The WEC also has a research function, and collaborates on student research projects. Current faculty interdisciplinary research projects focus on women's civic participation, on women's health and creativity, and on new paradigms for knowledge-creation within the university.
Drop-ins are welcome, but if you need help with a particular problem, you may wish to schedule an appointment in advance.

The WEC can help you create strategies which will enable you to accomplish your goal of completing your degree at the University of Michigan - Flint. We welcome the opportunity to work with you.

## International Student Center

515 Stevens St.
Flint, Michigan 48502
(810) 767-6449

FAX: (810) 767-0724
Coordinator: Susan K. Taylor
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 Bureau of 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.

## Marian E. Wright Writing Center

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

FAX (810) 762-3687
Website: http://www.flint.umich.edu/Departments/writingcenter
Director: Dr. Robert W. Barnett
Manager: Scott Russell
Materials and individualized instruction in writing are provided for all students. All tutoring is by appointment only. In the Writing

Center 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, working with tutors in the Center, or both. Computers with software are available for use by students.

The Center is fully staffed with trained tutors and is open Monday through Thursday, 8:00 a.m. to 7:00 p.m., Friday, 8:00 a.m. to 4:00 p.m., Saturday, 12:00 p.m. to 4:00 p.m., and Sunday, 2:00 p.m. to 6:00 p.m.

## Career Development Center

237 French Hall
(810) 762-3250

FAX (810) 762-3024
Website: www.umflint.edu/careers
Director: Marlene R. Smith
Career Advisors: Kyatonna Avery
Support Staff: Kathy Gasper, Barbara Griffin
The Career Development Center (CDC) provides leadership and service to students and alumni in the areas of career development, experiential education and professional employment strategies. The CDC staff assists constituents in identifying career goals and/or in making successful career transitions.

The role of the CDC 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.

Career Development Center 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


## 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/departments/eoi

Executive Director: Tendaji W. Ganges
Office Manager: Patricia 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 color and other students from under-represented groups. Ultimately, such efforts should contribute to the overall adaptability and success of UMFlint in serving its constituent community.

The three primary thrusts in Educational Opportunity Initiatives are:

- To increase access to UM-Flint for minorities and other students from under-represented groups.
- To provide direct student supportive services and collaborate with UM-Flint offices and departments in providing services that will enhance the persistence and graduation rate of minorities and students from other under-represented groups.
- To 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 students.


## College Level Programs and Services

## Transition and Support Services (TSS)

Coordinator: Clara W. Blakely

TSS provides a web of services, programs and information designed to contribute to students' positive academic, personal and social transition to the University of Michigan-Flint. Its services are provided to students upon request with the primary focus being current and transfer minority students. TSS develops and implements programming that contribute to student success and goal attainment. Programs and activities organized by TSS are designed to enhance the rate of persistence and thereby enable more students to attain their baccalaureate degree. TSS also utilizes a comprehensive referral network to connect students to campus and external programs and services. The Bridges to Success, Challenge Program and the Transitions Programs are all part of TSS.

## Transitions Program <br> Coordinator: James Anthony Jones

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.

## Bridges to Success Program (BTS)

Coordinator: Tonya C. Bailey
The Bridges to Success Program assists students in their academic,
personal, and social transition to the University of Michigan-Flint. 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. BTS provides a series of comprehensive interventions and support services to first year students, transfer students, and those who are experiencing academic difficulties.

Bridges to Success is funded through the Office of King/Chavez/Parks Initiatives in the Michigan Department of Career Development. The Bridges to Success Program also includes a four-week summer bridge component that is funded by the University of Michigan-Flint's Office of Educational Opportunity Initiatives.

The Bridges to Success Program features a unique concept entitled the Posse component. Founded in New York City more than ten years ago, the Posse concept has been utilized in many other prestigious universities nationwide. 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 from diverse backgrounds (particularly African American, Hispanic/Latino, and Native Americans) 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.

## The Challenge Program

Coordinator: Tonya C. Bailey

Students who have demonstrated academic achievement yet do not meet one or more of the traditional freshman admissions criteria, are offered contractual admission to the University of MichiganFlint through the Office of Admissions. Their participation in The Challenge Program is intended as a means of providing students with a good high school to college transition experience and foundation for success at the University. Introduced to a variety of support services through the program, students have the opportunity to enhance 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 enhance them 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.

## Pre-College Programs and Services

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

Coordinator: Tawana L. Day

ISP serves high achieving minority students selected as 8th graders and inducted as 9th graders from the Flint and Beecher school districts. The objective is to enhance their preparation for college (through programs, ACT/SAT test preparation, workshops, seminars, etc.) 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.

Martin Luther King, Jr., Caesar Chavez, Rosa Parks College Day Program (KCP-CDP)

Coordinator: Tawana L. Day
The KCP College Day Program was created by the Michigan State legislature in 1986 as part of the larger King/Chavez/Parks Initiative to increase the enrollment of students traditionally underrepresented in post-secondary education. This goal is achieved through campus visits, programs and workshops designed to inform and prepare students for the challenges of higher education.

## Choosing to Succeed Enrichment Program (CTS)

Coordinator: Henry E. Bazemore

The Choosing to Succeed Program is designed to increase the number and preparation of minority students in the Flint, Beecher and surrounding school districts who will graduate from high school, and to encourage and challenge them to pursue postsecondary education. CTS is divided into two components: grades 6-8 and grades 9-12. CTS provides a summer program and a comprehensive series of academic year workshops and enrichment activities. An "incentive scholarship" component is being initiated for the 2002-2003 school year wherein selected CTS participants will be eligible for a full scholarship to UM-Flint upon successful completion of the program and admission to UM-Flint.

## Diversity Education Services; Special Projects

Coordinator: Crystal A. Flynn<br>Administrative Assistant: Barbara Bassett

Throughout the year, EOI sponsors a variety of programs, services and activities designed to enhance, educate and celebrate the multicultural environment of the campus and the greater Flint 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 fairness and equity. Previous programs offered have included anti-racism and inter-racial communications programs, facilitated workshops and discussion groups.

# Information Technology Services Academic Computing Laboratories 

207 William R. Murchie Science Building
Office: (810) 762-3123
ITS HelpDesk: (810) 766-6804
Fax: (810) 766-6805
3102 William S. White Building
Office: (810) 237-6647
Fax: (810) 237-6632
http://www.umflint.edu/its/
Director of ITS: Kathleen Conover
Administrative Assistant: Gail Gibson
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 highquality computing services. In doing this, ITS provides state-of-theart 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 seven 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.

All labs (both open and instructional) are equipped with a variety of computers including the Windows and/or Macintosh 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 Career Development Center, described below. Units within the University, such as WFUMTV/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 <br> (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 upperdivision 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

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Career Development Center (CDC)
237 French Hall
(810) 762-3250
http://www.umflint.edu/careers/
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The CDC'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 parttime 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 their academic unit.

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.

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.

In order to enroll in the Cooperative Education and Internship Program students must complete an information session in person or through a PowerPoint presentation on the website (http://www.umflint.edu/careers/). Group sessions are offered twice weekly at varying times for approximately 30 minutes. The dates and times are available on the CDC website, from the CDC office, or by phone.

## Student Life and Services

The faculty and staff of the University of Michigan-Flint seek to help 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 has exercise equipment, a pool, an indoor track, and offers many fitness classes as well as intramural sports. 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 MichiganFlint; 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

Interim Vice Chancellor for Student Services and Enrollment Management: Dr. Mary Jo Sekelsky

Interim Assistant Vice Chancellor: Dr. Johnny Young
Senior Systems Analyst: Jayshri Gandhi
Executive Assistant to the Vice Chancellor: Rob Montry
Executive Secretary to the Vice Chancellor: Katie Tesmer
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 Center, Career Development 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

## Interim Assistant Vice Chancellor for Student Services and Enrollment Management: Dr. Johnny W. Young <br> Office Manager: Virginia July <br> Secretary: Jean Corey

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 a walk-in and individual 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, M.A., L.L.P., A.C.F.E.
Student Counselor: Paula Pollander, M.A., L.P.C.
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

Coordinator: Paula Pollander, M.A., L.P.C.
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 campus

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

## Lesbian, Gay, Bisexual, and Transgender Center

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, 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

Interim 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:

Amnesty International. Actively engages in raising awareness to human rights abuses through letter writing campaigns, film festivals, teach-ins, and more. The club urges the campus community to "get involved and make a difference!"

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.

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 Programming Board (CPB). Campus Programming Board (CPB) 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. CPB provides many experiences for its members. Specific skills ranging from contract negotiations to accounting are acquired through CPB , along with planning and executing every event. In addition, experience in leadership, group dynamics, and time \& stress management are developed through involvement.

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 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.

Computer Science Gaming Enthusiasts and Developers. Provides a forum and organization for aspiring computer game developers and gaming enthusiasts.

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 UMFlint community.

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.

National Association of Black Accountants (NABA). Aims to unite through membership, business students in the greater Flint area who have similar interest and ideals.

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 facultystudent interaction for those interested in the field of physical therapy.

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

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.

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.

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.

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.

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.
Gamma Theta Upsilon, Earth and Resource Science Department
Golden Key International Honour Society
Phi Alpha, Social Work Department
Pi Sigma Alpha, Political Science Department.
Psi Chi, Psychology Department.

## Performance Groups

A full schedule of choral and instrumental concerts and plays is presented each year. Students interested in musical performance opportunities should contact the Music Department for audition requirements and schedules; students interested in theatrical performance should consult the Theatre Department. In addition, the Office of Student Life schedules numerous professional and amateur acts in the University Center and the University Pavilion throughout the year.

## 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
Advisor: Dr. Johnny W. Young
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

206 University Pavilion
(810) 762-3351

FAX (810) 762-3334
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 alumni 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 belong to the UM Alumni Association, M-Club of Greater Flint and th Flint Association of UM Alumnae.

## Recreational Services

## Recreation Center

(810) 762-3441
www.flintrec.com
Director: Theresa Landis

Associate Director: Gary Parr
Assistant Director of Intramural Sports: Chris Clolinger
Student Development \& Facilities Coordinator: Ervin Leavy Jr. Assistant Director of Health Promotion: Sherri Berry
Membership Services \& Budget Manager: Becky Pettengill
Business Information Manager: Amy Clolinger
Secretary: Kay Fritzler
The Recreation Center is open to all currently enrolled students who register for Recreation Center identification cards. Annual, monthly and daily memberships can also be purchased by alumni and community members.

The 80,000 square foot facility includes a multi-purpose gym, weight training areas, aerobic training equipment, 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:

Intramural Sports. The intramural sports program consists of flag football, basketball, racquetball, volleyball, soccer leagues, and a variety of special sports tournaments. This program provides an 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, swim lessons taught by American Red Cross certified instructors, Hapkido martial arts training, self-defense for women programs, and special events such as Women's Night Out.

## Building Management and Events

(810) 762-3436

Director, Auxiliary Services: Dick Horning
Associate Director, Auxiliary Services: Tammy Rees
Facilities Coordinator: Peggy Graham
Auxiliary Services Coordinator: vacant
Reservationist: Gina Rose
Food and Beverage 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 and William S. White Building.

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 five 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<br>Administrative Assistant: Gayle Bachman

The Department of Public Safety is responsible for maintaining a safe environment on the properties of the University of MichiganFlint. 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 911 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 the Public Safety World Wide Web Site at: www.umflint.edu/departments/safety. 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<br>(810) 762-3383 or 762-3180<br>FAX (810) 766-6791<br>Website: http://research.umflint.edu/<br>Director: Dr. Sally A. Harris<br>Accounts Manager: Mona Younis<br>Study Manager: Sally Conley<br>Statistical \& Technical Assistance Consultant: David Keswick<br>Research Field Supervisor: Andre Louis<br>Administrative Assistant: Suzy Sikora<br>Research Secretary: Kathy Steenson

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, disseminating important research-related information to the campus, sponsoring several Undergraduate Student Research events, and acting as a steward for internal research funds including Research Initiatives Grants, Fellowships, Partnerships, Faculty Development Funds, International Travel Funds and Research Excellence Funds.

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 basis.

Through consultation and technical assistance, the Office of Research helps clients define problems and collect and analyze appropriate information. The Office of Research staff assemble research teams, which are often interdisciplinary, to address issues of public concern to the city and region. Research teams of faculty members, staff or students work closely with client agency representatives from government, nonprofit groups, industry or business.

Our Survey Research Facility (SURF) uses a ComputerAssisted 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

## Outreach Administration

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

## Executive Director: Dr. Kristen D. Skivington

University Outreach at the University of Michigan-Flint was established in 1998 with the mission of meeting the challenges and opportunities of the University of Michigan-Flint service region and the UM-Flint family by linking university and community resources, providing programs and services that are learning-centered, promoting the creation and application of knowledge, and engaging the university and community in mutually beneficial relationships.

To accomplish such broad goals, University Outreach was established by bringing together university units with a total of over twenty years of community partnership experience. In addition to the 'Amaizing $U$ ' lifelong learning courses, University Outreach consists of a number of specialized organizations including the Center for Applied Environmental Research, the Center for Service Learning and School Partnerships, and the Center for Entrepeneurship and Business Development.

# Center for Applied Environmental Research 

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

Director: Harry Blecker
The Center for Applied Environmental Research (CAER) applies the resources of the University of Michigan-Flint to environmental problems throughout Greater Genesee County and Mid-Michigan. CAER combines technical consultation, education, and research with creative applications of geographic information systems (GIS) in order to facilitate proactive discussions between community leaders and decision makers. For instance, CAER has earned a reputation for excellence in water management, balancing the delicate issues of protection versus use. The Center has worked with a number of communities and organizations in east-central Michigan to help balance groundwater and surface water concerns with development and economic growth issues. CAER uses careful consideration and works closely with all concerned parties in order to create the most valuable, efficient, and sustainable solutions to environmental concerns.

## Center for Service Learning and School Partnerships

444 David M. French Hall
(810) 766-6896 Phone
(810) 237-6501 Fax

Director: Tracy B. Atkinson
The Center for Service Learning and School Partnerships (CSLSP) links University of Michigan-Flint resources with community education programs to enhance the academic development and encourage the citizenship of University and K12 students. The CSLSP is committed to providing meaningful community service opportunities for the University of MichiganFlint students through a variety of programs. These programs provide needed supplemental services to K-12 schools, including intergenerational mentorship and professional development for community schoolteachers. The programs also provide valuable job skills, training and/or research opportunities for University faculty, staff and students.

## Center for Entrepreneurship and Business Development

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

Director: Harry S. Blecker
The Center for Entrepreneurship and Business Development (CEBD) applies the resources of the University of MichiganFlint to assist new and existing organizations in Flint and the surrounding communities. Currently, the Flint Area Enterprise Community faces unique challenges not only in generating new business but maintaining established business, young and old alike. The CEBD assists organizations with community development projects and connects University of Michigan faculty, students, and alumni with real-world business scenarios, encouraging both education and creative solutions. University Outreach and the School of Management have been designated
the host for Small Business Development Center, Region 6. Through this joint effort, CEBD and the School of Management will bring specialized services and support for growing and supporting small businesses in our service region.

## Michigan Public Media

# Michigan Television/ WFUM-PBS (TV28, HD 52) <br> 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
Director: Donovan Reynolds
Deputy Director: Michael P. Coleman
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.

- Acting as stewards of public culture, arts and humanities-entertaining, 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

## Interim 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/

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.

Station Manager: Jon Hoban


Undergraduate Programs of Study

## GUIDE TO PROGRAMS AND DEGREES UNDERGRADUATE DEGREES

| SUBJECT AREA | MAJOR | MIN. CREDITS FOR DEGREE | MINOR | TEACHER CERTIFICATION | HONORS 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 Education | BS | 126 | - | BS | - |
| Art -Studio Art | BFA | 124 | Yes | - | BFA |
| Art/Art History | - | - | Yes | - | - |
| Biology | BS | 124 | Yes | BS/Minor | 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 | - | - |
| Corrections | - | - | Yes | - | - |
| Criminal Justice | BA | 120 | - | - | BA |
| Dance | - | - | Yes | - | - |
| Environmental Science \& Planning | BS | 120 | Yes | BS/Minor | BS |
| Economics | BA | 120 | Yes | - | BA |
| Education, Elementary | BS | 128 | - | BS | BS |
| Education, Secondary | BA/BS | 126/124 | - | 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 Writing | - | - | Yes | - | - |
| Field Biology | - | - | Yes | - | - |
| Finance | BBA | 120 | - | - | BBA |
| French | BA | 120 | Yes | BA/Minor | BA |
| French and International Studies | BA | 120 | - | - | - |
| French and Linguistics | BA | 120 | - | - | - |
| Geographic Information Science | - | - | Yes | - | - |
| Gerontology | - | - | Yes | - | - |
| Health Care Administration | BS | 124 | Yes | - | - |
| Health Education | BS | 124 | - | - | - |
| 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 | - | - | BS |
| Music | BA | 120 | Yes | BA/Minor |  |
| Music Education | BME | 122 | - | - | - |
| Music Performance | BS | 124 | - | - | - |
| Natural History | BA | 120 | - | - | - |
| Nursing | BSN | 129 | - | - | BSN |

## GUIDE TO PROGRAMS AND DEGREES UNDERGRADUATE DEGREES

$\left.\begin{array}{lccccc}\hline \text { SUBJECT AREA } & \text { MAJOR } & \begin{array}{c}\text { MIN. CREDITS } \\ \text { FOR DEGREE }\end{array} & \text { MINOR } & \begin{array}{c}\text { TEACHER } \\ \text { CERTIFICATION }\end{array} & \begin{array}{c}\text { HONORS } \\ \text { PROGRAM }\end{array} \\ \hline \text { Operations Management } & \text { BBA } & 120 & - & - & \text { BBA } \\ \begin{array}{l}\text { Organizational Behavior \& } \\ \text { Human Resources Management } \\ \text { Philosophy }\end{array} & \text { BBA } & 120 & \text { Yes } & - & \text { BBA }\end{array}\right\}$

## BACHELOR'S DEGREES

| BA | Bachelor of Arts | BFA | Bachelor of Fine Arts |
| :--- | :--- | :--- | :--- |
| BS | Bachelor of Science | BAS | Bachelor of Applied Science |
| BBA | Bachelor of Business Admnistration | BME | Bachelor of Music Education |
| BIS | Bachelor of Interdisciplinary Studies | BSN | Bachelor of Science in Nursing |

## GRADUATE DEGREES

Master of Arts in Education
Specialization in Early Childhood Education
Specialization in Literacy (K-12)
Specialization in Urban/Multicultural Education
Specialization in Technology in Education
Master of Arts in Elementary Education with Teacher Certification
Master of Arts in Social Sciences
Gobal Studies Track
Gender Studies Track
US History \& Politics Track

## Master of Business Administration

Master of Liberal Studies in American Culture
Master of Public Administration
General Program in Public Administration

Concentration in Administration of Nonprofit Agencies
Concentration in Oriminal 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.)
C. 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
Weekend Courses: Theresa Stevens
Professional Development and Continuing Education Programs: Terri Blackwell
Academic Online Programs: Courtney Bentley, Theresa Stevens, Tim Todd
Secretarial Staff: Tracy Smith

## Mission Statement

Our mission is to offer quality educational programs for lifelong learners in collaboration with the UM-Flint community using alternative methods of delivery. This includes academic and professional development and continuing education course offering and programs through online learning, interactive TV, weekend programming, extension sites, and international programs.

## Online Academic Course Offerings

All academic online courses are instructor-led and typically asynchronous through Blackboard courseware. This courseware allows the instructor to post assignments, lead discussions, host virtual chats, post grades and announcements for students to view.

UM-Flint hosts on-campus orientation sessions for new online students prior to the start of each semester. To learn more about online courses or to view a demo course, call the Office of Extended Learning. You may find a schedule of current class offerings at the website, http://online.umflint.edu.

In addition to fully online courses, Blackboard is also used to provide mixed-mode courses and Course Companions. Mixedmode courses require students to come to campus for predefined times to complete their course; Course Companions are used by faculty in traditional face-to-face course to load information for the students to view online.

Currently, the University of Michigan-Flint offers a full RN to BSN degree online and a mixed-mode NetPlus! MBA.

## Online Professional Development and Continuing Education Course Offerings

Current students and lifelong learners may also participate in our professional development and continuing education courses. We offer online technical certification programs for K-12 teachers. These programs are registered with the State of Michigan and participants receive SB-CEUs upon successful completion of the coursework.

Other offerings include courses for accountants, business professionals and healthcare professionals. Visit http://loginandlearn.com to view a listing of current course offerings or call our office for more information.

## Weekend Course Offerings

A limited number of traditional day or evening credit courses
are also offered on the weekends. Please call our office to learn more about weekend course offerings or visit our website at http://oel.umflint.edu/Weekend.htm.

## International Study Abroad Tours

The Office of Extended Learning in collaboration with the International and Global Studies Program (IGS) provides CEUs for certain international study abroad course offerings. These trips may be taken for academic credit or as non-credit learning opportunities. Trips typically take place during the spring and summer semesters. To register, please call our office.

## Additional Non-credit Programs

Conferences, workshops, and seminars on topics relevant to the
special needs of groups or the needs of lifelong learners are offered by special arrangement. One such program is our Jump Start workshop that assists learners as they learn how to take advantage of the Internet for their coursework. Jump Start may be offered as a one-day workshop or seminar on campus or on site to get learners acclimated to the online learning environment. This is a hands-on instructor-led interactive experience that will accommodate up to thirty participants in a session.

Customized training programs for business, industry, labor, public and not-for-profit and professional organizations are available through this office. Certification programs may be customized for special organizational needs. Admission to the University of Michigan-Flint is not necessary.


## General Education Worksheet

## Requirements

I. English Composition (ENG 112 or equivalent)
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. Area Options (see below)
VII. Additional Courses (to bring total number of general education credits to 50)

| English Composition | cr. |
| :--- | :---: |
| ENG 111 |  |
| ENG 112 |  |


| Humanities | cr. |
| :--- | :---: |
|  |  |
|  |  |
|  |  |


| Fine Arts | cr. |
| :--- | :---: |
|  |  |


| Natural Sciences | cr. |
| :--- | :---: |
|  |  |
|  |  |


| Social Sciences | cr. |
| :--- | :---: |
|  |  |
|  |  |
|  |  |

[^0]

Additional Courses (from fine arts, humanities, natural sciences, social sciences, foreign languages, linguistics, mathematics, and computer science, but excluding discipline of concentration)

|  |  |
| :--- | :--- |
|  |  |
|  |  |
|  |  |


|  |  |
| :--- | :--- |
|  |  |
|  |  |
|  |  |

## 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 levels.
- 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 seven groups: English Composition, Fine Arts, Humanities, Natural Sciences, Social Sciences, Additional Courses, and Area Options, 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. Based on their performance on an English Placement Exam (EPEX), all incoming students and transfer students who do not transfer in sufficient applicable writing credits will be place din 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). EPEX 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. Area Options.

The area options include course work basic to a general education but beyond the bounds of any single discipline or academic division. Students must complete two of the following five options.
A. Analytic Reasoning (ar)
B. Cultural Studies (cs)
C. Foreign Language (fl)
D. Values Inquiry ( $v i$ )
E. The Foundations of Western Civilization (wc)

## Area Option Requirements.

Two area options must be completed. Each option requires nine credits, with the exception of the foreign language option (see option C below).

Foreign language is required as one of the two options for the Bachelor of Arts degree; for the Bachelor of Business Administration degree, one of the options completed must be analytical reasoning. Many programs also require or recommend certain area options.

In all cases, either one of the area options or nine credits from a combination of both options must be in courses outside the primary discipline of the student's concentration program.

Area option courses may "double count" (apply simultaneously to one area option and one other general education requirement). An $f, h, n$, or $s$ follows courses listed below that can count toward an area option and also toward
another general education requirement.
The choice of area options should be made with care. The range of offerings is wide and includes courses that vary considerably in content and level. Before completing 45 credits at the University of Michigan-Flint, the student should declare the choice of area options to the advisor. A declared choice may be changed upon consultation with the advisor.
A. Analytic Reasoning (ar). This area option provides experience in the use of logical reasoning. The letters ar immediately following the credit parentheses of a course indicate that the course satisfies the analytic reasoning area option.

Requirements. Nine credits from among the courses listed below, including courses from at least two of the following categories.
ar1. Courses which examine the nature, methods, and types of reasoning used in the analysis and solution of problems. AFA 220, Introduction to Research and Africana Theories of Knowledge
PHL 103, Principles of Analytic Reasoning, $h$
PHL 202, Introduction to Logic, $h$
PHL 309, Introduction to Philosophical Analysis, $h$
PHL 321, Metaphysics, $h$
PHL 322, Theories of Knowledge, $h$
PHL 323, Philosophy of Mind, $h$
PHL/PSY 235, Introduction to Cognitive Science, $s$
ar2. Courses in which analytic reasoning is applied to specific or concrete questions.
BUS 211, Business Statistics
CHM 150, General Chemistry for Health Sciences, $n^{*}$
CHM 160, Principles of Chemistry I, $n$
CHM 162, Principles of Chemistry II, $n$
CHM 252, Biological Chemistry for Nursing
CHM 220, Fundamentals of Organic Chemistry
CSC/CIS 175, Problem Solving and Programming Concepts
CSC/CIS 270, COBOL Programming
CSC 271, FORTRAN Programming
CSC/CIS 273, Visual BASIC for Windows
ECN 201, Principles of Economics (Macroeconomics), $s$
ECN 202, Principles of Economics (Microeconomics), $s$ FRN/GER/LIN/SPN 360, Comparative Phonetics/

The World's Major Languages
GEO 203, Introduction to Spatial Analysis
GEO 216, Modern Geography
MUS 141, Music Theory I, $f$
MUS 142, Music Theory II, $f$
PHY 110, Conceptual Physics by Inquiry Method, $n$
PHY 143, College Physics I, $n$
PHY 145, College Physics II, $n$
PHY 243, Principles of Physics I, $n$
PHY 245, Principles of Physics II, $n$
PSY 201, Principles of Research Design
PSY 301, Basic Statistics and Probability
RPL360, Analytic Methods in Resource Planning
SOC 210, Introduction to Social Research, $s$
SOC 215, General Statistics
SWK 250, Methods of Research and Evaluation, $s$
ar3. Courses in mathematics which present mathematical reasoning and analysis either through the study of fundamental concepts or nonroutine problem solving.
MTH 112, Liberal Arts Mathematics
MTH 115, Mathematical Inquiry I
MTH 116, Mathematical Inquiry II
MTH 117, Mathematics for Management and Social Sciences
MTH 118, Calculus for Management and Social Sciences
MTH 120, Pre-Calculus Mathematics
MTH 121, Calculus I
MTH 122, Calculus II
B. Cultural Studies (cs). This area option examines the nature and types of human culture, and the life and thought of foreign and American cultures. The letters cs immediately following the credit parentheses of a course indicate that the course satisfies the cultural studies area option.

Requirements. Nine credits from among the courses listed below, including courses from at least two of the following categories.
csl. Nature and types of human culture.
AFA 201, Introduction to Africana Studies, $s$
AFA 310, Performance Traditions and Aesthetics of the African World, $f$
AFA 311, African World Performance Studio, $f$
ANT/INT 100, Introduction to Anthropology, $s$
ANT 110, Introduction to Archaeology, $s$
ANT/SOC 325, Culture and Personality, $s$
ANT/HCR 330, Medical Anthropology, $s$
ANT/LIN 335, Language Variation in Society, $s$
ANT 340, Urban Anthropology, $s$
ANT/POL 351, Political and Legal Anthropology, $s$
ANT 352, Culture and Economy in Cross-Cultural
Perspective, $s$
ANT 355, World Religions, $s$
GEO 116, Human Geography, $s$
GEO/RPL 215, Cultural Landscapes, $h$
PHL 350, Mythological Thought, $h$
SOC 340, Urban Sociology, $s$
$c s 2$. Foreign cultures.
AFA 320, Contemporary East African History
AFA 322, History of West Africa and the Atlantic World, $s$
AFA/ANT 250, African Cultures, $s$
AFA/ANT 305, Topics in African Languages and Cultures
AFA/ART 308, African and African-American Art, $h$
AFA/CPL 206, Survey of African Literature, $h$
AFA/CPL 257, Protest in African Literature, $h$
AFA/CPL/WGS 218, Women Writers of the African
World, $h$
AFA 300/CPL 301, Introduction to Francophone
African Literature, $h$
AFA/HIS 230, Survey of African History to 1800, s
AFA/HIS 336, Africa in Modern Times, 1800 to
Present, $s$
AFA/MUS 202, African Music and Cultures
AFA/POL 340, African Politics, $s$

AFA/SOC 265, Caribbean Society and Culture
ANT 215, Islamic Civilization, $s$
ANT 255, Cultures and Peoples of East Asia, $s$
ANT 284, Cultures of the Middle East, $s$
ANT 284, Cultures and Peoples of Latin America, $s$
ANT 295, Cultures of South Asia, $s$
ANT 299, Third World Cultures Through Film, $s$
ANT 315, Mexico: Cultures in Transformation, $s$
ANT 318, Mesoamerican Archeology, $s$
ANT/INT 385, Japanese Society and Culture I, $s$
ANT/INT 386, Japanese Society and Culture II, $s$
ANT/WGS 378, Sex and Gender in Cross-Cultural
Perspective, $s$
ART 315, Impressionism and French Culture, $h$
CPL 258, Russia and the Soviet Union Through its
Literature: Russia of the Tsars, $h$
CPL 259, Russia and the Soviet Union Through its
Literature: Russia of the Soviets, $h$
ENG 218, British Classics and British Landscapes, $h$
FRN 310, Understanding the French-Speaking World, $h$
FRN 346, French as a Multi-Cultural Language, $h$
GEO/INT 115, World Regional Geography, $s$
GER 310, Understanding the German-Speaking World, $h$
HIS 215, Islamic Civilization to 1500 , $s$
HIS 216, Islamic Civilization since 1500, $s$
HIS 283, Introduction to Islam and the Modern
"Middle East," s
HIS 290, East Asia to 1600, s
HIS 291, East Asia since 1600, $s$
HIS 302, Latin America from Colonization to Independence, $s$
HIS 303, Latin America: Independence to the Present Day, $s$
HIS 305, Central America from Conquest to the Present, $s$
HIS 308, Topics in Modern Latin American History, Politics and Culture, $s$
HIS 339, History of Mexico, $s$
HIS 341, Comparative Revolutions in Modern Latin
America, $s$
HIS 352, History and Civilization of Russia, $s$
HIS 353, History of East Central Europe, $s$
HIS 355, Topics in Contemporary Europe, $s$
HIS 357, Polish Culture through History and Literature, $s$
HIS 367, History of Germany, $s$
HIS 376, History of Modern China, $s$
HIS 377, Pre-Modern Japan to 1600, $s$
HIS 378, History of Modern Japan, $s$
HIS 385, History of the Modern "Middle East" since the XIXth Century, $s$
HIS 386, International Relations of the "Middle East," $s$
HIS/INT 346, Twentieth Century World History, s
SPN 319, Understanding the Spanish World: Latin
America, $s$
MUS 226, Music in World Cultures, $h$
MUS 227, European Folk Music, $h$
POL 341, Politics and Society in the Soviet Union
and the Commonwealth of Independent States, $s$

POL 345, European Politics, $s$
SPN 310, Understanding the Spanish-Speaking World: Spain, $h$
cs3. American cultures.
AFA 357, The Black Church and the Civil Rights Movement
AFA 301, Early Africana Studies
AFA 321, Twentieth Century African-American Literature
AFA 357, The Black Church and the Civil Rights Movement
AFA/ANT 260, African Diaspora in the Americas, $s$
AFA/EDU 399, Africana Studies for Teachers
AFA/ENG 215, Survey of African-American Literature, $h$
AFA/HIS 286, Muslims in North America, $s$
AFA/THE 239, Introduction to African-American
Theatre: Ante-Bellum to 1950s
AFA/THE 242, Contemporary Black Theatre in America, $h$
AFA/MUS 200, The History of Blues, Jazz and Rap
AFA/MUS 313, African-American Music, $h$
AFA/HIS 334, History of Ethnic and Racial
Minorities in the United States, $s$
AFA/HIS 335, The History of the African-American, $s$
AFA/SOC/WGS 359, The Black Family, $s$
AFA/WGS 216, Afro/Latino/Caribbean Women Writers $h$
ANT 271, Native Americans, $s$
ANT 311, Historical Archaeology
ART 409, History of American Art, $h$
ENG 213, American Ethnic Literature, $h$
ENG 374, Major Themes in American Ethnic Literature, $h$
ENG 375, Modern Native American Literatures, $h$
ENG 382, Cultural Themes in Contemporary American Novels, $h$
HIS 438, Jazz, Rock \& Cinema: A Social History of the 20th Century United States, $s$
HIS/INT 241, Introduction to Latina/Latino Studies, $s$
HIS/WGS 250, The History of American Women, $s$
HIS 323/THE 303, United States Theatre History, $h$
MUS 313, African-American Music, $h$
POL 245, Mass Political Movements, $s$
WGS 200, Introduction to Women's Studies
C. Foreign Language ( $f l$ ). A sequence of study of a foreign language and culture. The letters $f l$ immediately following the credit parentheses of a course indicate that the course satisfies the foreign language area option.

Requirements. Completion of Arabic 112, French 112, German 112, Italian 112, Spanish 112, Latin 105, Russian 112, or Japanese 112, or equivalent proficiency by examination ( $0-8$ credits).*
*Note: 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.
D. Values Inquiry (vi). This area option covers a broad and diverse range of values, such as those appearing in moral, artistic, political, and religious contexts. It emphasizes the use of careful and critical thinking in seeking clearly articulated and well reasoned points of view. The letters $v i$ immediately following the credit parentheses of a course indicate that the course satisfies the values inquiry area option.

Requirements. Nine credits from among the courses listed below, including courses from both of the following categories.
vil. Courses that present and critically examine different theories and types of reasoning involving diverse values in such areas as ethics, politics, religion, art, and literature.
AFA/ANT/PHL 205, African Religions and Philosophy, $h$
AFA/ANT 369, African Religions
ENG 241, Elements of Literary Analysis, $h$
ENG/PHL 373, Philosophy in Literature, $h$
HIS 360, An Introduction to Holocaust History, $s$
HIS 387, Islam and Political Change, $s$
HON 251, Great Ideas I, $h$ or $s$
HON 252, Great Ideas II, $h$ or $s$
PHL 162, Introduction to Ethics, $h$
PHL 165, Philosophy of Religion, $h$
PHL/NSC 168, Introduction to Bioethics, $h$
PHL 261, Morality and its Foundations, $h$
PHL 272, Philosophy and the Environment, $h$
PHL 320, Computers and Society, $h$
PHL 361, The Study of Ethics, $h$
PHL 368, Social and Political Philosophy, $h$
PHL 376, Existentialism, $h$
POL 120, American National Government and Politics, $s$
POL 261, Contemporary Ideologies, $s$
POL 365, Marxist Political Thought, $s$
POL 380, The American System of Law, $s$
SOC 384, Criminology, $s$
vi2. Courses involving rigorous thinking about value-laden issues.
AFA 363, Black Cultural Criticism
AFA 358/HIS 368, The History of African-American Religion, $s$
AFA/SOC 270, Race and Ethnic Relations, $s$
COM/LIN 231, Language and Law
COM/PHL 163, Rhetoric of Hate and Fear, $h$
ENG 353, American Poetry in the Modernist Tradition, $h$ ENG 383, Modern Novel, $h$
ENG/WGS 228, Women and Literature, $h$
ENG/WGS 337, Topics in Women's Literature, $h$
HCR/PHL 304, The Ethics of Health Care, $h$
PHL 115, Mortal Questions, $h$
PHL 160, Values in Contemporary Life, $h$
PHL 167/WGS 167, Race, Gender and Sexuality, $h$ PHL 266, Philosophy of Art, $h$
PHL 267, Philosophical Theories of Punishment, $h$ PHL 271, Ethics in Business, $h$

> PHL 362, Philosophy of Law, $h$
> PHL 364, Philosophy, Work, and Economic Freedom, $h$ PHL/WGS 264, Introduction to Feminist Theory, $h$ PHL 374, Philosophy and Children's Literature, $h$ PHL/THE 372, Philosophy in Film and Literature, $h$ POL 329, Civil Liberties and the Constitution, $s$ POL 381, The Bill of Rights, $s$ POL 387, Sex, Drugs, and Politics, $s$ PSY 230, Psychology of Adjustment, $s$ SOC/WGS 354, Sociology of the Family, $s$ SWK 200, Introduction to Social Work, $s$ SWK 300, Mental Illness and Social Work Practice, $s$
E. The Foundations of Western Civilization (wc). This area option emphasizes the philosophical, religious, and artistic roots of western civilization as found in their origins, in classical thought and literature, the Judeo-Christian tradition, the culture of Europe in the Middle Ages and the Renaissance, the intellectual and artistic flowering of the Enlightenment, and the nineteenth century. The letters wc immediately following the credit parentheses of a course indicate that the course satisfies the western civilization area option.

Requirements. Nine credits from among the courses listed below, including courses from both of the following categories.
wcl. Courses concerned with the history of western civilization, its philosophic traditions, its culture, and its political thought.
AFA/ANT/PHL 203, Origins of Modern Racism, $h$
ANT/SOC 302, History of Social Thought, $s$
HIS/INT 112, World History to 1500, s
HIS/INT 113, World History since 1500, s
HIS 210, Western Civilization to $1600, s$
HIS 211, Western Civilization from 1600, $s$
HIS 260, The European Cultural Experience:
Classicism to Surrealism, $h$
HIS 325, Medieval Britain, $s$
HIS 326, Modern Britain, $s$
HIS 349, Medieval European Social History, $s$ HIS 350, Medieval European Intellectual History, $h$
HIS 358, Modern European Thought, $h$
HIS 372, France: From Absolutism to Democracy, 1660-1914, s
HIS 373, Revolution in Early Modern Europe, s HIS/INT 113, World Civilizations since 1600, $s$

MUS 220, Music Survey, $h$
MUS 261, Music History I, $h$
PHL 140, Ancient Philosophy in its Cultural Context, $h$
PHL 312, History and Philosophy of Science, $h$
PHL 340, Ancient Greek Philosophy, $h$
PHL 341, Medieval Philosophy, $h$
PHL 342, Early Modern Philosophy, $h$
POL 360, Ancient and Medieval Political Thought, $s$
POL 361, Modern Democratic Political Thought, $s$
THE 300, History of Western Theatre I, $h$
THE 301, History of Western Theatre II, $h$
$w c 2$. Courses concerned with the western literary tradition through the nineteenth century.
CPL 303, Masterpieces of World Literature in
Translation: III, $h$
CPL 304, Masterpieces of World Literature in
Translation: IV, $h$
ENG 204, Literature of Greece and Rome, $h$
ENG 205, The Bible in English: Old Testament and Apocrypha, $h$
ENG 206, The Bible in English: Old Testament Prophets, Apocalyptic and New Testament, $h$
ENG 207, Survey of Greek and Roman Classical
Literature, $h$
ENG 303, Medieval Literature, $h$
ENG 312, The Renaissance, $h$
ENG 317, The Seventeenth Century, $h$
ENG 326, The Age of Enlightenment, $h$
ENG 327, Age of Sensibility, $h$
ENG 329, The Eighteenth Century British Novel, $h$
ENG 350, The Tradition of English Literature, 15001750, $h$
HON 155, Great Books I, $h$
HON 156, Great Books II, $h$
HON 355, Great Books, $h$
No more than one of the following:
ENG 315, Shakespeare's Principal Plays, $h$
ENG 316, Shakespeare's Principal Plays, $h$

## VII. 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:

After this Catalog was readied for print, 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) made changes to the Area Options segments of 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<br>(810) 762-3234<br>Web Address: www.flint.umich.edu/Departments/cas

Dean: Dr. D.J. Trela
Associate Dean: Dr. Robert Barnett
Assistant Dean: Dr. Roy Barnes
Senior Executive Secretary to the Dean: Mary Packer
Administrative Assistant II: Roxanne M. Brunger
Institutional Advancement College of Arts and Sciences: Janette F. Kolodge
Academic Services Secretary III: Anna Gross
Academic Services Secretary III: Rhonda Broadworth
Academic Services Secretary III: 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 American Culture, Biology and in Public Administration are offered through the faculty of the College of Arts and Sciences. These programs lead to the degrees Master of Liberal Studies in American Culture, Master of Science in Biology and Master of Public Administration.

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:

- 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 j 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 |
| B | 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 $\mathrm{E}, \mathrm{F}$ 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: $\mathrm{C}, \mathrm{C}-, \mathrm{D}$, 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 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 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 UMFlint 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.

1. The instructor(s) shall be consulted directly in an effort to resolve the dispute.
2. 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).
3. 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.

## $\underline{\text { Bachelor of Arts (BA) }}$

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, including the foreign language area option.
B. 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.
C. 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.
D. A cumulative grade point average of $\mathrm{C}(2.0)$ 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 $\mathrm{C}(2.0)$ 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.

1. 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).
4. 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.
5. 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.
6. 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 $\mathrm{C}(2.0)$ 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 twoyear 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 $\mathrm{C}(2.0)$ 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; Assistant Professors Guluma Gemeda, Tiffany Willough-Herard; Lecturers Gerald Matthews, George Moss, Carolyn Nur Wistrand, Kim Yarber.

## Department Mission and Program Assessment

The Department of Africana Studies at the University of MichiganFlint 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 goals, methods and outcomes is available at 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 is 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.

Area Options. One of the two required area options must be 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. See the section entitled "General Education.")

Requirements. Completion of 33 credits distributed as follows:
A. Introductory Courses ( 6 credits).

AFA 201, 220.
B. History and Literature (9 credits).

1. AFA/HIS 230.
2. 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, 218, 301, 319, 321; AFA/CPL 257, AFA 300/CPL 301.
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/EDU 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/EDU/SWK 375 also recommended.

## 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.

Area Options. Same as for the General Program.
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, including 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, 218, 301, 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/EDU 331; AFA/PSY 219; AFA/SOC 270; AFA/SOC/WGS 359, 373.

## 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)cs3.

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)cs2.

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. (166). Origins of Modern Racism. (3)h/wcl.

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/vil.

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) $h / c s 2$.

Introduction to works of representative writers from all parts of the African continent. Also listed as CPL 206.
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.
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/cs3.

Introduction to American literature written by AfricanAmerican writers. Major authors studied in historical context along with cultural elements of folklore and related arts. Also listed as ENG 215.
216. (402). Afro/Latino/Caribbean Women Writers. Prior or concurrent election of ENG 112. (3) h/cs3.

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.
218. (401). Women Writers of the African World. AFA 101 or 260 or consent of instructor. (3)h/cs 2 .

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 CPL 218 and WGS 218.
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/arl.

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. Africa to the 1870s. (3)s/cs2.

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.
239. Drama of the Harlem Renaissance. (3)cs3.

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/cs3.

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. Also listed as ECN 244.
250. African Cultures. (3) $\mathrm{s} / \mathrm{cs} 2$.

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/cs2.

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/cs3.

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)cs2.

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. Socialscientific 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/vi2.

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/cs2.

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 $A B C D>N$. Also listed as CPL 301.
301. Early African-American Literature. AFA 101, 260. (3)cs3.

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. (302). Topics in African Languages and Cultures. AFA 101 or consent of instructor. (3)cs2. Also listed as ANT 305.]
308. African Art. At least junior standing or consent of instructor. Previous course in art history recommended. (3) $h / c s 2$.

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 ART 308.
310. Performance Traditions \& Aesthetics of the African World. AFA 101 or consent of instructor. (3)f/csl.

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/csl.

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 Movements. 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/cs3.

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.
320. Contemporary East African History. AFA/HIS 230 or consent of instructor. (3)s/cs2.

Contemporary political, economic, and social history of East Africa; historical background for major conflicts in the region.
321. Twentieth Century African-American Literature. $A F A$ 101, 260. (3)cs3.

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/cs 2 .

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. Also listed as EDU 331.
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/cs3.

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/cs3.

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. (201) Africa in Modern Times, 1800 to Present. (3) $s / c s 2$.

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 231.
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/cs2.

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)cs3.

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)s/vi2.

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/cs3.

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. 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. $A F A$ 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)vi2.

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)vil.

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. ANT/INT 100 or SOC 100 or AFA 101 or SWK 200; 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 EDU 375 and 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.
399. Africana Studies for Teachers. AFA 101 or 220 or consent of instructor. (3)cs3.

Overview of Africana Studies content useful to teachers in public schools. Also listed as EDU 399.
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. (286) Muslims in North America. (3)s/cs3.

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. (6).

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.
490. (393). 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.
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.

## Graduate Course in Africana Studies

590. Africana Studies for Teachers. Graduate standing; AFA/EDU 331. (3)

See AFA 399 for description. Not open to students with credit for AFA/EDU 399. Also listed as EDU 590.
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.

## 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
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).
Area Options. One of the two required area options must be the
study of a language other than English.
Requirements. Thirty credits distributed as follows:
A. Methods ( 3 credits).

SOC 210.
B. Theory ( 3 credits).

One from ANT/SOC 302, 303.
C. Institutions and Cultural Studies ( 6 credits). Two from: ANT/SOC 325; ANT/POL 351; ANT 352, 355; ANT/WGS 378.
D. Archaeology/Biological Anthropology (3-4 credits) One from: ANT 105, 110.
E. Capstone (3 credits) One from: ANT 400, 405.
F. Cultural Area Courses. Three of the following (9 credits) for students in Socio-Cultural sub-discipline; two (6 credits) for students in Archaeology/Biological Anthropology sub-discipline: ANT 240, 271, 284, 295; ANT/AFA 250, 260.
G. Specialized Topics in Anthropology. One of the following (3 credits) for students in Socio-Cultural sub-discipline; two (6 credits) for students in Archaeology/Biological Anthropology sub-discipline: AFA/ANT/PHL 203; ANT 311, 370, 380, 399, 415; ANT/AFA 305, 369; ANT/HCR 330; ANT 322; ANT/INT 299, 385, 386; ANT/LIN 290, 335; ANT 318; ANT/SOC 340, 375; ANT/SOC/INT/WGS 376.
H. Cognate Fields: Three courses ( $9-12$ credits) numbered 300 or higher from the fields of biology, economics, earth and resource science, history, linguistics, philosophy, psychology, political science, and/or sociology, to be chosen in consultation with advisor.

## Honors Program in Anthropology

Faculty Advisor: Dr. Rosenthal
Prerequisites. ANT/INT 100, SOC 210.
Area Options. One of the two required area options must be the study of a language other than English.

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. Completion of 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 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: AFA/ANT 250, 260, ANT 215, 240, 271, 284.
D. Theory ( 3 credits). ANT/SOC 302 or 303.
E. Electives ( 6 credits). Two from: AFA/ANT/PHL 203, ANT 311, 318, 322, 325, 340, 352, 355, 369; 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) $s / c s 1$.

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 $A B C D D->N$. 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/cs1.

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/wcl.

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/vil.

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/cs2. Graded $A B C D D->N$.]
240. (310). Cultures of the Middle East. ANT/INT 100 or consent of instructor. (3)s/cs2.

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) $s / c s 2$.

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/cs3.

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/cs3.

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. (314). Cultures and Peoples of Latin America. ANT/INT 100. (3)s/cs2.

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/cs2.

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/cs 2 .

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/wcl.

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)cs2. Also listed as AFA 305.]
311. Historical Archaeology. ANT 110 or consent of instructor. (3)cs3.

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/cs2.

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.

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 325.
330. Medical Anthropology. A course in anthropology or HCR 300. (3)s/csl.

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/cs1.

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/csl.

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/csl.

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/cs1.

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.
355. World Religions. ANT/INT 100 or SOC 100. (3)s/cs1.

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 nonorthodox 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)vil.

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/cs2.

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. (3-6)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/cs2.

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/cs2.

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, structuralfunctionalism, 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 SocioCultural 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.
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.
499. (399) Senior Seminar. Consent of instructor. (3).

Critical review of the sociological and anthropological literature with attention to the interaction of theory and research. Also listed as SOC 499.

## 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 415. Also listed as INT 515.
525. Culture and Personality. Graduate standing; ANT 100 or PSY 100 or SOC 100. (3).

See ANT 325 for description. Not open to students with credit for ANT/SOC 325.
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 SocioCultural Systems. Graduate standing or consent of instructor. (3). Not open to students with credit for ANT 455.]
[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.
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.
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

285 University Pavilion
(810) 762-3085

FAX (810) 762-3043
Program Director: Dennis Viele (Biology Department, 264 MSB)
Program Advisors: Jo Ann Shabazz, Dr. Johnny W. Young
Administrative Assistant: Barbara J. Peckham
The concentration in Applied Science is designed for students seeking a Bachelor of Applied Science degree, available to graduates of two-year programs in specified technical areas. The
degree permits a student who has had education and experience in a technical field to transfer these credits to the University of Michigan-Flint and complete a baccalaureate degree in a program appropriate to the student's interests and needs.

For this degree, the student's major concentration is Applied Science, consisting entirely of technical credits taken during the associate in applied science degree program. Courses to be taken at the University of Michigan-Flint are chosen to meet the general education requirements and to allow the student to pursue areas of interest in some depth.

## Bachelor of Applied Science (BAS)

The Bachelor of Applied Science (BAS) degree is awarded in recognition of baccalaureate level study beyond approved twoyear programs in specified technical areas. After admission to the program, the student should meet with an advisor, who will help to develop a plan for degree completion.

## 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 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, 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 sixtytwo (62) credits, and is permitted only for courses in which the final grade earned was a $\mathrm{C}(2.0)$ 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 MichiganFlint. 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 $\mathrm{C}(2.0)$ or better in the total work at the University of Michigan-Flint.

## 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 Teacher's Certificate Program in General Science or for the General Program in Physical 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: Wendy Carpenter
Part-time Secretary: Ann Niemann
Professors Steven F. Myers, David L. Wigston; Associate Professors Gary L. Pace, Bruce D. Parfitt, Joseph F. Sucic; Assistant Professors Jerry D. Sanders, Ann Sturtevant; 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 are 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 departmental courses designated as writing courses or, in the case of B.A. 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 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. Non-majors BIO courses (BIO 103, $104,135,167,168,191)$ generally only count half of their credits toward the required number of BIO credits in a biology program. The only exception is the BA Program in Human Biology, which does fully count the credits earned in BIO 167 \& 168. The credits earned in all non-majors BIO courses count fully towards the total number of credits required for graduation.

## 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.

Area Options. Unless equivalency for MTH 120 is granted, an area option in analytic reasoning is automatically satisfied by required courses. Students may choose the second area option
according to their interests.

## Requirements.

A. The general education requirements of the College of Arts and Sciences.
B. At least 44 credits in biology including BIO 111, 113, 326, 327 and 328, and two writing courses; and no more than 16 credit hours of 100 or 200 -level courses.
C. At least 25 credits in non-biological sciences, mathematics and computer science, including CHM 160, 161, 162, either 163 or 165, 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 160, 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 the total work at the University of Michigan-Flint.
G. Grades of C- or better in all 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.

Area Options. An area option in Analytical Reasoning is automatically satisfied by required courses. Students may choose the second area option according to their interests.

## Requirements

A. The general education requirements of the College of Arts and Sciences.
B. At least 40 credit hours in Biology including BIO 111, 113, 326, 327, 328, 425, 435, 462, 467.
C. Non-biological natural sciences. MTH 120, PHY 143, 145, CHM 160, 161, 162, 163, 230, 231, 232, 233, 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 total work at the University of Michigan-Flint.
F. Grades of C - or better in all 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 study the dynamics of animal and plant communities. The program in wildlife biology 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 wildlife management methods, field techniques and theoretical studies of wildlife populations and species. Wildlife managers will ultimately be responsible in controlling animal and plant populations within state, country and possibly international borders. Wildlife managers may also be responsible for the 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 will expect 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. The general education requirements of the College of Arts and Sciences.
B. At least 40 credit hours in Biology including BIO 111, 113, 326, 327, 328 and at least one wildlife management course.
C. Biology electives, including at least two writing courses, selected from organism or botany related courses such as: BIO 316, 373, 410, 420, 421, 423, 424, 431, 443, 460, 461, 480, 481, 483, 484, 488, 491.
D. Non-biological natural sciences: CHM 160, 161, 162, 163 , 220 or 330 (CHM 330 and 332 recommended for advanced
science degrees), 380; GEO 151, 203; MTH 120; PHY 143, 145; RPL 312, 370.
E. Electives to complete a minimum total of 124 credits.
F. A cumulative grade point average of 2.0 or better in biology and in all work completed at the University of MichiganFlint.
G. Grades of C- or better in all 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 to 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.

Area Options. An area option in Analytical Reasoning is automatically satisfied by required courses. The second area option may be in any area.

## Requirements.

A. The general education requirements of the College of Arts and Sciences.
B. At least 44 credits in biology, including the core courses: BIO $111,113,326,327,328$ (no more than 16 credit hours of 100 or 200 -level coursework can be applied toward the required 44 credits in biology), two writing courses, and one course from each of the following five categories:

1. 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.
5. 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 $160,161,162$, either 163 or 165, 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 160; ENV 100; MTH 090; PHY 105, 110.
D. A Teacher's Certificate Minor; see the particular department or program for requirements.
E. Grades of C- or better in all 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 department's honors advisor as soon as possible after being admitted to the Freshman/Sophomore Honors 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.

Note that because of the specialized sequence of courses required in the pre-medicine program, such students should plan to fulfill some of their requirements with courses taken during spring or summer terms.

Applications to the University Honors Program in Biology should be made early in the second semester of the sophomore year. Procedures for application to this program can be obtained from the biology honors advisor.

## Prerequisites.

A. HON $155,156,251,252$.
B. BIO 111, 113, 326, 327, 328. Eight credits should be elected as honors elections.
C. CHM $160,161,162,165$.
D. MTH 121 .

Area Options. One of the two required area options must be in a foreign language, as stated in the University Honors Scholar Program. Students may choose the second area option according to their interests.

## Requirements.

A. The general education requirements of the College of Arts and Sciences.
B. HON 490 and eight additional credits in honors courses or honors electives taken outside biology.
C. At least 21 additional credits in biology including:

1. BIO 404 and two writing courses.
2. BIO 491, 493, 494 (to be completed by the end of the junior year).
3. BIO $495,496$.
D. CHM 330, 331, 332, 333; PHY 143, 145.
E. Electives to complete a total of 124 credits.
F. At least 33 credits taken in upper division courses (courses numbered 300 or above).
G. A cumulative grade point average of 3.5 overall, and 3.0 in honors courses and honors electives.
H. Grades of C- or better in all core courses to be used as prerequisites.

For further information see the section entitled "University Honors Program" in this Catalog.

## Program in Human Biology <br> (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 160/161-162/163), while human biology program students may alternatively choose a one-semester chemistry survey course (CHM 150/151). Students who choose CHM $150 / 151$ and then 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, while the Human Biology Program requires a course in public speaking, selection of the foreign language area option for general education and a different set of core-biology courses.

Area Options. One of the two required area options must be in a foreign language. Students may choose the second area option according to their interests.

## Requirements.

A. The general education requirements of the College of Arts and Sciences.
B. Thirty-two (minimum) to forty (maximum) credits in biology, no more than 16 below the 300 -level, including a core sequence of BIO 111, 113, 167*, 168*, 326 and 432. (BIO 302 may be substituted for BIO 167 and 168.)

Additional courses may be selected from: BIO 300, 319, 328, 409/410, 412, 425, 430, 435, 438, 450, 467, 468, 472, 475,485 , or, with consent of instructor: BIO 434, 470, 482.
*No more than 16 credits of 100 or 200-level biology coursework may apply toward the required credits in biology.
C. 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.
D. Non-biological natural sciences and mathematics to include the following (or higher-level courses): CHM 150, 151, 220, 350; MTH 111; PHY 143, 145.
E. Electives to complete a total of 120 credits.
F. At least 33 credits taken in upper division courses (courses numbered 300 or above).
G. A cumulative grade point average of 2.0 or better in biology and in the total work at the University of Michigan-Flint.
H. Grades of C- or better in all 100- and 300-level core BIO courses used as prerequisites.

## Program in Natural History <br> (Bachelor of Arts)

Faculty Advisors: Dr. Bruce Parfitt, Ernest Szuch and Nanette Kelly

The Bachelor of Arts program in general biology 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.

Area Options. One of the two required area options must be in a foreign language. Students may choose the second area option according to their interests.

## 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. The general education requirements of the College of Arts and Sciences.
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 a grade 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 total 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 the total 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 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 302 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 in 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. Open to non-science majors with 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. Open to non-science majors with 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. (404). 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 402.
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 PTP 323 and SOC 323.
326. (211). 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. (221). 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. (261). 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. (303). 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. Lecture and laboratory.
408. (308). Comparative Anatomy. BIO 111, 113, 327. (4).

Evolutionary and developmental aspects of the gross structure of representative chordate animals. Lecture and laboratory.
409. (309, 320). Lectures in Histology and Organology. BIO 111, 113, 326; admission to the professional program in physical therapy or concurrent enrollment in BIO 410. (3).

Microscopic structure and function of mammalian cells, tissues, and organs. Lecture. Also listed as PTP 413.
410. (310, 320). Histology and Organology Laboratory. BIO 111, 113, 326; concurrent election of BIO 409; or consent of instructor. (2).

Identification of mammalian cells, tissues and organs. Laboratory.
412. (312). 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.
420. (321). 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. (322). 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. (325). 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. (330). 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. (331). 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. (332). 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. (334). Human Anatomy. BIO 432, or 167 and 168; admission to the professional program in physical therapy; or consent of instructor. (6).

Detailed study of the gross structure of the human body. Laboratory involves cadaver dissection. Lecture and laboratory. Also listed as PTP 410.
435. (335). 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 161, 162. (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 enrollment in BIO 439. BIO 435 recommended. (1).

Identification of fungi; experiments in physiology, nutrition, symbioses. Laboratory.
443. (343). 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. (346). Animal Behavior. PSY 201 or 200 with a grade of $B$ (3.0) or better, or BIO 111, 113, and 327. (4)n*/ar2.

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. (350). 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. (353). 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. (354). 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. (360). Conservation Biology. BIO 111, 113, 326, 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. (361). 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. (364). 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 enrollment in BIO 464; or consent of instructor. (1).

Experimental approach to understanding the physiology of plants at the molecular, cellular and organismal levels. Laboratory.
467. (367). Molecular Biology of Procaryotes. BIO 111, 113, 326, 328; prior or concurrent enrollment in BIO 435; CHM 220 or 230; 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. (374). Molecular Biology of Eucaryotes. BIO 111, 113, 326, 328, 435; CHM 220 or 230; 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 transduction, cell cycle control, cell differentiation, and cancer. Lecture and laboratory; laboratory includes mammalian cell culture and expression of cloned genes in mammalian cells.
470. (370). 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. (372). 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. (375). 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. (380). 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 filed excursion to Michigan's upper peninsula.
481. (381). 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. (382). Neuroscience. BIO 434/PTP 410; admission to the professional program in physical therapy or consent of instructor. (3).

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. Also listed as PTP 412.
483. (383). 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. (384). 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. (385). Pathology. BIO 111, 113, 326, 432; admission to the professional or post-professional program in physical therapy or consent of instructor. (3).

Human structural and functional disorders primarily related to physical therapy. Lecture. Also listed as PTP 414. BIO 425 and BIO 485/PTP 414 cannot both be counted toward a Biology major.
488. (388). 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. Completion of two 300 or higher level BIO courses; prior or concurrent enrollment in BUS 290; 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. (391). 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.
492. (394). 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. (398). 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.
494. (399). 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.
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.
496. Honors Thesis II. Prior or concurrent election of BIO 495 and consent of Department Chair. Open only to Honors Program students in biology. (4).

Also listed as HON 496.

## 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 (CHM)

556 William R. Murchie Science Building
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Professor Emeritus: Dr. Harry H. Blecker, 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 can prepare you for a career in chemistry 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 to pursue admission to 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 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 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 Universitywide 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

Four concentration programs are offered: the General Program in Chemistry with options in Chemistry, Biochemistry, Environmental Chemistry, or Materials Chemistry (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 and a Teacher's Certificate Minor in Chemistry are also available.

The department also offers two-year programs in PrePharmacy, Pre-Medicinal Chemistry, and Pre-Pharmaceutical Sciences. (See "Pharmaceutical Studies Information.")

## General Program in Chemistry <br> (Bachelor of Science)

Four 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, Biochemistry and Environmental Chemistry Options below.

Area Options. An area option in analytic reasoning is automatically satisfied by required courses. For the second area option, a foreign language, especially German, Japanese or Russian, is recommended.

## Requirements.

A. CHM 160, 161, 162, 163 or $165,302,310,330,331,332$, 333, 340, 341, 366, 367 ( 2 credits), 368, 410.
B. MTH 121, 122, 222.
C. CSC 121, CSC 175 or 271.
D. PHY 243,245 .
E. Completion of Chemistry, Biochemistry, Environmental Chemistry or Materials Chemistry option requirements described below.
F. CHM 499 strongly recommended.
G. 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.

## 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, 441, 460, 461, 470, 471 (1 credit); 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 courses listed as Requirements, Chemistry.
B. CHM 390 or 499 .

## Biochemistry Option

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 Biochemistry Option. The student who intends to do professional study in medicine (human, osteopathic, veterinary) or dentistry may elect to complete either the Biochemistry Option or the Bachelor of Arts degree in Chemistry.

## Requirements, Biochemistry.

A. CHM 370, 442, 450, 451, 452, 453.
B. BIO $111,113,326$ or 328 .
C. Other recommended courses: BIO 425, 431, 432, 435, 450, 464, 467, 472.

## 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 courses listed as Requirements, Biochemistry.
B. CHM 371, 499 (1 credit).

## 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, 370, 380, 381, 382, 444, 460, 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 courses listed as Requirements, Environmental Chemistry.
B. CHM 371, 499 (1 credit).

## Honors Program in Chemistry (Bachelor of Science)

Area Options. An area option in analytic reasoning is automatically satisfied by required courses. A second area option in foreign language is required by the University Honors Scholar Program; the Chemistry Department recommends German, Japanese or Russian.

## Requirements.

A. Completion of the requirements for one of the Chemistry Bachelor of Science options, Chemistry, Biochemistry, Environmental Chemistry, or Materials Chemistry.
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. Completion of 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 Chemistry 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.

Area Options. An area option in analytic reasoning is automatically satisfied by required courses. A second area option in foreign language is required in all B.A. programs; the Department recommends German, Japanese or Russian.

## Requirements.

A. Core courses ( 16 credits). CHM 160, 161, 162, 163 or 165 , 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 368, 430, 432, 471 (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.
5. BIO 111, 327; or BIO 111, 113, 326.
6. GEO 150,151 .
7. PHY 243, 245; or PHY 143, 145.
8. CSC $121,175,275$.

## Teacher's Certificate Program (Bachelor of Arts)

This program is designed for the student who plans to teach chemistry in a secondary school.

Area Options. An area option in a foreign language is required. An area option in analytic reasoning is automatically satisfied by required courses.

## Requirements.

[^1]B. Advanced courses (25-29 credits). CHM 302, 310, 340, 341, 350*, 366, 367 (1 credit), 370, 371, 410. 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. EDU 364. EDU 340 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.

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 Chemistry

## Requirements.

A. 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.
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.

## Teacher's Certificate Minor

## Requirements.

A. Core courses ( 18 credits). CHM 160, 161, 162, 163 or 165, 330, 331, 332, 333.
B. CHM 302, 350,370 ; one chosen pair from CHM $366 \& 367$ (1 credit), or CHM $380 \& 381$.
C. A minimum of eight credits of chemistry at the 200 -level or above taken at UM-Flint.
D. A minimum 2.75 GPA in all UM-Flint chemistry courses.
E. The student must become involved in the teaching of chemistry at UM-Flint, for at least one semester. Such involvement may take the form of enrollment in a directed readings course (CHM 390, for one credit) approved for this purpose, participation in a teaching internship/practicum (CHM 364, for one credit), or employment as a student assistant (CHM 364, zero credits), depending on departmental availability.

## 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 160 prerequisite nor toward a concentration in chemistry; students who continue in chemistry are required to pass placement test. Graded $A B C D>N$.
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 $A B C D D->N$.
140. Fundamentals of Chemistry. MTH 090 or equivalent. Not open to students having credit for CHM 160. (3).

Introduction to basic theories and methods of chemistry. Three hours lecture weekly. For students in fields not requiring CHM 160-162, and to prepare for CHM 160. Does not apply to a concentration in chemistry.
150. General Chemistry for Health Sciences. MTH 090. (3) $n * / a r 2$.

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.
160. Principles of Chemistry I. CHM 140 with a grade of $C$ (2.0) or better, or a minimum score on chemistry placement examination; prior or concurrent election of MTH 120 or higher. (3)n*/ar2.

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 160 and 161, together, are applicable to the natural science general education requirement.
161. General Chemistry Laboratory. Prior or concurrent election of CHM 160. (1)n*.

Experiments and procedures to illustrate principles of chemistry. Four hours lecture and laboratory weekly. *CHM 160 and 161, together, are applicable to the natural science general education requirement.
162. Principles of Chemistry II. CHM 160. (3) $n * / a r 2$.

Selected principles and theories, including chemical kinetics, equilibria, acid-base theories, thermodynamics, electrochemistry, and organic structures. Three hours lecture weekly. *CHM 162 and either 163 or 165, together, are applicable to the natural science general education requirement.
163. Introductory Quantitative Analysis Laboratory. CHM 161, prior or concurrent election of CHM 162. (1) $n^{*}$.

Gravimetric, titrimetric and introductory instrumental methods of analysis. One hour lecture and three hours laboratory weekly. *CHM 162 and 163 , together, are applicable to the natural science general education requirement.
164. Problem Solving for Principles of Chemistry I. Concurrent election of CHM 160. (1).

Approaches to problem solving in chemistry with an emphasis on applications in CHM 160. Strongly recommended for students with a C+ grade or lower in CHM 140, repeating CHM 160, or needing extra assistance. Graded Pass/Fail.
165. Introductory Quantitative Analysis Laboratory IIHonors. CHM 161, prior or concurrent election of CHM 162, 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 162 and 165 , together, are applicable to the natural science general education requirement.
166. Problem Solving for Principles of Chemistry II. Concurrent election of CHM 162. (1).

Approaches to problem solving in chemistry with an emphasis on applications in CHM 162. Strongly recommended for students with a C+ grade or lower in CHM 160, repeating CHM 162, or needing extra assistance. Graded Pass/Fail.
220. Fundamentals of Organic Chemistry. CHM 150 or 162. (3)ar2.

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 or 162. (3)ar2.

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.
299. Supervised Chemical Research. CHM 162, CHM 163 or 165, 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.
302. Laboratory Safety. $C H M 162,163$. (1).

Causes and prevention of accidents. Chemical, biological and radiation hazards of materials. Hazard analysis, accident investigation, safety programs and safety education. Use and design of safety equipment, storage facilities and laboratory facilities.
304. Safety Management. CHM 162, prior or concurrent election of CHM 302. (1).

Storage and control of hazardous materials, hazard communication, chemical hygiene plans, hazardous waste management, emergency response and industrial safety programs.
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 162. (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 163 or 165, 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 162, MTH 222, PHY 145 or 245. Concurrent election of CHM 342 strongly recommended. (3).

First of two-term sequence CHM 340/440 building on CHM $160 / 162$. 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 I. CHM 163 or 165 , 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.
342. Problem Solving for Physical Chemistry I. Concurrent election of CHM 340. (1).

Mathematical approaches to problem solving with an emphasis on CHM 340. Strongly recommended for those students needing extra assistance with this type of approach to problem solving.
350. (250). 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.
367. 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.
368. Spectroscopy of Organic Compounds. CHM 332. (1).

Proton NMR, 13-C NMR, infrared, and mass spectra of organic compounds. Uses of spectra to identify compounds. Three hours lecture weekly, beginning the fifth week of classes, ending the tenth week.
370. Intermediate Inorganic Chemistry. CHM 162; prior or concurrent election of CHM 340; PHY 143 or 243. (3).

Modern overview of the descriptive chemistry of the elements, emphasizing structures, oxidation/reduction, periodicity, and the application of bonding theories to chemical structure and reactivity. Three hours lecture and discussion weekly.
371. Intermediate Synthesis Laboratory. CHM 333; prior or concurrent election of CHM 370. (1).

Preparation, isolation and characterization of different types of inorganic compounds. One four hour lab weekly.
380. (280). Environmental Chemistry. CHM 162; 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 163, 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.
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.
394. Clinical Chemistry. CHM 162. (3).

Instrumentation and chemometrics utilized in clinical diagnostic chemistry. Test method selection and evaluation in pathodiagnostic testing. Reaction mechanisms and protocol of test development implemented in diagnostics manufacturing industry. Three hours lecture weekly. Also listed as MTP 394.
410. (490). 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 160/162. 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.
441. Physical Chemistry Laboratory II. CHM 341; prior or concurrent election of CHM 440. (1).

Continuation of CHM 341. Student works with the instructor in designing and implementing experiments in physical chemistry. One hour lecture and three hours laboratory 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.
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.
446. Problem Solving for Physical Chemistry II. Concurrent election of CHM 440, 442, 444. (1).

Mathematical approaches to problem solving with an emphasis on CHM 440, 442, 444. Strongly recommended for those students needing extra assistance with this type of approach to problem solving
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).

Isolation, characterization and analysis of proteins. Mechanism and kinetic studies of enzyme catalysis. Spectrophotometric methods of analysis. Chromatographic methods of analysis, including gel filtration, ion-exchange and electrophoresis. 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).

Continuation of CHM 451. Isolation and characterization of nucleic acids. Examination of cellular metabolism. Eight hours recitation/laboratory weekly.
456. Biochemistry of Human Form and Function. A semester (3 credits) of sophomore-level organic chemistry (e.g. CHM 220). Open only to students with an undergraduate nursing degree. (3).

Examination of protein structure and organization with special emphasis on body tissues. Effects of physical influences on tissue structure and function. Builds upon knowledge of biomolecules presented in CHM 220.
460. Advanced Analytical Chemistry. CHM 340, 366. (2).

Advanced electrochemical analysis, including pH measurements, polarography, and conductance methods. Theory of spectroscopic analyses, including NMR, electron paramagnetic resonance, ultraviolet, visible, infrared, and Raman. Two 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.
470. Advanced Inorganic Chemistry. Prior or concurrent election of CHM 440 or 442 or 444. (3).

Modern theories of the structure of inorganic compounds and
the mechanisms of inorganic reactions. Periodic and group relationships as related to atomic structure. Three hours lecture and discussion weekly.
471. (397). Advanced Synthesis Laboratory. CHM 333. (1-2).

Preparation, isolation, and characterization of different types of inorganic and organic compounds using a variety of modern techniques. One four hour lab weekly. May be reelected, to a maximum of four credits.
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.
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.
499. Chemical Research. Minimum GPA of 2.5 in all chemistry courses taken at UM-Flint; consent of instructor. (1-3).

Original chemical research problems chosen and pursued in consultation with the directing faculty member. Written report required.

## 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.
552. Biochemistry of Human Form and Function. Graduate standing; a semester (3 credits) of sophomore-level organic chemistry (e.g. CHM 220). Open only to students with an undergraduate nursing degree or with consent of instructor. (3).

See CHM 456 for description. Not open to students with credit for CHM 456.

## Communication and Visual Art

(810) 766-6679

Email sbeam@umflint.edu
http://www.umflint.edu/departments/communication
http://www.umflint.edu/departments/art
Chair: Steven Ralston
Principal Secretary: Sharon Beam
Professor Steven Ralston; Associate Professors Darryl Baird, Christine Waters, Marcia Watkins; Assistant Professors Heither Seipke, Mike Sevick; Lecturers Jjenna Andrews, James Bakken, Stanley Blood, Carlos Cruz, Traci Currie, James Gilbert, William Kenner, Janet Lorch, Tony McGill, Marcia Polenberg, Molly Reilly, Holly Stevens, Fred Wagonlander, Christopher Young.

The Department of Communication and Visual Art 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 Visual Art. Studio Art concentrations are ceramics, graphic design, painting, printmaking/drawing, photography, and sculpture. Both Communication and Visual Art 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, drawing, 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.

Area Options. One of the two required area options must be in a foreign language.

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.
2. A minor.
3. A second major.

## 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.

Area Options. One of the two required area options must be in a foreign language, as stated in the University Honors Scholar Program.

## Requirements.

A. Completion of all requirements for the General Program in Communication, including 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. Completion of 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

140. History of Graphic Design. (3)f.

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 ART 140.
160. Introduction to Graphic Design Theory and Process. (3)f.

Introduction to contemporary graphic design topics including theory, professional practice, creative workflow, career paths, digital graphics hardware and software usage, copyright, and ethics. Also listed as ART 160 and THE 160.
163. Rhetoric of Hate and Fear. (3) h/vi2.

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.

## 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)vi2.

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.
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.
252. Two-Dimensional Computer Art. ART 160 or consent of instructor. (3)f.

Introduction to digital graphic design fundamentals and use of computer software in studio practice. Survey of major computer graphics software programs, including page layout, vector drawing, animation, and bit-map imaging. 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.
299. Topics in Communication Theory and Criticism. (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.
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. Also listed as PHL 301.
304. Advanced Public Speaking. COM 204 or 210; or consent of instructor. (3)f.

Advanced communication theory related to public speaking with a special emphasis on persuasion theory Advanced
delivery and presentation techniques applied to a variety of settings. Also listed as THE 304.
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.
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 the theoretical literature in the processes and effects of mass communication. Emphasis on political, social, economic, technological structures and functions of the media in contemporary society.
335. Introduction to Web Graphics and Design. ART 145 (MCC) or ART 252 or COM 200 or consent of instructor. (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 filming and editing. Focus on how video and its use influences 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. Computer Animation. ART 335. (3)f.

Digital design problems solved utilizing computer software and electronic imaging. Emphasis on solutions through application of motion, interactivity, design sequencing, special effects, and streaming technologies. Lecture and lab. 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 EDU 303. (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 EDU 368 and THE 368.
371. 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).
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.
398. Internship in Art and Communication. Consent of instructor. (1-3).

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. Also listed as ART 398.
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.

Community/university projects that allow students to apply their organizational, management, public relations, and creative performance skills in media projects. Graded $A B C D>N$.
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.
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.
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.

## Visual Art

## Mission and Program Assessment

The Visual Art 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.

## Consortium with Mott Community College (MCC)

The Visual Art Program at the University of Michigan-Flint (UMF) 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 Art Program.

## Programs in Visual Art

Two concentration programs are offered: the General Program in Studio Art (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 general education requirements in English composition, natural sciences, social studies, humanities, fine arts, and two area options.
B. Art History (15-19 credits).

1. Survey courses ( $9-12$ credits). ART 111 and 112 (MCC) or equivalent transfer course(s); ART 411.
2. 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).
3. Two-dimensional design ( 3 credits). ART 141 (MCC).
4. Three-dimensional design ( 3 credits). ART 142 (MCC).
5. Beginning drawing ( 6 credits). ART 131, 132 (MCC).
6. Life drawing ( 3 credits). ART 135 (MCC) or ART 361 (UM-F).
7. Computer Graphics. ART 145 (MCC) or ART 252 (UM-F)
8. 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)

Area Options. One of the two required area options must be in a foreign language, as required by the University Honors Scholar Program.

## Requirements

A. Completion of 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 including 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).

## 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.

- Students interested in the Visual Art program at UM-Flint cannot be officially admitted to the new Art Education Specialist Program until the UM-Flint proposal is approved by the State of Michigan.
- We anticipate that the proposed UM-Flint Visual Art Education Program will be approved. Students interested in learning more about the program should contact Mr . Fred Wagonlander (766-6680) of the UM-Flint Art Program. See the list of program requirements below.
- Students who would like more information about when the UM-Flint program might be approved should contact Vicki Tonda (Education School Registrar; 763-3260) for updates and more information.


## Prerequisites.

A. Admission into the Visual Art Education Program, which requires a UM-Flint grade point average of 2.75 overall; 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, 214, 215 (MCC); ART 308, 310, 311, 315, 331, 409, 410 (UM-F).
3. ART 411
B. Studio Art (42 credits).
4. Two-Dimensional Design: ART 141 (MCC) (3).
5. Three-Dimensional Design: ART 142 (MCC) (3).
6. Beginning Drawing: ART 131, 132 (MCC) (6).
7. Computer Graphics: ART 145 (MCC) or ART 252 (UM-F) (3).
8. Life drawing: ART 135 (MCC) or ART 361 (UM-F) (3).
9. Six additional credits, chosen to include two of the following two-dimensional disciplines: animation, drawing, painting, printmaking, photography, graphic design, costume design.
10. Six additional credits, chosen to include two of the following three-dimensional disciplines: sculpture, ceramics, scene design.
11. Nine credits beyond the 100 level in an area of concentration (i.e., painting and drawing, printmaking, sculpture, or ceramics).
C. Visual Arts Education (12 credits).
12. ART 101 (MCC) Elementary School Art Education (3).
13. ART 102 (MCC) Secondary School Art Education (3).
14. ART/EDU 300 (UMF) Methods and Materials (3).
15. (UMF) Creative Learning (3).
D. Education ( 24 credits), all UM-Flint courses.
16. EDU 301 or $305,302,303$ (9).
17. EDU 349, Student Teaching in the Elementary School (5).
18. EDU 359, Student Teaching Seminar (2).
19. EDU 369, Student Teaching in the Secondary School (5).
20. EDU/ENG 410 (3).
E. Others.
21. An approved course in first aid that includes both adult and child CPR.
22. PSY 100, 237 (6).
23. A course in the history or culture of an American ethnic minority.
From: AFA/SOC 270; AFA/EDU 331; AFA/HIS 334; EDU/PUB 438; ENG 213, 374.
24. A course in United States history. HIS 220, 221 recommended.

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:
3. ART 111, 112, 116, 214, 215 (MCC).
4. 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 coursework in Art History to total 21 credits in art history, including surveys of photography and graphic design, and 9 credits in art history taken at UM-Flint.

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, twodimensional 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.
115. Photography Survey. ENG 112. (3)f.

Discussion of the history, aesthetics, and uses of photography. Introduction to black and white photographic processes.
116. Introduction to Black \& White Photography. (3)f.

Introduction to material and techniques of traditional B\&W photography. Utilization of the 35 mm 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.

## 140. History of Graphic Design. (3)f.

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.
160. Introduction to Graphic Design Theory and Process. (3)f. Introduction to contemporary graphic design topics including theory, professional practice, creative workflow, career paths,
digital graphics hardware and software usage, copyright, and ethics. Also listed as COM 160 and THE 160.
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.
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.
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 Graphic Design. ART 160 or consent of instructor. (3)f.

Introduction to two-dimensional art fundamentals and the use of computer software in studio practice. Survey of the major computer graphics software programs including page layout, vector drawing, animation, and bit-map imaging. 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.
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.
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 EDU 300.
301. Drawing. ART 131 (MCC), or consent of instructor. (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.
302. 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.
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.
308. African and African-American Art. At least sophomore standing. (3)h/cs2.

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/cs2.

The Impressionist spirit in French painting and life, 18601910, and its influence on painting in other countries.
322. Image and Text. ART 145 (MCC) or ART 252, ART 146 (MCC), ART 325; 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.
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.
325. Introduction to Digital Imaging. ART 116 or 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.
326. Advanced Digital Imaging. ART 325. (3)f.

Extension of ART 325. Emphasis on production of advanced imaging techniques and execution of a professional portfolio of digital images.
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.
330. Typographic Communications. ART 146 (MCC), ART 145 (MCC) or ART 252 or consent of instructor. (3)f.

Examination of the impact of typography on the world of visual communication through symbolic, cultural, aesthetic and personal typographic expression. May be repeated twice for credit.
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.
335. Introduction to Web Graphics and Design. ART 145 (MCC) or ART 252 or COM 200 or consent of instructor. (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. EDU 301-303 or consent of instructor. (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 EDU 336, 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. Computer Animation. ART 335. (3)f.

Digital design problems solved utilizing computer software and electronic imaging. Emphasis on solutions through application of motion, interactivity, design sequencing, special effects, and streaming technologies. Lecture and lab.
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.
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. (1-3).

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. Also listed as COM 398.
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.
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.
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. Computer Design Portfolio. Senior standing or 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.
409. History of American Art. At least junior standing. (3)h/cs3.

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 nonWestern 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.
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.

## Graduate Course in Visual Art

509. History of American Art. Graduate standing. (3).

## Comparative and General Literature (CPL)

326 David M. French Hall
(810) 762-3285

Fax: (810) 237-6666

## Coordinator and Faculty Advisor: Dr. Judith Kollmann (English 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

206. (319) Survey of African Literature. (3) $h / c s 2$.

Introduction to works of representative writers from all parts of the African continent. Also listed as AFA 206.
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.
218. Women Writers of the African World. AFA 101 or 260 or consent of instructor. (3)h/cs2.

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 218 and WGS 218.
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.
[254. The Leader and the Led. (3)h.]
257. Protest in African Literature. At least sophomore standing. (3)h/cs2.

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.
[258. Russia and the Soviet Union Through its Literature: Russia of the Tsars. At least sophomore standing. (3) $h / c s 2$.]
[259. Russia and the Soviet Union Through its Literature: Russia of the Soviets. At least junior standing and a course in Western Civilization, or consent of instructor. (3) $h / c s 2$.]
301. Introduction to Francophone African Literature. $E N G$ 112. (3)h/cs2.

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/wc]
[304. Masterpieces of World Literature in Translation: IV. Not open to freshmen except with permission of the instructor. (3)h/wc2.]
[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.]
[358. Major Authors. At least sophomore standing or consent of instructor. (3)h.]
[364. Twentieth Century Spanish-American Literature in Translation. At least sophomore standing. (3)h.]
[387. Continental European Fiction. A sophomore course in literature or consent of instructor. (3)h. Also listed as ENG 387. Graded $A B C D>N$.]
391. Directed Readings in Comparative Literature. Consent of instructor. (1-2)h.

## 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, Mudasser Wyne; Assistant Professors Song Ci, Michael Farmer, Stephen W. Turner; 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)

Area Options. An area option in analytic reasoning is automatically satisfied by required courses. Students may choose the second area option according to their interests.

## Requirements.

A. Completion of 124 credits, including the general education requirements. In addition, at least 33 credit hours of courses numbered 300 or above must be completed as a College of Arts and Sciences requirement.
B. MTH 121, 122, 220, 370; CSC/MTH 321 ( 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. 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, 436 477; nine 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

Area Options. An area option in analytic reasoning is automatically satisfied by required courses. A second area option in foreign language is required, as stated in the University Honors Scholar Program.

## Requirements.

A. Completion of requirements $A$ through $E$ 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).
2. Systems/Networking Track. CSC 336, 436, 477; three additional credits in computer science in courses numbered 300 or above, excluding CSC 301, 395, 491(may include CSC 383, 483).
B. Completion of all requirements of the University Honors Scholar program.
C. CSC 491, Research Methods, in the first semester of the junior year (3 credits).
D. CSC 491, Independent Research, and CSC 491, Seminar, in the second semester of the junior year ( 6 credits).
E. 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)

Area Options. An area option in analytic reasoning is automatically satisfied by required courses. Students may choose the second area option according to their interests.

## Requirements.

A. Completion of 124 credits, including the general education requirements. In addition, at least 33 credit hours of courses numbered 300 or above must be completed as a College of Arts and Sciences requirement.
B. MTH 115,118 ( 8 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 $127,128,151,152,170,173,175,263,275,320,335$, 363, 365, 375, 384, 410, 420 (49 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.
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)ar2.

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.
171. (271) FORTRAN Programming. CSC 121 competency, MTH 120; or consent of instructor. (3)ar2.

Introduction to FORTRAN programming using scientific as well as business problems as examples. Understanding of algorithms; program construction and documentation.
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; or consent of instructor. (4)ar2.

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.
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; or consent of instructor. (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; or consent of instructor. (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 a 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 with a grade of C (2.0) or better; or consent of instructor. (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.
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. (423). Object Oriented Programming in Java. CSC/CIS 275 with a grade of $C$ (2.0) or better or consent of instructor. (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.
321. Discrete Structures. Prior or concurrent election of MTH 220 or consent of instructor. (3).

Selected topics in combinatorics, graph theory, Boolean algebras, and other aspects of discrete mathematics. Also listed as MTH 321.
335. Computer Networks I. CSC/CIS 275 with a grade of $C$ (2.0) or bette; MTH 122; or consent of instructor. (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 or consent of instructor. (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 networkconnected 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 or consent of instructor. (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/MTH 321. (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 System Kernels. CSC/CIS 127; CSC 365; CSC 375 with a grade of $C$ (2.0) or better; or consent of instructor. (3).

Design and implementation of operating system kernels. Introduction to organization and structure of operating systems; system calls; introduction to processes and threads; race condition and critical sections; principles of I/O hardware and software; study of drivers for block devices that use DMA; clock hardware and software; terminals; overview of memory management and file systems.
381. Introduction to the Theory of Computation. CSC/MTH 321 or consent of instructor. (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 or consent of instructor. (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; CIS/MTH 320 or CSC/MTH 321. (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. (478). Unix System Administration. CSC/CIS 127; CSC 277; or consent of instructor. (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.
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.
436. Systems/Networking Design Project. CSC 336, 377, 382, 384; or consent of instructor. 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. MTH 370 or equivalent, CSC 375 with a grade of $C$ (2.0) or better; or consent of instructor. (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 with a grade of $C$ (2.0) or better or consent of instructor. (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. Advanced Operating Systems. CSC 377 or consent of instructor. (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.
483. Software Engineering Design Project. CSC 335, 377, 383, 384; or consent of instructor. 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 or consent of instructor. (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.
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.
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.

## 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).
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)ar2.

See CSC 170 for description. Also listed as CSC 170.
171. (271) FORTRAN Programming. CSC 121 competency, MTH 120; or consent of instructor. (3)ar2.

See CSC 171 for description. Also listed as CSC 171.
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; or consent of instructor. (4)ar2.

See CSC 175 for description. Also listed as CSC 175.
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; or consent of instructor. (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.
291. 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.
293. Intermediate Web Design. CSC/CIS 263. (3).

See CSC 293 for description. Graded $A B C D>N$. Also listed as CSC 293.
313. Object Oriented Programming in Java. CSC/CIS 275 or consent of instructor. (3).

See CSC 313 for description. Also listed as CSC 313.
320. Discrete Structures for Computer Information Systems. MTH 118, BUS 211.(3).

An algorithmic approach to mathematical problem solving. Topics include, but are not limited to, sets, equivalence relations, lattice and partially ordered sets; introduction to number theory, encryption, permutations and combinations; graphs and graph algorithms. Also listed as MTH 320.
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).

Web programming using languages such as JavaScript, Perl, PHP, MySQL and Java Applets in commercial applications. Consumer issues including shopping arts, human computer interface designs, interactions with payment processing mechanisms. Consumer privacy, ethical and security issues also addressed. 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; CIS/MTH 320. (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; CIS/MTH 320 or CSC/MTH 321. (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.
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 postimplementation 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
Associate Professors Roy Barnes, Larry W. Koch, Kathryn Schellenberg, Charles B. Thomas, Jr.; Assistant Professors Kenneth Litwin, Joan Mars, 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 agencies. 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.
Area Options. One of the two required area options must be in a foreign language.

Requirements. Completion of 33 credits as outlined below.
A. An overall GPA of 2.5 , a GPA of 2.5 in the concentration, grades of $\mathrm{C}(2.0)$ or higher in all courses below.
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 289, 380, 381, 384, 385, 386; CRJ/PUB 432; CRJ/SWK 388; POL 380; SAT 202; SOC 382.

## 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.

Area Options. One of the two required area options must be in a foreign language, as stated in the University Honors Scholar Program. The second area option is normally in Values Inquiry.

## Requirements.

A. Completion of all requirements for the General Program in Criminal Justice, including SOC 210. SOC 210 is ordinarily elected in the sophomore year.
B. Completion of a statistics requirement by electing SOC 215, PSY 301, or an equivalent course approved by the advisor. Recommended for the sophomore year.
C. Completion of SOC 384 and CRJ 391 in the junior year.
D. CRJ 496 and 497, Honors Thesis I and II (4 credits each).
E. Completion of 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.
289. Selected Topics in the Criminal Justice Process. CRJ 185. (3)s.

Examination of an area of the criminal justice system not dealt with in detail in other courses. May be taken more than once if no topic is repeated. CRJ majors may only use 3 credits toward their program.
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 SWK 388.
389. Correctional Practice. $S W K$ 200, CRJ/SWK 388, 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 SWK 389.
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.
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.
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.

## Dance (DAN)

## 238 Theater

Dance Studio in Northbank Center
(810) 762-3230 Theatre
(810) 238-7771 Dance Studio

Theatre and Dance Chair/Director: Lauren Friesen
Lecturer Beth Wielinski; Lecturers Susan Baldiga, Alfred Bruce Bradley, Lindsay DeCamp, Mary Farris

## 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 wellrounded 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 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, hip-hop, 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 rhythm-oriented 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. (350). 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. (351). 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.

## Dental Studies Information

## Pre-Dental

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.")

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 Chemistry Department or the Biology Department at the University of Michigan-Flint.

## Earth and Resource Science (ERS)

[^2]FAX: (810) 762-3153
Chair: Martin M. Kaufman
Supervisor of Science Laboratories: Keith King
Principal Secretary: Lisette Boss
Associate Professors Richard Hill-Rowley, Martin M. Kaufman,
Randall Repic; Lecturers Frederick DeGroot, John Linker, 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).

## Honors Program in Environmental Science and Planning

Area Options. One of the two required area options must be in a foreign language, as stated in the University Honors Scholar Program.

## Requirements.

A. Completion of all requirements for the Program in Environmental Science and Planning.
B. GEO 370 or ENV 370; GEO 495, 496; GEO 498, 499.
C. Completion of all requirements of the University 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.Completion of the following courses as part of the general education requirements: 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. Completion of the general education requirements of the College of Arts and Sciences.
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. EDU 302, 303, 305 ( 9 credits).
2. Methods courses. EDU $360,361,363,364,365$ or 368. (Hours/courses vary.)
3. EDU/ENG 410 ( 3 credits).

4 EDU 359, 369 ( 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 $A B C D>N$.
380. (241). 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. (380). 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/csl.

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)ar2.

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) $h / c s l$.

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)ar2.

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 $A B C D>N$.
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. At least sophomore standing and declared concentration in earth science, physical geography, resource ecology or resource planning. (1-3).

Methods and techniques for data management, survey research, professional writing, report preparation, public presentations and other topics. Graded $A B C D>N$.
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 $A B C D>N$.
331. 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 $A B C D>N$.
372. Biogeography. GEO 150, 203; BIO 111; 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 $A B C D>N$.
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 $A B C D>N$.
491. Resource Science Departmental Seminar II. Consent of instructor. (1-3).

Applied research in resource science, including supervised fieldwork. Graded $A B C D>N$.
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.
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.
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.
499. Independent Study. GEO 498 or consent of instructor. (1-3).

Field study and study of current literature on specific topics.

## Courses in Resource Planning (RPL)

215. Cultural Landscapes. (3) $h / c s 1$.

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)ar2.

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 $A B C D>N$.
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 $A B C D>N$.
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 $A B C D>N$.

## Economics (ECN)

350 David M. French Hall
(810) 762-3280

FAX (810) 762-3281
Chair: Tevfik F. Nas
Website: www.flint.umich.edu/econ
Principal Secretary: Judy J. Bedore
Professors Tevfik F. Nas, Nallapu N. Reddy; Associate Professor
Mark J. Perry; Assistant Professors Phoebe Chan, Adam
Lutzker; Lecturers Scott Darragh, Paula L. Nas.
Professors Emeriti: Virgil M. Bett, Lubomyr M. Kowal
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.

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

Area Options. An area option in a foreign language is required. An area option in analytic reasoning is automatically satisfied by required courses.

## 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.

## Honors Program in Economics

Faculty Advisor: Paula Nas
Prerequisite. MTH 121.
Area Options. An area option in a foreign language is required, as stated in the University Honors Scholar Program. An area option in analytic reasoning is automatically satisfied by required courses.

## Requirements.

A. Completion of all requirements for the General Program in Economics, including 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. Completion of 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/ar2.

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/ar2.

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.
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. Also listed as AFA 244.
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.
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. (470) 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 services.
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.
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.
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.
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. (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 INT 466.
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.
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.

## 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 424.
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 466 for description. Not open to students with credit for ECN 466.
567. World Economic History. Graduate standing; ECN 201, 202; or consent of instructor. (3).

See ECN 467 for description. Not open to students with credit for ECN 367.
569. Managerial Economics. Graduate standing; ECN 201, 202; or consent of instructor. (3).

See ECN 469 for description. Not open to students with credit for ECN 469.
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

## 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

Area Options. An area option in analytic reasoning is automatically satisfied by required courses.

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 160, 161, 162 ( 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 (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; at least 11 credits in Engineering Science, Physics, Mathematics or Computer Science courses at the 200 level or above.
D. Elective credits, including general education requirements, to bring the total to 128 credits.

## Honors Program in Engineering Science

Prerequisites. EGR 260, 280; MTH 222.
Area Options. An area option in a modern foreign language is required, as stated in the University Honors Scholar Program. An area option in analytic reasoning is automatically satisfied by required courses.

## Requirements.

A. Completion of all requirements for the Bachelor of Science 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. Completion of 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 $A B C>N$.
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, CHM 162 and PHY 245, each with a grade of C (2.0) or better. Concurrent election of EGR 305 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.
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.
301. (465). 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.
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.
310. Cost Engineering. 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, $\mathrm{A} / \mathrm{D}$ and $\mathrm{D} / \mathrm{A}$. 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.
353. Thermodynamics. CHM 162, 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, each 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).

Electrostatics, behavior of dielectrics, electric currents and magnetism, electromagnetic induction, alternating current circuits, Maxwell's equations. Also listed as PHY 367.
370. Dynamics. PHY 243, MTH 305, each with a grade of $C$ (2.0); or better or consent of instructor. Prior election of EGR 230 and CSC/CIS 175 or CSC 271 recommended. (3).

Particle and rigid body mechanics in one, two and three dimensions. Kinematics, kinetics by application of Newton's Laws. Impulse, energy and momentum methods, rotations and vibrations. Also listed as PHY 344.
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.
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.
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. (290 \& 295). 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. $E G R 370$ 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. Undergraduate Research Project. Consent of instructor. (1-3).

Original research 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. Graded ABCDE/Y. Also listed as PHY 433.
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 $A B C D E / Y$.
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 $A B C>N$.
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 $A B C>N$.

## 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 Stephen D. Bernstein, Thomas Foster, Jan Furman, Judith J. Kollmann, Frederic J. Svoboda, Jacqueline Zeff; Associate Professors Robert W. Barnett, Janice Bernsten, Mary Jo Kietzman; Assistant Professors Kazuko Hiramatsu, Alicia Kent, Stephanie Roach, AnneMarie Toebosch; Lecturers Jim Anderson, Julie Colish, Dorothea M. Law, Danny Rendleman, Maureen Thum, Jan Worth; Lecturers

Cathy Akers-Jordan, Jill Bauer, Gerald Browning, Hannah Furrow, David Larsen, 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 Exam (EPEX)

The English Department uses a reading test score and the EPEX 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). The EPEX consists of a short essay written on a given topic. EPEX is required of all incoming freshmen and transfer students who have not yet completed their freshman composition requirements. Freshmen 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 EPEX and can be appropriately placed on the basis of their scores. Adult returning students are advised to take EPEX if they completed their requirements more than three years previously.

Based on writing test results, students may be required to complete ENG 109 for three credits before taking ENG 111. Students may also be required to take one credit of ENG 109 along with ENG 111 or 112 and must successfully complete the one credit of ENG 109 to receive a passing grade for the concurrent ENG 111 or 112 .

Students required to take ENG 100 based on reading test scores may take ENG 109 (1-3 credits) and 111 concurrently with 100. However, they must complete their ENG 100 requirement before taking ENG 112 to insure that they have developed the reading strategies necessary for success in ENG 112.

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 EPEX scores place them into a course for which they have not received transfer credit.

## 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

Area Options. An area option in a foreign language is required. For the second area option, cultural studies, values inquiry, or the foundations of western civilization is recommended.

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.

## Honors Program in English

Area Options. An area option in a foreign language is required, as stated in the University Honors Scholar Program. For the second area option, cultural studies, values inquiry, or the foundations of western civilization is recommended.

## Requirements.

A. Completion of all requirements for the General Program in English, including ENG 400; at least one semester of ENG 395, Honors Independent Reading; one semester of ENG 396, Advanced Honors Research; and one additional course selected from courses numbered 399 or above.
B. ENG 495 and 496, Honors Thesis I and II (4 credits each). No student with a grade of B- or less in ENG 495 or ENG 496 will graduate with Honors in English.
C. Completion of 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).
2. 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).
4. British Literature (any period). One additional from: ENG 303, 310, 312, 315, 316, 317, 318, 319, 326, 327, $329,330,331,332,333,34,385,386$ ( 3 credits).
5. American/Ethnic Literature. One from: ENG 353, 355, 356, 357, 364, 368, 374, 375, 382, 432, 433, 434 (3 credits).
B. Writing. Eighteen credits as follows:
6. Composition Theory. Two from: ENG 336, 340, 363 (6 credits).
7. 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, 393, 393, 399 (9 credits).
8. 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.

## Teacher's Certificate Program

Area Options. An area option in a foreign language is required. For the second area option, cultural studies, values inquiry, or the foundations of western civilization is recommended.

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.
2. 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, $364,368,382,432,433,434$.
5. 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).
7. One from: ENG 252, 296, 298, 338, 340, 345, 354, 363, 392, 393, 399, 400; ENG/LIN 306.
8. ENG/EDU 412.
C. Education ( 6 credits). ENG/EDU 361, 410; 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.

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 $252,296,298,338,340,345,354,363,392$, 393, 399, 412, 490, 306 (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/EDU 361 (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 $A B C>N$.
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 $A B C>N$.
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 $A B C>N$.
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 $A B C>N$.
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 $A B C>N$.
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. $E N G$ 112. (3) $h / w c 2$.

Contribution of classic myth to European and American literary culture. Selected masterpieces of ancient literature read in English translation.
205. The Bible in English: Old Testament and Apocrypha. Prior or concurrent election of ENG 112. (3)h/wc2.

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.
206. The Bible in English: Old Testament Prophets, Apocalyptic and New Testament. Prior or concurrent election of ENG 112. (3)h/wc2.

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.
207. Survey of Greek and Roman Classical Literature. $E N G$ 112. (3)h/wc2.

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.
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.
213. American Ethnic Literature. Prior or concurrent election of $E N G 112$. (3) $h / c s 3$.

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/cs3.

Introduction to American literature written by AfricanAmerican 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/vi2.

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/vil.

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. (352). 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/wc2.

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 ENG 306.
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) $h / w c 2$.

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/wc2.

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/wc2.

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/wc2.

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/wc2.

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/wc2.

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) $h / w c 2$.

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/wc2.

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/vi2.

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.
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 349.
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/vi2

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.
361. Teaching English in Middle and Secondary Schools. Prior or concurrent election of EDU 303. (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 EDU 361 by majors in the teacher's certificate program; may be elected as ENG or EDU 361 by English minors in the teacher's certificate program. Also listed as EDU 361.
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 $A B C D>N$.
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/vil.

Philosophical problems as they occur in works by such authors as Dostoevsky, Nietzsche, Kafka, Gide, Hesse, Sartre and Camus. Also listed as PHL 373.
374. Major Themes in American Ethnic Literature. $E N G$ 213,215 , or consent of instructor. (3)h/cs3.

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/cs3.

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. (3)h/cs3.

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/vi2.

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. (397). 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.
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.
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 EDU 303 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. Also listed as EDU 410.
412. Writing for Middle and Secondary School Teachers. Prior or concurrent election of EDU 303 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 EDU 412.
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.
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 EDU 448.
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 EDU 474.
[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.
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.

## Graduate Courses in English

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. Admissions to the MA in Education program. (3).

See ENG 410 for description. Not open to students with credit for EDU/ENG 410. Also listed as EDU 510.
512. Writing for Middle and Secondary School Teachers. Graduate standing; EDU 301, 302, 303; or consent of instructor. (3).

See ENG 412 for description. Not open to students with credit for EDU/ENG 412. Also listed as EDU 512.
532. The American Novel. Graduate standing; a 300-level course in literature; or consent of instructor. (3).

See ENG 432 for description. Not open to students with credit for ENG 432.
533. American Poetry. Graduate standing, a 300-level course in literature; or consent of instructor. (3).

See ENG 433 for description. Not open to students with credit for ENG 433.
534. American Drama. Graduate standing, a 300-level course in literature or theatre history; or consent of instructor. (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, a 300-level course in literature; or consent of instructor. (3).

See ENG 435 for description. Not open to students with credit for ENG 435.
536. American Film II. Graduate standing, a 300-level course in literature; or consent of instructor. (3).

See ENG 436 for description. Not open to students with credit for ENG 436 ..
548. Children's Literature. Graduate standing. (3).

See ENG 448 for description. Not open to students with credit for ENG /EDU 448.
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 EDU/ENG 474. Also listed as EDU 574.

## Environmental Studies

See Earth and Resource Science and the School of Health Professions and Studies.

## Foreign Languages and Literatures

344 David M. French Hall<br>(810) 762-3370<br>FAX (810) 762-3066

Chair: Douglas E. Miller
Principal Secretary: Gayle C. Marcum
Professors Juan E. Mestas, Paul E. O'Donnell; Associate Professors Imane A. Hakam, Jamile T. Lawand, Douglas E. Miller, Rafael H. Mojica; Assistant Professor Matthew Hilton-Watson
Professors Emeriti: Dr. Theophilus Lynch, Dr. Frank C. Richardson, Dr. Birgitta J. Vance

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 (with the exception of the combination program in linguistics). Courses in Arabic, German, Italian, Japanese, Latin and Russian are also available.

## Courses in Foreign Languages (FOR)

[109. Fundamentals of Foreign Language Grammar. Recommended for students whose foreign language grammar skills are inadequate for FRN/GER/SPN/ITL 111 or LAT 104. (1).]
305. Community Outreach Field Experience. Intermediatelevel 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) $f l$.

Continuation of ARB 111. Introduction of more complex structures and more active use of Arabic. Further practice in
reading and speaking standard Arabic. Graded $A B C D D->N$.
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. Graded $A B C D>N$.
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 $A B C D>N$.
[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.

Area Options. A student in this program may choose French as one of the two required area options.

Requirements. Twenty-eight credits in French beyond the level of FRN 212, to include the following:
A. FRN $291,301,309,310,311$ or 314,318 or 329 ( 16 credits).
B. At least twelve additional credits in French language and/or literature.

## Cognate Requirements.

A. HIS 111 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.

## Honors Program in French

Prerequisite. Honors election of FRN 212.*
Area Options. A student in this program may choose French as one of the two required area options.

## 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 392, Special Topics: The History of French Criticism (2 credits).
E. 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.
F. At least one term or semester of residence or study in a French-speaking country.
G. Honors reading proficiency in a second foreign language.
H. HIS 110, HIS 111 or an equivalent history course approved by the advisor, and a course in French history ( 9 credits).
I. LIN 200; ENG 204; ENG 205 or 241. Additional courses in linguistics and anthropology are strongly recommended.
J. 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 Foreign Language Department's Honors Program in French. See the departmental honors advisor or the Honors Program Director for this information.
*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.

Area Options. One of the two required area options must be in a second foreign language.

## 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).

## Required Cognates.

A. HIS 110 or 111 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).

## 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).

## Teacher's Certificate Program

Prerequisite. FRN 212 or equivalent proficiency as demonstrated by examination.

Area Options. A student in this program may choose French as one of the two required area options.

## 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/EDU 365.
C. HIS 111 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.

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.

## 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/EDU 365.

## 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 $A B C C->N$.
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 $A B C D D->N$.
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. Graded $A B C D>N$.
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 $A B C D>N$.
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 $A B C D>N$.
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) $h / c s 2$.

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: $\mathbf{1 8 0 0}$ 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, LaFontaine, LaBruyère 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, Beckette, Robbe-Grillet, Breton and Prevert.
[346. French as a Multi-Cultural Language. FRN 315 or equivalent. (3)h/cs2.]
360. Comparative Phonetics/The World's Major Languages. FRN 212 and prior or concurrent election of LIN 200. (3)ar2.

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 GER 360, LIN 360 and SPN 360.
365. Teaching of Foreign Languages in Middle and Secondary Schools. FRN 212; prior or concurrent election of EDU 303. (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 EDU 365, GER 365 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. $F R N 211$ 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.
396. Honors Independent Research. Consent of French Honors Program Advisor. Open only to Honors Program students in French. (3).
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.
496. Honors Thesis II. Prior or concurrent election of FRN 495. (4). Also listed as HON 496.

## 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 $A B C C->N$.
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 $A B C D D->N$.
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. Graded $A B C D>N$.
[211. Intermediate German I. GER 112 or placement. (4).]
[212. Intermediate German II. GER 211 or placement. (4)].
[301. Conversation and Composition I. GER 212 or equivalent. (3).]
[303. Conversation and Composition II. GER 301 or equivalent. (3).]
[308. Business German. GER 212 or equivalent or consent of instructor. (3).]
[309. Advanced German Composition and Grammar. GER 301 or equivalent. (3).]
[310. Understanding the German-Speaking World. GER 212. (3) $h / c s 2$.]
[311. Survey of German Literature: Middle Ages to the Age of Goethe. GER 212 or equivalent. (3)h.]
[314. Survey of German Literature: The Age of Goethe to Present. GER 212 or equivalent. (3)h.]
[315. Introduction to German Literature. GER 212 or equivalent. (3)h.].
[318. German Classicism. GER 315 or equivalent. (3)h.]
[319. German Romanticism. GER 315 or equivalent. (3)h.]
[323. Realism and Naturalism. GER 315 or equivalent. (3)h.]
[324. Modern German Literature. GER 315 or equivalent. (3)h.]
[325. Contemporary German Literature. GER 315 or equivalent. (3)h.]
[360. Comparative Phonetics/The World's Major Languages. GER 212 and prior or concurrent election of LIN 200. (3)ar2.]
[365. Teaching of Foreign Languages in Middle and Secondary
Schools. GER 212; prior or concurrent election of EDU 303. (3).]
[366. Modern German. GER 301 or equivalent. (3).]
[391. Directed Readings. GER 212 and consent of Department Chair. (1-2)h.]
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.
[395. Honors Research Methods. Consent of German Honors Program Advisor. (1).]
[396. Honors Independent Research. Consent of German Honors Program Advisor. Open only to Honors Program students in German. (3).]
[495. Honors Thesis I. Open only to Honors Program students in German. (4).]
[496. Honors Thesis II. Prior or concurrent election of GER 495. (4).]

## Italian (ITL)

There is no concentration program in Italian. However, Italian courses are available.
[111. Beginning Italian I. (4)fl.]
[112. Beginning Italian II. ITL 111 or placement. (4)fl.]

## 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 $A B C C->N$.
112. Beginning Japanese II. $J P N$ 111. (4)fl.

Continuation of JPN 111. Introduction of more complex structures and continued expansion of basic vocabulary. Oral practice for conversational competence. Graded $A B C D D->N$.

## 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 $A B C C->N$.
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. Graded $A B C D>N$.

## 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.

Basic structures and patterns the student must know to understand written and spoken Russian. 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 $A B C C->N$.
112. Beginning Russian II. RUS 111 or placement. (4)fl.

Continuation of RUS 111. Introduction of more complex structures and more active use of Russian. Further practice in reading texts adapted from newspapers, magazines and literature. Graded ABCDD->N.
[211. Intermediate Russian I. RUS 112 or placement. (4).]
[212. Intermediate Russian II. RUS 211 or placement. (4).]
[291. Directed Study. RUS 112 and consent of instructor. (1-4).]
[391. Directed Study. RUS 291 or consent of instructor. (1-3).]

## Spanish (SPN)

Faculty Advisors: Dr. Jamile Lawand, Dr. Rafael Mojica, Dr. Paul O'Donnell

## Programs in Spanish

Four 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 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.

Area Options. A student in this program may choose Spanish as one of the two required area options.

Requirements. Twenty-eight credits in Spanish beyond the level of SPN 212, to include the following:
A. SPN 291, 301, 309, 310 or 319,311 or 314,318 or 320 (16 credits).
B. 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.
C. At least three additional credits in Spanish 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 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 Spanish are strongly advised to begin a second language as early as possible in their college programs.

## Honors Program in Spanish

Prerequisite. Honors election of SPN 212.*
Area Options. A student in this program may choose Spanish as one of the two required area options.

## 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 392, Special Topics: History of Criticism in Spain and Latin America ( 2 credits).
E. 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.
F. At least one term or semester of residence or study in a Spanish-speaking country.
G. Honors reading proficiency in a second foreign language.
H. 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.
I. LIN 200; ENG 204; ENG 205 or 241. Additional courses in linguistics and anthropology are strongly recommended.
J. 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 Foreign Language Department's Honors Program in Spanish. See the departmental honors advisor or the Honors Program Director for this information.
*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 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 280; 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).

## Teacher's Certificate Program

Prerequisite. SPN 212 or equivalent proficiency as demonstrated by examination.

Area Options. A student in this program may choose Spanish as one of the two required area options.

## 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/EDU 365 .
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 approved by the advisor.

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 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/EDU 365.

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 $A B C C->N$.
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.
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. Graded $A B C D>N$.
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 $A B C D>N$.
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 $A B C D>N$.
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 $A B C D>N$.
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 $A B C C->N$.
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 $A B C D>N$.
310. Understanding the Spanish-Speaking World: Spain. SPN 212 or equivalent. (3)h/cs2.

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.
314. Survey of Spanish Literature: $\mathbf{1 7 0 0}$ 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/cs2.

Cultural ways of Latin America. Short stories, essays, newspapers, magazines, slides and films dealing with LatinAmerican 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.]
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.
331. 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)ar2.

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, GER 360 and LIN 360.
365. Teaching of Foreign Languages in Middle and Secondary Schools. SPN 212; prior or concurrent election of EDU 303. (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 EDU 365, FRN 365 and GER 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.
396. Honors Independent Research. Consent of Spanish Honors Pro-gram Advisor. Open only to Honors Program students in Spanish. (3).
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.
496. Honors Thesis II. Prior or concurrent election of SPN 495. (4).

Also listed as HON 496.
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
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Website: http://www.flint.umich.edu/departments/history
Chair: Dr. Roy S. Hanashiro
Principal Secretary: Crystal Pepperdine
Professors Roy S. Hanashiro, Bruce A. Rubenstein; Associate Professors Joseph G. Rahme, Theodosia S. Robertson; Assistant Professor John S. Ellis.
Professors Emeriti: Dr. Robert W. Heywood, Dr. Robert G. Schafer, 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.

Area Options. One of the two required area options must be in a foreign language.

## Requirements.

A. Thirty-three or more credits in history, of which at least 18 are numbered 300 or above.
B. HIS 112,113 .
C. HIS 220, 221.
D. HIS 300, 301; normally elected in the sophomore and junior years.
E. 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.
F. 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.

## Honors Program in History

Prerequisites. HIS 112, 113, 220, 221, 290.
Area Options. One of the two required area options must be in a foreign language, as stated in the University Honors Scholar Program.

Requirements. Completion of 26 credits in courses numbered 300 or higher, as follows:
A. HIS 300, 301; taken during the student's sophomore and junior years.
B. HIS 395 ( 3 cr ), taken during the student's junior year.
C. An honors election of one 300-level history course approved by the department honors advisor.
D. Six additional credits in history selected with the approval of the department honors advisor.
E. HIS 495, 496 ( 8 credits).
F. Additional elections in cognate areas so as to assure a balanced program.
G. Completion of 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 History Department's Honors Program. See the Honors Program Director for this information.

## Teacher's Certificate Program

Prerequisites. HIS 112, 113, 220, 221.
Area Options. One of the two required area options must be in a foreign language.

Requirements. Completion of 39 credits, distributed as follows. Appropriate courses from requirements B through D may be used to fulfill more than one requirement in B through D.
A. Requirements $A$ through $E$ of the General Program in History. Courses that fulfill General Pogram 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.
B. A course on the US in a global context from: HIS 328, 346, 412, 479.
C. A course with emphasis on economy from: HIS 307, 328, 329, 374.
D. A course with emphasis on politics from: HIS 321, 374, 386, 479.
E. EDU 363.
F. A teacher's certificate minor in another discipline.

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.
Option 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/wcl.

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, SubSaharan 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/wcl.

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. (110). Western Civilization to 1600. (3)s/wcl.

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. (111). Western Civilization since 1600. (3) $s / w c l$.

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/cs2.

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) $s / c s 2$.

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' chaning social/cultural mores and its global economic and political responsibilities in the twentieth century and beyond.
230. Survey of African History to 1800. (3) $s / c s 2$.

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.
283. Introduction to Islam and the Modern "Middle East." (3) $s / c s 2$.

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) $s / c s 2$.

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) $s / c s 2$.

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) History Seminar. Two history courses; at least sophomore standing. Open to non-history concentrators by with consent of Department Chair. (3)s.

Historical questions and sources; varieties of history; types of writing (summaries, reviews, annotated bibliographies, historiographical essays); research questions and argument; analysis; evaluation, role of description and narration; documentation; related contemporary issues.
301. History Capstone Seminar. At least junior standing and two courses in history. Open to non-history concentrators by 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. $A t$ least sophomore standing or consent of instructor. (3)s/cs2.]
[303. Latin America: Independence to the Present Day. At least sophomore standing or consent of instructor. (3)s/cs2.]
[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/cs2.]
[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) $s / c s 2$.]
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/cs3.

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/wcl.

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/wcl.

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. (295) 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.
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.
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/cs3.

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/cs3.

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. (201) Africa in Modern Times, 1800 to Present. (3)s/cs2.

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/cs2.

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/cs2.]
[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/cs2.

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/cs2.

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/cs2.

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/cs2.

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/cs2.

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/vil.

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/cs2.

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)s/vi2.

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 358.
369. (250) History of American Women. At least sophomore standing. (3)s/cs3.

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/wcl.

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/wcl.

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/cs2.

Chinese civilization and culture from the Ch'ing Dynasty of the 17 th 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/cs2.

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/cs2.

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/cs2.

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/cs2.

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/vil.

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.
393. (392). 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.
409. (309) Colonial America to 1754. HIS 220; at least junior standing. (3)s.

History of the British colonies in the Americas from early exploration to the eve of the French and Indian War. Topics include rationales for migration, formation of first settlements, development of colonial government and society, origins of slavery.
410. The Birth of the American Republic. At least junior standing. (3)s.

Examination of the causes, consequences and nature of the American revolutionary experience from 1750 to 1789.
411. The Age of Jefferson and Jackson. At least junior standing; a course in American history. (3)s.

Examination of the growth of the U.S. from the Constitution to the era of migration to the trans-Mississippian West. Topics include political, social, and economic developments in early 19th century, Native American relations, U.S. diplomacy, origins of political parties, and early reforms.
412. (312) The Atlantic World in Transition: 1400-1850. HIS 112, 220. (3)s.

Examination of socio-cultural, economic and political interactions among Europeans, Africans and Amer-Indians. European expansionism, biological exchange, slavery, creolization, and impact of colonialism are among topics covered.
419. (319) 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.
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. (286) Muslims in North America. (3)s/cs3.

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 AfricanAmerican 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/cs3.

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. (379) 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.
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.

## Graduate Courses in History

509. Colonial America to 1754. Graduate standing. (3).

See HIS 409 for description. Not open to students with credit for HIS 409.
510. The Birth of the American Republic. Graduate standing. (3).

See HIS 410 for description. Not open to students with credit for HIS 410.
511. The Age of Jefferson and Jackson. Graduate standing. (3).

See HIS 411 for description. Not open to students with credit for HIS 411.
519. History of Sport in the United States. Graduate standing. (3).

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. 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: Crystal Pepperdine
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)vi2.

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. $L I N / E N G$ 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. $E N G / L I N ~ 200 . ~(3)$.

Second language acquisition theory and strategies. Problems in phonology, morphology, syntax, pragmatics, and cross-cultural issues.
335. Language Variation in Society. ANT 100 or ENG/LIN 200. (3)s/cs1.

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.
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 349.
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)ar2.

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/GER/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.

## 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<br>(810) 762-3244<br>FAX: (810)766-6880<br>Chair: Dr. Mehrdad Simkani<br>Principal Secretary: Pat Klein<br>Professors Steven C. Althoen, Robert A. Bix, Harry D'Souza, Renate McLaughlin, Kenneth Schilling; Associate Professors Ricardo Alfaro, Kristina Hansen, Larry M. King, Mehrdad Simkani; Assistant Professors Lixing Han, Shu-Yi Tu; Lecturer Joan Hellmann.

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 reveal truth through logical reasoning. The roots of mathematics lie in ancient Mesopatamia, 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 excellend way to prepare for a borad 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 analysists, 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.

Area Options. An area option in a foreign language is required (French or German recommended). Most students choose analytic reasoning as the second area option.

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 127, 175 (5 credits).
E. All College of Arts and Sciences requirements for the Bachelor of Arts degree.

## 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.

Area Options. Most students choose analytic reasoning as an area option. An area option in a foreign language is required for Option A below (French or German recommended), and is recommended for Option B.

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 College of Arts and Sciences requirements for the Bachelor of Science degree.

## 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 127,175 ( 5 credits).

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 $321,327,328,329,331,333,354,362,378,385,392,422$, 423, 456 ( $6-8$ credits).
C. CSC 127, 175, 275 (9 credits).

## 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.

Area Options. An area option in a foreign language is required (French or German recommended). Most students choose analytic reasoning as the second area option.

## 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.

Area Options. Most students choose analytic reasoning as an area option. Foreign language is recommended as the second area option.

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 above, excluding MTH 390, 391 (23-25 credits).
C. BUS 201, 202, 361 ( 9 credits).
D. CSC 127, 175 or 271 (4-5 credits).
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).

## Teacher's Certificate Program <br> (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.

Area Options. The foreign language area option is required for both the Bachelor of Arts and Bachelor of Science. Most students choose analytic reasoning as the second area option.

## 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 321, 370, 390 and 391 ( $6-8$ 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 EDU 360.
E. CSC 127, 175 ( 5 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.

## 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 321, 370, 390, 391 (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 EDU 360.
E. CSC 127, 175, 275 (9 credits).
F. PHY 243, 245 ( 10 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 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 321 (3-4 credits).
C. One from: MTH 375, BIO 404/HCR 402, PSY 301, BUS 211 (3-4 credits).
D. EDU 360 ( 3 credits).

## Courses in Mathematics (MTH)

90. (110). 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)ar3.

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.
115. Mathematical Inquiry I. MTH 111 with a grade of $C$ (2.0) or better, or equivalent as determined by departmental placement test. Prior or concurrent election of ENG 111. (4)ar3.

Theory of positional notation and base arithmetic, area and volume, variables and functions, geometry. Emphasis throughout on problem solving and writing. Lab sessions consisting of discovery-based activities in a cooperative group work setting; recitation. Designed for elementary education concentrators.
116. Mathematical Inquiry II. MTH 112 or 115 with a grade of $C$ (2.0) or better. (4)ar3.

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)ar3.

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)ar3.

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)ar3.

Differentiation and its applications; limits; introduction to integration.
122. Calculus II. MTH 121 with a grade of $C$ (2.0) or better. (4)ar3.

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.
133. Elementary Geometry. MTH 115, 120, each with a grade of C (2.0) or better. (4).

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. (223). 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 200 recommended. (4).

Differential and integral calculus of several variables, including partial derivatives, multiple integrals, line integrals.
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.
320. Discrete Structures for Computer Information Systems. MTH 118, BUS 211. (3).

An algorithmic approach to mathematical problem solving. Topics include, but are not limited to, sets, equivalence relations, lattice and partially ordered sets; introduction to number theory, encryption, permutations and combinations; graphs and graph algorithms. Also listed as CIS 320.
321. Discrete Structures. MTH 220 with a grade of $C$ (2.0) or better, or concurrent election of MTH 220. (3).

Induction and recurrence relations; equivalence relations, modular arithmetic, and the Euclidean algorithm; generating permutations and combinations; graphs and trees. Also listed as CSC 321.
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-Saloman 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. (496). 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 oddnumbered 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/CSC 321. 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 oddnumbered 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.
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 mathematical topic. 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, BolzanoWeierstrass property, Heine-Borel property, category, CantorBendixson 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 years.
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.
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.

## Medical Studies Information

## Pre-Medicine

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. 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 Chemistry Department or the Biology Department at the University of Michigan-Flint. 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. Joseph G. Rahme

Program Faculty: Dr. Imane Hakam (FOR), Dr. Judith Kollmann (ENG), Dr. Jamile Lawand (FOR), Dr. Joseph Rahme (HIS), Dr. Judy Rosenthal (ANT)

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." The 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 the Western world, but also has played a significant role in shaping the human experience. Students will gain perspective 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

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, 387.
2. AFA/HIS 433; HIS 386.
3. 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.
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; Lecturer cum Assistant Professor Robert Southard; Lecturers Gerald Blanchard, Maureen Carlson, Francesco Cavallini, James Coviak, Andrew Crane, Brian Di Blassio, John Hill, Glen Holcomb, G. Donald Kaye, Ida Leshchinskaya, Spencer Phillips, Jeffrey Price, Sarah Southard, 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 Music Department 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 Music Department 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 Music Department 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 Music/Art Department.

## 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 and Bachelor of Music Education 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 Music/Art 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, Music Theatre, and a Teacher's Certificate Minor in Music.

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 and 237 or equivalents with grades 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. At least 122 credits, including general education requirements and concentration in music education. The total program, including music, must include at least 33 credits of courses numbered 300 or above.
A. Performance ( 40 credits).

1. Applied Music* ( 12 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.
2. 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.
5. 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 ( 36 credits).
6. Education ( 28 credits). CSC 123*; EDU 301 (or 305), 302, 303, 349, 359, 369; EDU/ENG 410; PSY 237.
7. Music Education ( 8 credits). MUS 170; EDU/MUS 381, 382.

## General Program in Music <br> (Bachelor of Arts)

General Education Requirements. Students must complete the general education requirements in humanities, social sciences, natural sciences, and area options. For area options, students should take MUS 141 and 142 (Theory I and II) and three credits in another analytical reasoning area. A second area option in foreign language is required. A total of 80 credits in areas other than music is required for the BA degree. The total program, including music, must have at least 33 credits of courses numbered 300 or above.

## 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 ( 15 credits). 1. Applied Music (8 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.
2. 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.

## Honors Program in Music

Area Options. One of the two required area options must be in a foreign language, as stated in the University Honors Scholar Program.

## Requirements.

A. Completion of all graduation requirements for 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. Completion of 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 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 <br> (Bachelor of Science)

## Requirements.

A. The general ecducation requirements in English composition, natural sciences, social studies, humanities and fine arts, including two area options. For voice majors, one area option must be a foreign language.
B. Performance concentration ( 34 credits).

1. 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.
C. Music Theory ( 18 credits).

MUS 141, 142, 143, 144, 241, 242, 243.
D. Music History/Literature ( 12 credits). MUS 162, 261, 262, 361,
E. Music Electives ( 18 credits). From: MUS 222, 226, 232, 313, 321, 345, 362, 365, 366, 368, $422,445,455$, and additional ensembles.
F. Additional credits to bring the total to 124 , with at least 50 credits outside the performance concentration.

## Minor in Music

Requirements. Twenty-five credits, distributed as follows:
A. Music history and theory (12 credits). Six credits from each group below.

1. Music Theory ( 6 credits).

MUS 135, 141, 142, 143, 144, 241, 242, 243.
2. Music History ( 6 credits).

MUS 162, 220, 222, 226, 261, 262, 361, 422, 455.
B. Performance ( 7 credits).

1. 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: Jan Sage (Theatre), Kirk Aamot (Music).

Prerequisite. MUS 135 ( 3 cr ) or equivalent proficiency as demonstrated by examination

Requirements. Twenty-five to twenty-nine credits distributed as follows:
A. Music Theatre Core (9 credits). THE/MUS 240, 334 (elected twice)
B. Music ( 6 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.

## Teacher's Certificate Minor

This minor provides an introduction to music theory, history, performance and pedagogy.

## Requirements.

A. At least 30 credits, distributed as follows:

1. Music Theory ( 10 credits).

MUS 141, 142, 143, 144.
2. Music History (6 credits).

MUS 162, 220.
3. Music Performance ( 11 credits).
a. Applied music through MUS 252 (4). (Audition required.)
b. Performance organizations (4).
c. Piano: MUS 130 (1).
d. Conducting: MUS 371 (2).
4. Pedagogy (3-6 credits).

MUS 382. MUS 381 (elective) recommended.
B. Grade point average of B (3.0) or better in all courses counting toward the Teacher's Certificate Minor.
C. Completion of MUS 382 and at least one music history course at the University of Michigan-Flint.

## 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. (1) $f$.

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 $A B C D>N$.
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/ar2.

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/ar2.

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 $A B C>N$.
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 $A B C>N$.
151. Applied Music I. Consent of department after audition. (1) $f$.

Private instruction in instrumental or vocal music. Weekly onehour 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. (1)f.

Private instruction in instrumental or vocal music. Weekly onehour 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. Computer Music Technology I. MUS 141. (2).

Computer applications to music industry and music education. Use of several types of software in sequencing, recording, editing, multi-media presentation, and other applications for music education and industry. Students create data and audio CDs and DVDs and create and upload a website with audio.
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 EDU 180.

## 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 EDU 185.
200. The History of Blues, Jazz and Rap. (3)cs3.

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) $c s 2$.

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 and 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/wcl.

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/cs2.

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 $A B C>N$.
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 $A B C>N$.
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. (1)f.

Private instruction in instrumental or vocal music. Weekly onehour 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. (1)f.

Private instruction in instrumental or vocal music. Weekly onehour 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 $A B C C->N$.
261. Music History I. MUS 220 or consent of instructor. (3) h/wcl.

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.
313. African-American Music. A course in African-American studies or consent of instructor. (3)h/cs3.

Examination of the music developed and influenced by AfricanAmericans 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/vi2.

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 nonmusic 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. EDU 301-303 or consent of instructor. (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 EDU 336, MUS 336 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.
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 EDU 381.
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 EDU 382.
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).

Private applied music instruction in instrumental or vocal music, taken outside the applied music sequence; weekly one-hour 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.
393. Honors Independent Study. Open only to Honors Program participants in Music. Second semester of the junior year. (3)f.
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 only and 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. Open to nonmusic 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.
470. Computer Music Technology I. MUS 141. (3).

Computer applications to music industry and music education. Use of several types of software in sequencing, recording, editing, multi-media presentation and other applications for music education and industry. Students will create data and audio CDs and DVDs and create and upload a website with audio.
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).
499. Honors Thesis II. Open only to Honors Program Students in music. Prior or concurrent election of MUS 498. (4).

## 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; requirements vary from school to school. Consule 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.flint.umich.edu/departments/phl

## Chair: Paul K. Peterson

Principal Secretary:
Professors Charles E. M. Dunlop, Richard Gull, L. Nathan Oaklander; Associate Professor Paul K. Peterson; Assistant Professors Jami L. Anderson, Simon Cushing.

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

Five 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, the Joint Program in Philosophy and Psychology and the Advanced Program in Philosophy. Minors in Philosophy and Philosophy of the Social Sciences are also available.

## General Program in Philosophy

Prerequisites. PHL 101; PHL 202 or 302.
Area Options. One of the two required area options must be in a foreign language.

Requirements. Twenty-four credits in philosophy beyond the prerequisites, including:
A. Value Theory. PHL 261 or 361 or 368 ( 3 credits).
B. History. PHL 340 or 342 ; an additional course from: PHL 312, 340, 341, 342, 343, 380, 484 ( 6 credits).
C. Metaphysics and Epistemology: One from: PHL 321, 322, 323, 325 (3 credits).
D. Seminar. Two from PHL 385, 479-489 (6 credits).
E. Electives. PHL 309 is highly recommended. ( 6 credits).

## Applying to Graduate School in Philosophy (The Advanced Program in Philosophy)

Students planning to attend graduate school to study philosophy are advised to complete work beyond (and more specific than) the general program in philosophy. However, students should also seek the assistance of a faculty member in the philosophy department early in their undergraduate years to ensure that they will be adequately prepared for applying to graduate school.

The following is a sample recommendation of a program that would be suitable for students planning to pursue graduate study in philosophy. It is not intended as a substitute for advising sessions, nor is it required for a degree in philosophy. Advising sessions can be expected to lead to recommendations tailored to the individual student's needs.
A. Value Theory. PHL 261, 361 or 368 ( 6 credits).
B. History. PHL 340, 342; one from: PHL 312, 341, 343, 380, 484 (9 credits).
C. Metaphysics and Epistemology: Two from: PHL 321, 322, 323, 325 (6 credits).
D. Seminar. Two from PHL 385, 479-489 (6 credits).
E. Electives. Additional electives, including PHL 309, highly recommended.

## Program in Philosophy with Emphasis in Ethics, Social and Political

Prerequisites. PHL 101 or 209; 202 or 302; 103 or 115 or 160 or 162 or 163 or 167.

Area Options. One of the two required area options must be in a foreign language.

Requirements. Twenty-seven credits in philosophy beyond the prerequisites, including the following:
A. Value Theory. PHL 261 or 361, 368 ( 6 credits).
B. History. Two from PHL 312, 340, 341, 342, 343, 380, 484 ( 6 credits).
C. Metaphysics and Epistemology. One from PHL 321, 322, 323, 325 (3 credits).
D. Seminar. One from PHL 385 (with consent of advisor), 479, 480, 484 (with consent of advisor), 485 ( 3 credits).
E. Electives. Two courses, not used to satisfy prerequisites or requirements above, and at least one numbered 300 or higher, from: PHL 115, 160, 162, 163, 167, 261, 264, 267, 269, 271, $272,311,361,362,363,372,373,376,385$ (with consent of advisor), 479, 480, 484 (with consent of advisor), 485 ( 6 credits).
F. Any other course in philosophy ( 3 credits).

## 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.

Area Options. One of the two required area options must be in a foreign language, as stated in the University Honors Scholar Program.

## Requirements.

A. Twenty-four credits in philosophy beyond the prerequisites, including:

1. Value Theory. PHL 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, 479-489 (6 credits).
5. Electives. PHL 309 is highly recommended. (6 credits).
B. Completion of a seminar course in philosophy from PHL 479 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. Completion of 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 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.

Area Options. One of the two required area options must be in a foreign language.

Requirements. Completion of the graduation requirements for the Bachelor of Arts degree including the general education requirements. General education requirements in the natural sciences may not include courses in psychology. Also, 21 credits in philosophy and 24 in psychology, apportioned as follows:
A. Philosophy

1. Logic. PHL 202 or 302.
2. Value Theory. One from PHL 261, 264, 266, 361, 368, 376.
3. History of Modern Philosophy. One from PHL 342, 343, 484.
4. Philosophy of Social Sciences. Two from PHL 235*, 311, 312, 314.
5. Philosophical Foundations. One from PHL 479, 481, 482, 483, 489.
6. An additional course from those listed above.
B. Psychology
7. PSY 100, 201, 301.
8. PSY 384 or 386.
9. Three from: PSY 227 or $326,235^{*}, 302,309,328,336$, 345.

* PHL/PSY 235 may not be counted in both parts A and B.


## 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 479, 480, 481, 482, 483, 485, 489.
D. Two additional courses selected in consultation with an advisor from the Philosophy Department.

## Minor in Philosophy of the Social Sciences

The minor is for students interested in philosophical examinations of the nature, methods and presuppositions of the social sciences. Courses in the program address such issues as the nature and possibility of a science of human beings and human society, the nature and types of explanations and theories in the social sciences and their logical and conceptual structures, and views on the nature of human beings and human society that are presented, implied or presupposed by the social sciences.

## Requirements.

A. One from: PHL 101, 103, 162, 167, 202.
B. Fifteen credits from: PHL 235, 311, 312, 314, 320, 340 or 341 or 342 or 343, 350, 364, 376.
C. One of the following:

1. A concentration or minor in a social science discipline, education, or business administration.
2. Eighteen credits, chosen in consultation with a Philosophy advisor, including at least twelve credits in the social sciences and at least six credits in courses numbered 300 or above.

## 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/arl.

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/vi2.

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/wcl.

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/vi2.

Discussion of selected moral, political, or aesthetic issues in contemporary life. Analysis, criticism, and defense of alternative positions.
162. Introduction to Ethics. (3)h/vil.

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/vi2.

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/vil.

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/vi2.

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). $h /$ vil

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/arl.

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 $A B C D D->N$.
203. (166). Origins of Modern Racism. (3)h/wcl.

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/vil.

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 nonAfricans. Also listed as AFA 205.
[251. Philosophical Foundations of the World's Religions. A course in philosophy. (3)h.]
261. Morality and Its Foundations. A course in philosophy. (3)h/vil.

Questions about the foundations and origins of morality, such as whether morality is relative to a particular society or culture, whether the origin of our moral rules lies in our biological nature, whether moral judgments are the work of feeling or reason, whether we can ascribe different moral perspectives to men and women.
264. Introduction to Feminist Theory. At least sophomore standing. (3)h/vi2.

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/vi2.

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. Philosophical Theories of Punishment. A course in philosophy. (3)h/vi2.

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. A course in philosophy. (3)h/vi2.

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. A course in philosophy. (3)h/vil.

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?
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 the 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. Also listed as COM 301.
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..
304. The Ethics of Health Care. PHL 162 or PHL/NSC 168 or PHL 261. (3)h/vi2.

Examination of ethical and philosophical issues arising in and from the health care systems. Problems and conflicts posed by interpersonal, professional and client relationships. The right to live, the right to die, informed consent, sterilization, abortion, 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. Also listed as HCR 304.
309. (209) Philosophical Issues and Arguments. A course in philosophy. (3)h/ar1.

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 or PHL 309; six 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/wcl.

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. (265). Computers and Society. Sophomore standing and a course in computer science, or consent of instructor. (3)h/vil.

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. (221). Metaphysics. A course in philosophy. (3)h/arl.

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. (222). Theories of Knowledge. A course in philosophy. (3)h/arl.

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. (223). Philosophy of Mind. A course in philosophy. (3)h/ar1.

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. (225). 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. (235) Introduction to Cognitive Science. PSY 100, PHL 101. (3)s/arl.

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. Also listed as PSY 335.
340. (240). Ancient Greek Philosophy. A course in philosophy. (3) $h / w c l$.

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. (241). Medieval Philosophy. A course in philosophy. (3)h/wcl.

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. (242). Early Modern Philosophy. A course in philosophy. (3)h/wcl.

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. (243). Late Modern Philosophy. A course in philosophy. (3)h.

From Kant through the nineteenth century; Kant, Mill, Hegel, Schopenhauer, Marx, Kierkegaard, Nietzsche.
350. (250). Mythological Thought. A course in philosophy or consent of instructor. (3)h/csl.

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.
361. The Study of Ethics. A course in philosophy. (3)h/vil. Critical study of ethical theories. Problems of the meaning of ethical terms; problems of method, including the defensibility of the conclusions of ethical theories; problems of ethical knowledge.
362. (262). Philosophy of Law. A course in philosophy, or consent of instructor. (3)h/vi2.

Nature and justification of judicial decisions, the justification of punishment, the obligation to obey the law, the lawyer's professional responsibility, the enforcement of morality, and the concept of a just law.
[364. Philosophy, Work, and Economic Freedom. A course in philosophy. (3)h/vi2.]
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 375.
368. (268). Social and Political Philosophy. A course in philosophy. (3)h/vil.

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/vi2.

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/vi2.

Philosophical ideas as expressed in film and literature. Study of such films as: John Ford's "The Searchers," Billy Wilder's "Double Indemnity," Roman Polanski's "Chinatown," Martin Scorsese's "Taxi Driver," and Jan Kadar's and Elmar Klos' "The Shop on Mainstreet." Screenplays, original sources, and analytic articles considered. Also listed as THE 372.
373. Philosophy in Literature. A course in philosophy. (3)h/vil.

Philosophical problems as they occur in works by such authors as Dostoevsky, Nietzsche, Kafka, Gide, Hesse, Sartre and Camus. Also listed as ENG 373.
374. Philosophy and Children's Literature. A course in philosophy; junior standing or consent of instructor. (3)h/vi2.

Children's literature as a vehicle for philosophical discussion. Views of the nature of concepts such as the self and selfawareness, 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/vil.

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.
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.]
[443. American Philosophy. A course in philosophy and at least junior standing, or consent of instructor. (3)h.]
479. (379). 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. (381). 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. (382). 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. (383). 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. (249). 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).
489. (389). 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.
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.
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.
[543. American Philosophy. Graduate standing; a course in philosophy or consent of instructor. (3).]

## Physical Geography

See Earth and Resource Science.

## Physics (PHY)

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Professor Loretta J. Dauwe; Associate Professors Christopher A. Pearson, M. Vaziri; Lecturers Marian Aanerud, Alan Grafe, Li-hsuan Yang
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).

Area Options. The foreign language area option is required. The analytic reasoning area option is automatically satisfied by required courses.

## 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).

Students planning to pursue graduate study in physics are urged to elect PHY 470, MTH 357.

## General Program in Physics <br> (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).
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).

Area Options. The analytic reasoning area option is automatically satisfied by required courses. The foreign language area option, particularly in German, Russian or French, is recommended.

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).

## Honors Program in Physics <br> (Bachelor of Arts)

## Prerequisites.

A. PHY $243,245$.
B. MTH $121,122,220,222$.

Area Options. The foreign language area option is required, as stated in the University Honors Scholar Program. The analytic reasoning area option is automatically satisfied by required courses.

## Requirements.

A. Completion of all requirements for the Bachelor of Arts in Physics, except that the completion of 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. Completion of 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 160, 161 (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.

Area Options. The foreign language area option is required. The analytic reasoning area option is automatically satisfied by required courses.

Requirements. (28 credits).
A. PHY 321 or $323,333,344,367$, 433 ( 13 credits).
B. MTH 305, EDU 364, 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.

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.

## 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/ar2.

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. (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/ar2.

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/ar2.
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/ar2.

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/ar2.

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.
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. 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. (373) 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. Dynamics. PHY 243, MTH 305, each with a grade of C (2.0) or better, or consent of instructor. (3).

Particle and rigid body mechanics in one, two and three dimensions. Kinematics, kinetics by application of Newton's Laws. Impulse, energy and momentum methods, rotations and vibrations. Also listed as EGR 370.
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, each 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).

Electrostatics, behavior of dielectrics, electric currents and magnetism, electromagnetic induction, alternating current circuits, and Maxwell's equations. Also listed as EGR 367.
374. Introduction to Quantum Mechanics. PHY 343, MTH 220, 222, each 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. (4).

Application of Schrödinger's equation to problems of atomic and molecular structure. Prior or concurrent election of MTH 357 desirable.
375. Solid State Physics. PHY 245, MTH 220, 222, each with a grade of $C$ (2.0) or better. (3).

Crystal structure, diffraction by crystals, thermal properties, dielectric properties; free electron theory of metals, band theory, semi-conductors, magnetism, magnetic resonances, defects, superconductivity. Prior or concurrent election of MTH 305 desirable.
391. Independent Study. Consent of instructor. (To be arranged).

Laboratory study or study of current literature on a special problem.
433. Undergraduate Research Project. Consent of instructor. (1-3).

Original research 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. Graded ABCDE/Y. Also listed as EGR 433.
470. Advanced Topics in Classical Physics. PHY 344, 367, each with a grade of C (2.0) or better. (2).

Lagrangian and Hamiltonian dynamics. Mechanical waves. Magnetic fields in matter. Maxwell's equations and plane wave propagation. Prior or concurrent election of MTH 357 desirable.
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.
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.

## Political Science (POL)

310 David M. French Hall
(810) 762-3470
www.flint.umich.edu/departments/polsci
Chair: Peggy Kahn
Principal Secretary: Crystal Pepperdine
Professors Peggy Kahn, Albert C. Price; Assistant Professor
Stephen Rockwell, Lecturer cum Assistant Professor 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).

Area Options. One of the two required area options must be in a foreign language.

## 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.

## 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).

Area Options. One of the two required area options must be in a foreign language, as stated in the University Honor Scholar Program.

## Requirements.

A. Completion of 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 $494 / \mathrm{HON} 393$, 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).

General Education and Area Options. Students must satisfy the General Education Requirements for a Bachelor's Degree and foreign language is required as an area option.

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).
F. Electives to complete a total of at least 30 credit hours in Political Science.

In addition, students must meet the following requirements in the Education Department:
A. EDU 302, 303, 305 (9 credits).
B. EDU 363 Teaching Social Science in Middle and Secondary Schools (3 credits).
C. EDU/ENG 410 Improvement of Reading in the Middle and Secondary School (3 credits).
D. EDU 359 Student Teaching Seminar (2 credits).
E. EDU 369 Student Teaching in the Secondary School (10 credits).

Students who wish to receive Teacher's Certification must apply for admission to the Education Program. Deadlines for applying are January 15 and September 15. Requirements for admission are (1): admissions to UM-F; (2) overall grade point average of 2.75; (3) 2.75 grade point average in the major and minor; (4) at least 18 hours completed in the major and 12 hours completed in the minor; (5) passing score on the MTTV Basic Skills Test; (6) PSY 100 and PSY 237 or equivalents with a C or better; (7) CSC with a grade of C or better; and (8) completion of at least 55 credit hours. 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/vil.

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/cs3.

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. Contemporary Ideologies. (3)s/vil.

Review of major political ideologies, including Liberalism, Conservatism, Communism, Fascism and Nationalism.
301. Research and Writing in Politics and Public Affairs. 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 AfricanAmericans 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. $H C R$ 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/vi2.

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/vi2.

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 190 or SOC 100, 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. antidiscrimination 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/cs2.

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/cs2.

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.
351. Political and Legal Anthropology. ANT 100 or POL 190. (3)s/csl.

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/wcl.

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/wcl.

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/vil.

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.]
380. The American System of Law. POL 120 or consent of instructor. (3)s/vil.

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/vi2.]
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.
v387. Sex, Drugs, and Politics. POL 120 or consent of instructor. (3)s/vi2.

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.
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.
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.

## 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.
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.
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 441 for description. Not open to students with credit for POL/PUB 441. 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.
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 POL 559.

## Psychology (PSY)

411 William R. Murchie Science Building
(810) 762-3424

FAX (810 762-3426
Website: http://www.flint.umich.edu/departments/psy
Chair: Dr. Thomas A. Wrobel
Principal Secretary: Sharon Mittan
Professors Ronald E. Silverman, Harriet M. Wall, Thomas A. Wrobel; Associate Professors Eric Freedman, Susan GanoPhillips, Marianne P. McGrath; Assistant Professor Terrence Horgan, Michael Jarvinen, Jeannette Whitmore; Lecturers Allen Bellamy, Michael Jarvinen, Harriett Nordstrom, Vlenaetha Stewart.
Professors Emeriti: Paul M. Bronstein, Harry Frank, Donald M. Pollie, Alfred C. Raphelson

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.

Area Options. One of the two required area options must be in a foreign language.

Prerequisite. MTH 111 or equivalent preparation determined by the mathematics departmental placement test.

## Requirements.

A. Completion of 120 credits, including the general education requirements. Completion of the natural science general education requirement excluding courses in psychology.
B. Thirty-four credits in psychology including:

1. PSY 100, 201, 301 ( 11 credits).
2. 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 117, 118, or 120, 121 (8-11 credits).

## Requirements.

A. Completion of 124 credits, including the general education requirements; completion of the natural science requirement with courses outside 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).

1. 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 $\mathrm{A}, \mathrm{B}$ 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. Completion of 124 credits, including the College of Arts and Sciences general education requirements. Completion of the natural science requirement with courses outside psychology, courses in biology recommended. At least 44 credit hours in psychology including:
A. Methodology ( 12 credits). PSY 201, 301; a laboratory course selected from PSY 306, 310, 327, 351, 380, 384, 386.
B. Core ( 9 credits). PSY 336, 340, 382.
C. Theoretical and Practical Issues. Two courses from each of the following groups.

1. Theoretical ( 6 credits). PSY 326; PSY 334 or BUS 341; PSY 345 or 346 ( 3 credits) or 347; PSY 362.
2. Applied (6 credits). PSY 328, 350, 375, 381, 389.
D. Experiential/Thesis (11 credits). PSY 360 (taken twice), 396, 397, 398.
E. 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 <br> (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).

Area Options. One of the two required area options must be in a foreign language, as stated in the University Honors Scholar Program.

Prerequisite. PSY 201 (taken in the freshman or sophomore year).

## Requirements.

A. Completion of all requirements of one of the programs above.
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. Completion of 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, Dr. Wall, 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 <br> (Bachelor of Arts)

Area Options. One of the two required area options must be in a foreign language.

Prerequisite. MTH 111 or equivalent preparation determined by the mathematics departmental placement test.

## Requirements.

A. During the four college years, 34 credits in psychology including:
. PSY 100, 201, 301.
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 $309,326,328,336$.
6. 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. General education requirements in the natural sciences to be fulfilled with courses excluding 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.
D. 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)ar2.

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/vi2.

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)ar2.

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, 301; or PSY 200 with a grade of $B$ (3.0) or better. (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 or 200 with a grade of $B$ (3.0) or better and PSY 301; or BIO 111, 327. (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, 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. (235) Introduction to Cognitive Science. $P S Y 100, P H L$ 101. (3)s/arl.

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. Also listed as PHL 335.
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. (337). 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 or 200 with a grade of B (3.0) 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.
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. (263). 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 or 200 with a grade of B (3.0) 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, 301; or PSY 200 with a grade of B(3.0) or better, a course in statistics. (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, 301; or PSY 200 with a grade of B(3.0) or better, a course in statistics. (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 eclectic 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.
395. Cognitive Science Project. $P S Y$ 201, 301; PHL/PSY 235; one 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.
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.
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.
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.

## 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: Crystal Pepperdine
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.

Area Options. An area option in a foreign language is required. Analytic reasoning is recommended as the second area option since the required courses in economics and statistics complete two-thirds of this area option.

Requirements. The general education requirements, POL/PUB 301 , and 42 credits, distributed as follows:
A. 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.
B. Administrative Functions ( 12 credits).

From HCR 421; POL/WGS 331/SOC 362; PSY 334; PUB 425, 440; PUB/EDU 450; PUB/HCR 319, 418, 424; PUB/POL 420; PUB/SOC 361, 460.
C. 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.
D. Practicum (3-6 credits).

PUB/POL 390 or ECN 395.
E. 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.

Area Options. An area option in a foreign language is required. Analytic reasoning is recommended as the second area option.

## Requirements.

A. Completion of all requirements for the General Program in Public Administration, including SOC 210 as one of the courses in Analytical Methods.
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. Completion of 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 MichiganFlint 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. Analytical Methods (3 credits).

From List B in the General Program in Public Administration.
C. Administrative Functions ( 6 credits).

From List C 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 and Writing in Politics and Public Affairs. 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.
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. (466) 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.
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. Health Care Planning and Regulatory Process. $H C R$ 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 decisionmaking, 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. (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.
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 EDU 438. Graded $A B C D>N$.
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. (360). 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, relationships between organizations and individuals. Classical and contemporary perspectives on issues related to organization design, control, change and effectiveness. Also listed as SOC 446.
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 who have completed EDU 201 or EDU 400. Also listed as EDU 450.
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. (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 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. $H C R 376$ 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 EDU 482 and SWK 482.
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 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.
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.

## Religious Studies

Advisors: Drs. Paul Adams (Biology), Judith Kollmann (English), L. Nathan Oaklander (Philosophy), Paul Peterson (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, distributed as follows:
A. Minimum of 9 credits selected from AFA/ANT 369; AFA/PHL 205; ANT 355; ENG 205, 206; PHL 165, 251; SOC 458.
B. Minimum of 9 credits selected from AFA 357; AFA/HIS 286, AFA 358/HIS 359; BIO 314 (250); HIS 215, 216, 283, 306, 350, 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. (101). 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.

## Social Sciences, Joint Program

Faculty Advisors: Advisors in the department of major emphasis.
Area Options. One of the two required area options must be in a foreign language.

Requirements. At least 45 credits in the social sciences apportioned as follows:
A. 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:

1. PSY 100 or 101, PSY 201.
2. One from: PSY 306, 310, 327, 351, 380, 384, 386.
3. Three from: PSY 309, 326, 328, 336, 345.
B. 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.
C. No more than two senior seminars.
D. A grade point average of 2.0 or better within the concentration, based on the 45 credits of social science required.

## Social Studies

The program in social studies is designed to introduce the student who is preparing to teach 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 economics, geography, history and political science.

## 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).
Area Options. One of the two required area options must be in a foreign language.

Requirements. Thirty-nine credits, consisting of 12 credits from one of the disciplines below and 9 credits from each of the other three:
A. Economics. ECN 201, 202; additional courses in economics at or above 300 -level selected in consultation with an Economics Department advisor.
B. Geography. GEO/INT 116; additional courses selected from GEO 115, 216, 285.
C. History. HIS 220, 221; additional courses in non-U.S. history.
D. Political Science. POL 100, 120; additional courses in political science. (POL 230, 311, 345, 380 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.

## Social Theory and Practice

Faculty Advisors: Jami Anderson (Philosophy), Simon Cushing (Philosophy)

This program is intended to help students see the connections between abstract social, ethical and political theories and pragmatic social and political practices and policies, and is designed to prepare students to engage in active roles in their community and to develop greater awareness both of issues of social justice and of mechanisms whereby social change can be brought about. Participating disciplines include Africana Studies, Anthropology, Criminal Justice, International Studies, Philosophy, Political Science, Psychology, Sociology and Women and Gender Studies.

## Programs in Social Theory and Practice

A Minor in Social Theory and Practice is available.

## Minor in Social Theory and Practice

Requirements. Eighteen credits, distributed as follows:
A. Core courses ( 6 credits).

PHL 362, Philosophy of Law, or PHL 368, Social and Political Philosophy
POL 346, Political Economy, or POL 441, Comparative Social Policy
B. At least twelve additional credits selected from the groups below, with at least one course from each group, and
including courses from at least three different departments.

1. General Theory. AFA/POL 330; ANT/SOC 302, 303; CRJ 384; PHL 311, 362, 368, 480, 485; PHL 314/SOC 316; POL 351, 361, 365; PSY 227, 314, 334, 340.
2. Policy and Special Topics. AFA 375; AFA/PHL 203, 304; AFA/SOC 270; CRJ 381, 386; PHL 267, 320; POL 309, 346, 387, 441; POL/WGS 331; POL/PUB 422; PSY 219, 347, 363.

## Sociology (SOC)

522 David M. French Hall
(810) 762-3340

Chair: Beverley Smith
Principal Secretary: Lynne McTiernan
Associate Professors Roy Barnes, Larry W. Koch, Kathryn Schellengerg, Charles B. Thomas, Jr.; Assistant Professors
Heather Laube, Kenneth Litwin, Joan Mars
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

Area Options. One of the two required area options must be in a foreign language.

## 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.

## Honors Program in Sociology

Faculty Advisor: Dr. Barnes

Area Options. One of the two required area options must be in a foreign language, as stated in the University Honors Scholar Program.

Requirements. A total of 44 credits in sociology:
A. Completion of all requirements for the General Program in Sociology. SOC 210 is ordinarily elected in the sophomore year.
B. Completion of a statistics requirement by electing 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. Completion of 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 $A B C D D->N$.
180. Social Problems. (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 $A B C D D->N$.
210. Introduction to Social Research. SOC 100 or ANT/INT 100. (3)s/ar2.

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)ar2.

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) cs2.

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/vi2.

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/wcl. 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 and PTP 323.
325. Culture and Personality. ANT/INT 100 or PSY 100 or SOC 100. (3)s/csl.

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 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/csl.

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 the Family. SOC 100. (3)s/vi2.

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/cs3.

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. (466) 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 190 or SOC 100 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 IIlness. 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/vil.

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.
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. (360). 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.
452. 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 EDU 452.
456. Political Sociology. 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. Crosscultural 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.
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.
499. (399). Senior Seminar. Senior standing; consent of instructor. (3).

Critical review of sociological and anthropological literature, with attention to the interaction of theory and research. Also listed as ANT 499.

## Graduate Courses in Sociology

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 the Family. Graduate standing, SOC 100; or consent of instructor. (3).

See SOC 354 for description. Not open to students with credit for SOC/WGS 354.
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, labormanagement 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 EDU/SOC 452. Also listed as EDU 569.
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.
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.
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. They must have ready for approval before the end of the sophomore year 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 program of study and rationale must be endorsed by a board of study 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.

Area Options. One of the two required area options must be in a foreign language.

Requirements. The normal requirements for graduation with the degree of Bachelor of Arts, stated elsewhere in this Catalog, must be met.

## Substance Abuse Treatment

See Social Work.

## Theatre (THE)

## 238 Theater

(810) 762-3230

Chair: Lauren Friesen
Administrative Assistant: Linda K. Letts
Professors Lauren Friesen, Carolyn M. Gillespie; Assistant Professors Elizabeth Bourgeois, Jan Sage; Lecturer Dave Nofsinger; Technical Director and Lecturer Doug Mueller; Costume Shop Supervisor and Lecturer Monica Hart.

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 $\mathrm{A}, \mathrm{B}$, or C in all theatre courses.

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 goals, methods and outcomes is available at http://assessment.umflint.edu.

## Programs in Theatre

Five specialization programs (Bachelor of Arts) are offered: General Theatre, Design and Tech, 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), 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: $\mathrm{http}: / / w w w . f l i n t . u m i c h . e d u / d e p a r t m e n t s / t h e a t e r-d a n c e . ~$

## General Program in Theatre (Bachelor of Arts)

Area Options. One of the two required area options must be in a foreign language.

Requirements. Completion of the graduation requirements for the Bachelor of Arts degree, including two area options and the general education requirements in English composition, natural sciences, social sciences, humanities, and fine arts. A total of 40 credits distributed as described in one of the following five options. Students seeking a major in Theatre must have a grade of C (2.0) or higher in all theatre courses.

## Option 1. General Program in Theatre

A. Theatre History \& Literature ( 12 credits). THE 150, 300, 301; 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 (3 credits). THE/ART 271.
D. Technology ( 9 credits). THE 214, 215, 314 or 315 . THE 241, 370, 380, 385 recommended.
E. Directing ( 3 credits). THE 320.
F. Senior Seminar (1 credit). THE 425.
G. Theatre Practica (4 credits in 2 areas). THE 121, 122, 123.
H. At least 33 credits in courses numbered 300 or above.
I. Participation in at least one major production a year.

## Option 2. General Program in Theatre: Literature/History Emphasis

A. Theatre History \& Literature ( 21 credits). 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 ( 3 credits). THE/ART 271.
D. Technology (4 credits). One from: THE 214, 314 or THE 215, 315.
E. Directing ( 3 credits). THE 320.
F. Senior Seminar (1 credit). THE 425.
G. Theatre Practica ( 3 credits in 2 areas). THE 121, 122.
H. At least 33 credits in courses numbered 300 or above.
I. Participation in at least one major production a year.

## Option 3. General Program in Theatre: Design and Technology Emphasis

A. Theatre History \& Literature (9 credits). THE 150, 300, 301.
B. Performance ( 5 credits). THE 221, 230.
C. Design \& Technology (16 credits).

1. THE/ART 271
2. Three from: THE $214,215,314,315$
3. Six credits from: THE/ART 241, 251, 370; THE/ART/COM 252, THE/WGS 275; THE/ART 380 or THE 385.
4. One credit from: THE 404, 408, 409.
D. Directing ( 3 credits). THE 320.
E. Senior Seminar (1 credit). THE 425.
F. Theatre elective (3 credits).
G. Theatre Practica ( 3 credits in 2 areas). THE 121, 122.
H. At least 33 credits in courses numbered 300 or above.
I. Participation in at least one major production a year.

## Option 4. General Program in Theatre. 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 (3 credits). THE/ART 271.
D. Technology (4 credits). THE 214, 314 or THE 215, 315.
E. Directing ( 3 credits). THE 320.
F. Senior Seminar (1 credit). THE 425.
G. Theatre Practica (1 credit). THE 121 or $122 .$.
H. At least 33 credits in courses numbered 300 or above.
I. Participation in at least one major production a year.

## Option 5. General Program in Theatre. 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).
2. Four from: DAN $116,117,118,120,121,130,131,132$, $140,141$.
3. Four credits in Dance at the 200 level or higher.
C. Design (3 credits). THE/ART 271.
D. Technology (4 credits). THE 214, 314 or THE 215, 315.
E. Directing/Choreography (3 credits). THE 320 or DAN/ART 351.
F. Senior Seminar (1 credit). THE 425.
G. Theatre Practica ( 2 credits). THE 121, 122, 123.
H. At least 33 credits in courses numbered 300 or above.
I. Participation in at least one major production a year.

## Honors Program in Theatre <br> (Bachelor of Arts)

Area Options. One of the two required area options must be in a Foreign Language, as stated in the University Honor Scholar Program.

## Requirements.

A. Completion of all the graduation requirements for 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.
D. 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. Completion of 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 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.

Area Options. One of the two required area options must be in a foreign language.

Requirements. Completion of 126 credit hours and the graduation requirements for the Bachelor of Arts degree, including two area options and the general education requirements in English composition, natural sciences, social sciences, humanities, and fine arts. At least 70 credits in theatre distributed as follows:
A. 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.
B. Voice and Movement Sequence ( 12 credits). THE 221, 331, 333 , plus six credits in dance technique or ensemble selected in consultation with Dance advisor.
C. Theatre History ( 9 credits). THE 150, 300, 301.
D. Design/Technical ( 14 credits). THE/ART 251, 271 and nine additional credits from THE 214, 215, 216, 270, 280, 285 or Special Projects.
E. Directing ( 3 credits). THE 320.
F. Theatre Practica ( 7 credits). Four areas on mainstage productions: THE 120, 121, 122, 123.
G. Electives. Twelve additional credits in music, theatre or dance theory or performance chosen in consultation with the BFA advisor.
H. 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.
Area Options. One of the two required area options must be in a foreign language.

Requirements. Forty credits, distributed as follows:
A. Core courses ( 26 credits). COM 200, 281, 332; COM/THE 204, 210; THE 221, 320; THE/ART 271; THE/EDU 368.
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.

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). THE/COM/EDU 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.
160. Introduction to Graphic Design Theory and Process. (3)f.

Introduction to contemporary graphic design topics including theory, professional practice, creative workflow, career paths, digital graphics hardware and software usage, copyright, and ethics. Also listed as ART 160 and COM 160.
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.
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.
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, lighting, sound and production management. Lecture/discussion.

## 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. (2).

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)cs3.

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 ART 241.
242. Contemporary Black Theatre in America. (3)h/cs3.

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.
251. (250). 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 Graphic Design. ART 160 or consent of instructor. (3)f.

Introduction to digital graphic design fundamentals and use of computer software in studio practice. Survey of major computer graphics software programs, including page layout, vector drawing, animation, and bit-map imaging.. 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. (175). 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. $E N G 112$ and at least sophomore standing. (3)h/wcl.

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. $E N G 112$ and at least sophomore standing. (3)h/wcl.

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 Americna theatre: Ibsen, Strindberg, Chekhov, Wilde, Shaw, O'Neill, Eliot, Hellman, Brecht, Wilder, Miller, Williams, Beckett, Churchill, and Wilson. Also listed as ENG 388.
303. United States Theatre History. HIS 221 or consent of instructor. (3)h/cs3.

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. COM 204 or 210; or consent of instructor. (3)f.

Advanced communication theory related to public speaking with a special emphasis on persuasion theory Advanced delivery and presentation techniques applied to a variety of settings. Also listed as COM 304.
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 Movements. 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.
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. EDU 301-303 or consent of instructor. (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 EDU 336 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.
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 EDU 303. (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 EDU 368.
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/vi2.

Work of such directors as Ford, Huston and Curtiz within the genres of the western, film noir, and "tough" investigative thriller; the manner in which these and other filmmakers worked within and against the conventions of these forms to help destroy the polarity between art and entertainment. Ways in which visually dissimilar genres are intimately related philosophically; philosophical issues regarding gender. Tragedy and comedy in Kafka and in several cinematic works. 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 216, 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.
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. 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 lowerlevel 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. 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 lowerlevel 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. Consent of instructor and a lower-level course appropriate to the area elected. (1-3)f.
414. Special Projects in Costume Design. 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. 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. Consent of instructor and $a$ lower-level course appropriate to the area elected. (1-3)f.
420. Directing II: Practice. THE 320 or 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 EDU 449.
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.
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.

## 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, a 300-level course in literature or theatre history; or consent of instructor. (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 EDU/THE 449. Also listed as EDU 549.

# Women's and Gender Studies (WGS) 

544 David M. French Hall
(810) 766-6883

Website: http://www.umflint.edu/wgs
Director: Jami Anderson, 544 French Hall, (810) 762-6650
Program faculty: Ananthakrishan Aiyer (ANT), Jennifer Alvey (ANT), Jami Anderson (PHL), Bob Barnett (ENG), Jan Bernsten (ENG), Elizabeth Bourgeois (ENG), Carolyn Campbell (EDU), Rose Casement (EDU), Simon Cushing (PHL), Ernest Emenyonu (AAS), Mary Jo Finney (EDU), Jan Furman (ENG), Susan Gano-Phillips (PSY), Diana Garno (HIS) Carolyn Gillespie (THE), Kazuko Hiramatsu (LIN), Peggy Kahn (POL), Alicia Kent (ENG), Mary Jo Kietzman (ENG), Mary B. Killeen (NUR), Brenda Knaack (NUR), Larry Koch (SOC), Suha Kridli (NUR), Heather Laube (SOC), Adam Lutzker (ECN), Joan Mars (CRJ), Elizabeth Mazur (PSY), Marianne McGrath (PSY), Derwin Munroe (POL), Teddy Robertson (HIS), Lois Rosen (ENG), Judy Rosenthal (ANT), Vivian Semerdjian (HIS), Beverley Smith (ANT), Traki Taylor (EDU), D.J. Trela (ENG), Sapna Vyas (EDU), Mary Wagner (MUS), Steven Wandmacher (PHL), Chris Waters (ART), Tiffany Wiloughby-Herard (AFA), 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:
A. 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; ANT/WGS 378; SOC/WGS 376.
C. Additional electives (3-9 credits). AFA/WGS 401, 402; ANT 359/WGS 358; ART/WGS 410; COM/LIN/WGS 284; EDU/WGS 440; ENG/WGS 228, 337; HIS/WGS 250, 370, 371; HIS 457/SOC 357/WGS 457; MUS/WGS 321, PHL/WGS 264; POL 331/SOC 362/WGS 331; POL/WGS 385, PSY/WGS 363; SOC/WGS 354; THE/WGS 175, 350. 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) $h / v i 2$.

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)cs3.

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. (402). Afro/Latino/Caribbean Women Writers. Prior or concurrent election of ENG 112. (3)h/cs3.

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.
218. (401). Women Writers of the African World. AFA 101 or 260 or consent of instructor. (3)h/cs 2 .

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 and CPL 218.
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/vi2.

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/vi2.

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. (175). 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.
321. Women and Music. ENG 112. (3)h/vi2.

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 nonmusic major. Also listed as MUS 321.
325. Culture and Personality. ANT/INT 100 or PSY 100 or SOC 100.
331. Women and Work. POL 190 or SOC 100, 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. antidiscrimination 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/vi2.

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, re-enforce, challenge and re-vision sex and gender roles in a
variety of periods and cultures. Topics include: the politics of re-presentation, 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 the Family. SOC 100. (3)s/vi2.

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) $s / c s 3$.

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 227, 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.

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.
369. (250) The History of American Women. At least sophomore standing. (3)s/cs3.

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/cs2.

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.
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 and SOC 474, or two other 300-level courses in Women's and Gender Studies. (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 ART 410.
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 EDU 440.
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 HIS 457 and SOC 457.
474. Gender and Society. SOC 100, at least junior standing; or consent of instructor. (3)s.

Nature and causes of sex stratification in society. Crosscultural 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.

## Graduate Courses in Women's and Gender Studies (WGS)

540. Girls, Culture and Education. Graduate standing. (3).

See WGS 440 for description. Not open to students with credit for EDU/WGS 440. Also listed as EDU 540.
554. Sociology of the Family. Graduate standing, SOC 100; or consent of instructor. (3).

See WGS 354 for description. Not open to students with credit for SOC/WGS 354.
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 for students with credit for SOC/ANT/WGS/INT 376.
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.


General Education Program

## 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<br>Business Manager: Vickie Redmond-Powell<br>Development and Alumni Officer: vacant<br>Executive Secretary to the Dean: Beulah Alexander<br>Receptionist: vacant

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 MidMichigan, 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 |
| B | 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 $\mathrm{E}, \mathrm{F}$ 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. After the end of the semester a copy of the official grade report is mailed to each student at the address of record.

## 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

1. 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 Center, and through the online version of the Catalog.
2. 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 Center.)
3. 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 Catalog.

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: Tara Huls<br>Head Teachers: Amanda Baker, Della Becker-Cornell, Angela Hendrick, Najla Moore, Nadia Perez,<br>Assistant Teachers: Wendee Hooker, Rhonda Sevick, Denise Drlik, Adria Walton-Brown<br>Outreach Coordinator: Kathleen Woehrle<br>Food Service/Classroom Assistant: Tammi Couture<br>Administrative Assistant: Vickie 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.
2. Provide opportunities to educate University of MichiganFlint students in skills relevant to their professions.
3. Offer high quality child care to our constituents: students, faculty, staff and community.
4. Contribute to the ongoing development and education of early childhood professionals, families, and caregivers in the Flint area through research, collaboration, and teaching.

## Education (EDU)

430 David M. French Hall
(810) 762-3260

Fax: (810) 762-3102
Website: http://www.flint.umich.edu/departments/edu

Chair: Rose Casement<br>Director of Educational Field Experiences: Barb Walton<br>Coordinator for Academic Advising: Cheryl Godmar<br>Education Department Registrar: Vicki Tonda<br>Post-baccalaureate Program Advisor: Sandra Sepulvedo<br>Principal Secretary: Coleen Beamish<br>Certification Secretary: Ina Tonks<br>Receptionist: Roslyn Grays

Professor Sue Woestehoff; Associate Professors Rose Casement, Mary Jo Finney, Traki Taylor, Eric Worch; Assistant Professors Judith Ableser, Sharman Siebenthal Adams, Wei Cao, Aviva Dorfman, Patricia Gallant, Tara Huls, Jeffrey Kuppermabn, Michael Pardales, Sungho Park, Linda Pickett, Beverly Schumer, Sapna Taggar.
Professors Emeriti: Bernice Blamer, Thomas N. Filson, Maxine Perine, Carl H. Rinne, Harold Stahly, Edward E. Sullivan.

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: General Program for Elementary Teacher Certification (Bachelor of Science), the Bachelor of Music Education, the Bachelor of Science in Art Education, the Honors Program in Elementary Education (Bachelor of Science), and the General Program for Secondary Teacher Certification (Bachelor of Arts or Bachelor of Science). In addition, a specialization is offered in Early Childhood Education.

The Education Department also offers graduate programs in Early Childhood Education, Elementary Education with Certification, Literacy (K-12), Special Education, Technology in Education, and Urban/Multicultural 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)

Area Options. Students may choose any two area options.

## Requirements.

A. Completion of the requirements for the Bachelor of Science degree from the University of Michigan-Flint.
B. Completion of 128 credits, at least 80 of which must be noneducation courses, including:

1. 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 and 237.
3. MTH 115.
4. SCI 125 or 126 .
5. A course in the history or culture of an American ethnic
minorities: AFA/SOC 270; AFA/EDU/URB 331; AFA/HIS 334; ENG 213, 374; EDU/PUB 438. (This list is subject to change. See the Education Department office or website for the current list of acceptable courses.)
6. 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.)
7. A teaching major and a teaching minor, or three teaching minors.
C. Completion of the following courses in professional education, to be taken in the student's third and fourth years:
8. EDU 301, 302, 303, 333, 335, 342, 349, 359, 421 or 423 or 427, 432.
9. Four courses from: EDU 331, 336, 340, 343, 345, 400, 438, 440, 448, 449, 474, 481, 482.
D. Completion of the requirements in the section "General Requirements for Teacher Certification."

## Honors Program in Elementary Education

Area Options. One of the two required area options must be in a foreign language, as stated in the University Honors Scholar Program.

## Requirements.

A. Completion of all requirements of the elementary education Bachelor of Science program, to include:

1. EDU 391 ( 3 credits) and 394 ( 1 credit).
2. An education course in the 400 series taken with consent of the Honors Faculty Advisor.
B. EDU 495 and 496, 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 computed.
A. Fine Arts. A major consists of 36 credits in art, music, dance, and theatre, as follows:

1. Core courses ( 12 credits). ART 120; ART/EDU/MUS/THE 336; MUS 100; THE 100.
2. Art ( 6 credits): Selected from: ART 100, 271; ART 101, 131 (MCC).
3. Theatre/Dance ( 6 credits). Selected from: THE 150, 221, 230; DAN 116, 120, 130, 140.
4. Music ( 6 credits): Selected from: MUS 115, 117, 124, $125,126,127,128,129,130,135,141,151,180,185$.
5. Electives ( 6 credits). Six additional credits in a single discipline chosen from Art, Music, or Theatre.

A minor consists of 24 credits in art, music, and theatre, as follows:

1. Core courses (12 credits). ART 120; ART/EDU/MUS/THE 336; MUS 100; THE 100.
2. Art ( 3 credits). Selected from: ART 100, 271; ART 101, 131 (MCC).
3. Theatre/Dance ( 3 credits). Selected from: THE 150, 221, 230; DAN 116, 120, 130, 140.
4. Music ( 3 credits). Selected from: MUS 115, 117, 124, $125,126,127,128,129,130,135,141,151,180,185$.
5. Electives (3 credits). Selected in a single discipline chosen from Art, Music, or Theatre.
B. Foreign Language. A minor in French consists of 20 credits distributed as follows:
6. Core ( 17 credits). FRN $211,212,301,303 / 306,310$.
7. Elective ( 3 credits). Selected from FOR 305 ; any FRN courses at 300 level.

A minor in Spanish consists of 20 credits distributed as follows:

1. Core ( 17 credits). SPN 211, 212, 301, 303/306, and 310 or 319.
2. Elective ( 3 credits). Selected from FOR 305; any SPN courses at 300 level.
C. Integrated Science. The requirements for the Integrated Science major are currnetly under review by the Michigan Department of Education. Students interested in the Integrated Science major should consult with an advisor in the Office of Academic Advising or the Education Department before pursuing this concentration. The Integrated Science major consists of 36 credits distributed as follows:
3. 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.
4. Life science ( 8 credits). BIO 103, 104.
5. Earth science ( 8 credits). GEO 150, 151.
6. Physical science ( 12 credits). AST 131, 133; PHY 110; CHM 130, 131.
7. Science methods. Students completing the Integrated Science major must elect EDU 340 as part of their Professional Education requirements.
D. Language Arts. A major consists of 36 credits distributed as follows:
8. Linguistics ( $6-9$ credits):
a. 3 credits from the following: LIN 200, 244.
b. 3-6 credits from the following: LIN 200*, $244^{*}, 284$, 313, 335, 349, 351, 409.
*If not chosen under a above.
9. English (9-12 credits):
a. At least two of the following: ENG 202, 203, 208, 241.
b. At least one of the following: ENG 213, 215, 374, 382.
c. 0-3 elective credits chosen from the following: Any English course listed under $a$ and $b$ if not used to fulfill that requirement; ENG 252, 296, 298, 448*, 474*.
*May not also be used to fulfill Professional Education requirements.
10. Theatre (3-9 credits):
a. At least one of the following: THE $100^{*}, 150$.
*Fine Arts majors/minors may not select this course; THE 100 cannot count concurrently for a Language Arts major/minor and a Fine Arts major/minor.
b. 0-6 elective credits chosen from the following: THE $100^{1}, 150^{2}$, THE $213^{3}, 230,390,449^{4}$.
${ }^{1}$ If not chosen under a above; Fine Arts majors/minors may not select this course; THE 100 cannot count concurrently for a Language Arts major/minor and an Fine Arts major/minor.
${ }^{2}$ If not chosen under part a above.
${ }^{3}$ THE 213 may not also be used to fulfill Communication elective requirements.
${ }^{4}$ THE 449 may not also be used to fulfill Professional Education requirements.
11. Communication (6-9 credits):
a. COM 200, 210.
b. 0-3 elective credits chosen from the following: COM 204, 213*, 241, 242, 281, 301, 340, 342.
*COM 213 may not also be used to fulfill Theatre elective requirements.
12. Philosophy ( $0-6$ credits).
a. Electives chosen from: PHL 103, 325, 374.
13. Children's Literature/Adolescent Literature. Students completing the Language Arts major must elect EDU/ENG 448, Children's Literature, or EDU/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 EDU 448 or EDU 474 with 3 credits counting toward the EDU Professional Education requirements. Neither course can count concurrently for a Language Arts major requirement and a Professional Education requirement.

A minor consists of 24 credits distributed as follows:

1. Linguistics. A minimum of 6 credits including:
a. At least one of the following: LIN 200, 244.
b. One of the following: LIN 200*, 244*284, 313, 335, 349, 351, 409.
*If not chosen under a above.
2. English. (9 credits).
a. Two of the following: ENG 202, 203, 208, 241.
b. One of the following: ENG 213, 215, 374, 382.
3. Theatre. (3 credits).
a. One of the following: THE 100*, THE 150.
*Fine Arts majors/minors may not select this course; THE 100 cannot count concurrently for a Language Arts major/minor and a Fine Arts major/minor.
4. Communications. ( 6 credits).
a. COM 200, 210.
5. Children's Literature/Adolescent Literature. Students completing the Language Arts minor must also elect EDU 448, Children's Literature, or EDU 474, Adolescent Literature, as part of their Professional Education requirements.
E. Mathematics. A major consists of 30 credits distributed as follows:
6. Core ( 14 credits). MTH 115 with a C (2.0) or better, 116, 133, 240.
7. Calculus (4 credits). MTH 121 or 124.
8. Statistics (3-4 credits). Selected from: BUS 211; PSY 301; SOC 215.
9. Electives (12-13 credits): Selected from: MTH 111, 117, $120,121^{1}, 122,124^{1}, 193$; BUS $211^{2}$ or PSY $301^{2}$ or SOC 215 ${ }^{2}$; any MTH courses at the 200 level or higher.
${ }^{1}$ If not chosen under 2 above.
${ }^{2}$ If not chosen under 3 above.
A minor consists of 20 credits distributed as follows:
10. Core ( 11 credits). MTH 115 with a C $(2.0)$ or better, 116 , 133.
11. Calculus (4 credits). MTH 121 or 124.
12. Electives ( 5 credits): Selected from: MTH 111, 117, 120, $121^{1}, 122,124^{1}, 240$; BUS 211; PSY 301; SOC 215.
${ }^{1}$ If not chosen under 2 above.
F. Social Studies. A major consists of 36 credits distributed as follows:
13. Economics. A minimum of 6 credits and no more than 12 credits including:
a. Core ( 6 credits). ECN 201, 202.
b. Electives (0-6 credits). Up to 6 additional ECN credits may be elected.
14. Geography. A minimum of 6 credits and no more than 12 credits including:
a. GEO 116.
b. A minimum of 3 credits selected from GEO 115, 216, 285.
c. Up to 6 additional GEO credits listed under $b$ if not used to fulfill that requirement.
15. History. A minimum of 6 credits and no more than 12 credits including:
a. U.S. history (3 credits). HIS 220 or 221.
b. Non-U.S. history (3 credits).
c. Electives (0-6 credits). Up to 6 additional HIS credits may be elected.
16. Political Science. A minimum of 6 credits and no more than 12 cedits including:
a. Core ( 6 credits). POL 120, 190.
b. Electives ( $0-6$ credits). Up to 6 additional POL credits may be elected; POL 230, 311, 345, 380, 437 are recommended.
17. Social Studies Methods. Students completing the Social Studies major must elect EDU 345 as part of their Professional Education requirements.

A minor consists of 24 credits, distributed as follows:

1. Economics ( 6 credits). ECN 201, 202.
2. Geography ( 6 credits). GEO 116; three credits from GEO 115, 216, 285.
3. History ( 6 credits). HIS 220 or 221 ; three additional credits in non-U.S. history.
4. Political Science ( 6 credits). POL 190, 120.
5. Social Studies Methods. Students completing the Social Studies minor must elect EDU 345 as part of their Professional Education requirements.

## Endorsement in Early Childhood Education

Students in elementary education may wish to obtain Michigan certification in early childhood education. Completion of the following program meets the requirements for the elementary teaching certificate with a certificate endorsement in early childhood education.

Area Options. Students may choose any two area options.

## Requirements.

A. Completion of the requirements for the Bachelor of Science degree from the University of Michigan-Flint including:

1. ENG 112.
2. MTH 115.
3. PSY 100.
4. SCI 125 or 126 .
5. A course in U.S. history: HIS 220, 221 are recommended (See the Education Department office or website for the complete list of acceptable courses).
6. A course in the history or culture of American ethnic minorities: AFA/SOC 270; AFA/EDU 331; AFA/HIS 334; ENG 213, 374; EDU/PUB 438. (This list is subject to change. See the Education Department office or website for the current list of acceptable courses.)
7. A course in the study of the English language: ENG/LIN 200, 244, 349, 351, 409; LIN 346; LIN/ANT 290, 335; LIN/COM 284. (This list is subject to change. See the Education Department office or website for the current list of acceptable courses.)
B. Professional education ( 36 credits, to be taken in the third and fourth years). EDU 301, 302, 303, 333, 335, 342, 349, 359, 421 or 423 or 427, 432.
C. Two teaching minors chosen from fine arts, language arts, social studies, mathematics, and foreign language. GPA must be at least 2.75 in each teaching minor. A course used to fulfill one teaching minor cannot concurrently be used to fulfill a requirement in a different teaching minor or the early childhood specialization.
D. Early childhood education specialization (31 credits):
8. EDU 235, 237, 337, 338, 448, 451; PSY 237 (21 credits).
9. One from: EDU 202, 203; HCR 120 (3-4 credits).
10. One from: EDU 236, 336, 362, 449; MUS 100, 180, 185; art education; music education ( 3 credits).
11. One from: AFA/PSY 219; AFA/SOC 270, 359; AFA/EDU 399; AFA/EDU/SWK 375; EDU 341, 440, 460; EDU/PUB/SWK 482; SOC/ANT 325; PSY 230, 309, 336; SOC 340, 354; SAT 202; SWK 350; WGS/PHL 167 (3 credits).

Credits used to meet requirements in the early childhood program (item D) may not be used to meet requirements in item $C$ immediately above.

## 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:

Visual Arts (K-12): F. Wagonlander<br>Biology: G. Pace<br>Chemistry: M. Gebler<br>Earth Science: R. Repic<br>English: P. Emenyonu<br>French (see Foreign Language): P. O'Donnell<br>History: R. Hanashiro<br>Mathematics: M. Simkani<br>Music (K-12): L. Alexander<br>Physics: L. Dauwe<br>Political Science: M. Kahn<br>Psychology: M. McGrath<br>Social Studies: T. Robertson (History)<br>Spanish (see Foreign Language): P. O'Donnell<br>Speech (see Theatre): C. Gillespie

Area Options. For students working toward the Bachelor of Arts degree, one of the two required area options must be in a foreign language. All students should consult the requirements for their Teacher's Certificate major about possible additional required area options.

## Requirements.

A. PSY 100 and PSY 237 or $345^{*}$.
*Psychology majors/minors should take PSY 345.
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/EDU/URB 331; AFA/HIS 334; ENG 213, 374; EDU/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. EDU 302, 303/306, 305.
2. One of the following special methods courses appropriate to the teaching major: EDU $360,361,363$, 364, 365, 368.
3. EDU 359 and 369.
4. EDU/ENG 410.
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. Applications are available through the Education Department.

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 EDU 303/306 and courses requiring EDU 303/306 as a pre- or co-requisite. For example, a student must be admitted to a certificate program before registering to take EDU 301 or 305,302 , and 303 the following semester.

Students not admitted to a teacher certificate program may enroll in education courses which do not have EDU 301 or 305, 302, 303/306 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 minor).
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 $\mathrm{C}(2.0)$ or better.
F. Completion of PSY 237 or equivalent with a grade of $\mathrm{C}(2.0)$ or better.
G. Completion of MTH 115 with a grade of C (2.0) or better (Elementary Education students only).
H. Completion of SCI 125 or 126 with a passing grade (Elementary Education students only).

## 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 EDU 303 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 orientation meeting. Application period for Fall student teaching will be in early January. 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 orientation meetings will be announced in August for Fall semester student teaching and in December for Winter student teaching. Failing to attend an orientation meeting will result in waiting until the next application period. Announcements for the application periods and orientation 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 Michigan Teacher Certification Administrative Rules 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 earn a grade of C (2.0) or better in each of the following education courses: EDU $301,302,333,335$, and 342 and achieve a grade of "Pass" in EDU 303/306.
D. Secondary education students must earn a grade of $\mathrm{C}(2.0)$ or better in each of the following education courses: EDU 302, 305,410 , and the required secondary methods courses. They must also achieve a grade of "Pass" in EDU 303/306.
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. 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 Education Department Registrar.

## 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 Education Department Registrar 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 approximately 800 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 faculty-student ratio in the supervised student teacher experience is $1-12$ (one full-time faculty member is responsible for supervising a maximum of twelve 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.

Program Designation. The teacher education program at the University of Michigan-Flint has not been designated as low performing by the Michigan Department of Education.

## Courses in Education

## 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.

## 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.
202. Health, Nutrition, and Safety in Early Childhood. $E D U$ 235, PSY 237. (3-4).

Relationships between health, nutrition, and safety in the context of social and environmental factors; prenatal and maternal health, preventative health screenings, immunizations, and methods to guide young children to develop healthy habits and attitudes. Knowledge about healthful environments and strategies for promoting good health; common childhood diseases and nutrition; governing licensing regulations, safety procedures, and responses to emergencies; understanding of child abuse, responses, and responsibilities for reporting suspected abuse. For students who enroll for four credits, this course will include a field based service learning component.
203. Infant/Toddler Learning Environments. $E D U$ 235, PSY 237. (3-4).

Infant and toddler developmental milestones (birth-3 years); educational theory, including recent brain research, discussed and analyzed. Development and theory as a framework for discussion of appropriate environments and practices for stimulation and learning. Students spend time in an infant/toddler classroom to complete certain assignments. Students who enroll for four credits must complete a field experience in an infant toddler program.
223. Web-based Educational 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.
224. Advanced Web-based Educational Project Design. EDU 223. (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.
225. Participation in 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.
235. Foundations of Early Childhood Education. (3).

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.

## 236. Play and Learning in Early Childhood Education. (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.

## 237. The Child in the Family and Community. (3).

Explores the child in community and family through an ecological perspective. Includes discussion of current legislation, events and issues which affect families and children, and an overview of resources available in the community for children and families.

## 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.
301. Psychological Foundations of Elementary Education. PSY 100; prior admission to $K-8$ teacher education program; at least junior standing; prior or concurrent election of EDU 303. (3).

An exploration of issues of learning and development through a variety of theoretical lenses. Major topics include various facets of human development, diversity, knowledge construction, motivation, and assessment, as applied to learning and teaching. Special attention will be paid to learning and development issues in the K-8 setting.
302. Social Foundations of Education. Prior admission to teacher education program; at least junior standing; prior or concurrent election of EDU 303. (3).

Critical issues in education. Topics include organization, control and support of schools; problems of culture and race; teacher organizations; and alternatives in education.
303. Elementary Teaching Field Experience/Seminar. Prior admission to teacher education program; at least junior standing. Students are required to attend an orientation meeting prior to the beginning of the semester. This meeting is mandatory. Dates and times for mandatory orientation meetings will be posted outside the Education Department in May for Fall semester and in November for Winter semester. An email will be sent to UM-Flint email student accounts announcing the orientation meetings. (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.
305. Psychological Foundations of Secondary Education. PSY 100; prior admission to secondary teacher education program; at least junior standing; prior or concurrent election of EDU 303 or 306. (3).

An exploration of issues of learning and development through a variety of theoretical lenses. Major topics include various facets of human development, diversity, knowledge construction, motivation, and assessment, as applied to learning and teaching. Special attention will be paid to learning and development issues in the middle and secondary school setting.
306. Secondary Teaching Field Experience/Seminar. Prior admission to teacher education program; at least junior standing. Students are required to attend an orientation meeting prior to the beginning of the semester. This meeting is mandatory. Dates and times for mandatory orientation meetings will be posted outside the Education Department in May for Fall semester and in November for Winter semester. An email will be sent to UM-Flint email student accounts announcing the orientation meetings. (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.
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. Also listed as AFA 331.
333. The Integrated Language Arts: Reading, Writing, and Oral Language. Prior or concurrent election of EDU 303. (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.
335. Literacy Learning in the Elementary and Middle School. Prior or concurrent election of EDU 303. (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.
336. Creative Learning Experiences. Prior or concurrent election of EDU 303. (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.
337. Methods and Materials for Teaching the Young Child. Prior or concurrent election of EDU 235, 303. (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.
338. Working with Families in Early Childhood Environments. Prior or concurrent election of EDU 235, 237, and 303. (3).

Focus on family systems theory to prepare students to communicate effectively with families and to understand family configurations and structures and how racial, ethinic, class, religious, and cultural contexts affect child development and learning. Importance of involving families in children's education; developing respectful and reciprocal collaboration in children's growth, development, and learning.
340. Teaching Science in the Elementary and Middle School. Prior or concurrent election of EDU 303. (3).

Teaching strategies based on how children learn science. Experiences with content and materials drawn from modern elementary and middle school science programs.
341. Assessment in Early Childhood Education. Prior or concurrent election of EDU 235 and 303. (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.
342. Mathematics Learning and Curriculum in the Elementary and Middle School. MTH 115 or equivalent; prior or concurrent election of EDU 303. (3).

Developmental sequence for K-8 curriculum topics with
emphasis on how children learn mathematics through hands-on lab work. Materials, techniques, and experience needed to bridge the gap between concrete and abstract representations of mathematical concepts.
343. Applied Mathematics Teaching Methods in the Elementary and Middle School. EDU 342. (3).

Students plan and teach mathematics concepts to elementary school students using mathematics models and manipulatives introduced in EDU 342. New topics include planning, integrating manipulatives, and problem solving with textbook sequences, choosing worthwhile mathematical tasks, developing discourse in the classroom, and integrating mathematics with other elementary school topics.
345. Teaching Social Science in the Elementary and Middle School. Prior or concurrent election of EDU 303. (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.
349. Student Teaching in the Elementary School. EDU 301, 302, 303, 333, 335 and 342 with grades of C (2.0) or better; concurrent election of EDU 359. Students must be formally admitted to a teacher certification program and complete an application to student teach. 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 at time of application for student teaching. (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 and at least 2.75 in education courses and in major and minor subject areas to be eligible to student teach. Application procedures include an online application and mandatory orientation meeting. Application period for Fall student teaching will be in early January. Application period for Winter student teaching will be in late April/early May. Missing the deadline will result in waiting until the next application period. Dates and times for mandatory orientation meetings will be posted outside the Education Department in August for Fall semester student teaching and in December for Winter student teaching. Failing to attend will result in waiting until the next application period. An email will be sent to UM-Flint email student accounts announcing the application period and orientation meetings. It is strongly urged that students only take 12 credits during 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.
357. Assessment in Education. EDU 303 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.
359. Student Teaching Seminar. Concurrent election of EDU 349 or 369. (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.
360. Teaching Mathematics in Middle and Secondary Schools. Prior or concurrent election of EDU 301 or 305 and 303 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.
361. Teaching English in Middle and Secondary Schools. Prior or concurrent election of EDU 303 or 306. (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 EDU 361 by English majors in the teacher's certificate program; may be elected as ENG or EDU 361 by English minors in the teacher's certificate program. Also listed as ENG 361.
362. Emergent Literary. Prior or concurrent election of EDU 235, 303. (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.
363. Teaching Social Science in Middle and Secondary Schools. Prior or concurrent election of EDU 303 or 306. (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.
364. Teaching Science in Middle and Secondary Schools. Prior or concurrent election of EDU 303 or 306. (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.
365. Teaching Foreign Languages in Middle and Secondary Schools. FRN or GER or SPN 212; prior or concurrent election of EDU 303 or 306. (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, GER 365 and SPN 365.
368. Teaching Speech in Middle and Secondary Schools. Prior or concurrent election of EDU 303 or 306. (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.
369. Student Teaching in the Secondary School. EDU 301 or 305, 302, 303, 306, and the methods course in the major with grades of C (2. 0) or better; concurrent election of EDU 359. Students must be formally admitted to a teacher certification program and complete an application to student teach. Open only to students with 110 or more credits, and who are within 8 credits of completing their major and within 8 credits of completing their minor at time of application for student teaching. (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 and at least 2.75 in education courses and in major and minor subject areas to be eligible to student teach. Application procedures include an online application and mandatory orientation meeting. Application period for Fall student teaching will be in early January. Application period for Winter student teaching will be in late April/early May. Missing the deadline will result in waiting until the next application period. Dates and times for mandatory orientation meetings will be posted outside the Education Department in August for Fall semester student teaching and in December for Winter student teaching. Failing to attend will result in waiting until the next application period. An email will be sent to UM-Flint email student accounts announcing the application period and orientation meetings. It is strongly urged that students only take 12 credits during 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.
375. Community Building Through Educational Involvement. ANT 100 or SOC 100 or AFA 101 or SWK 200; 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 SWK 375.
381. Teaching General Music, Grades K-8. Interview with music faculty. (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.
382. Methods and Materials for Teaching Secondary School Performance Classes. MUS 130, 142, 144, 371. (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.
391. Independent Study. 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.
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.
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 $A B C>N$.
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 $A B C D>N$. Also listed as INT 398.
399. Africana Studies for Teachers. AFA 101 or 220 or consent of instructor. (3)cs3.

Overview of Africana Studies content useful to teachers in public schools. Also listed as AFA 399.
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 $A B C D>N$.
401. Leadership in Early Childhood Educational Programs. Prior or concurrent election of EDU 451. (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.
410. Improvement of Reading in the Middle and Secondary School. Prior or concurrent election of EDU 303 or 306; 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. Also listed as ENG 410.
411. Middle School Teaching. EDU 303. (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.
412. Writing for Middle and Secondary School Teachers. Prior or concurrent election of EDU 303 or 306; 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.
416. Technological Applications in Science Education. At least junior standing. (3).

Examination of how technological tools support new ways of thinking and learning; for preservice teachers. Roles of robotics, LOGO computer software, web page authoring, and laboratory probeware in the learning process. Use of technology as representational and expressive aids for critical thinking and problem solving. Students explore these tools to think, analyze, and design.
421. Using Technology in Education. Prior or concurrent election of EDU 303. (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.
423. Web-based Educational 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. Also listed as EDU 523.
424. Advanced Web-based Educational Design. EDU 423 or consent of instructor. (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. Also listed as EDU 524.
427. Mentoring and Management of Interactive Communications and Simulations. 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 K12 students in diverse geographic locations. Also listed as EDU 527.
432. Disability and Classroom Teaching. Prior or concurrent election of EDU 301 or 305 and 303 or 306; or consent of instructor. (3).

Introduction to and critique of the theory and practice of inclusive education, or the education of all students with disability 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 current inclusion strategies.
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.
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.
448. Children's Literature. At least junior 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. Also listed as ENG 448.
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.
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 who have completed EDU 201 or EDU 400. Also listed as PUB 450.
451. (232). Fieldwork in Early Childhood Education. $E D U$ 235, 237, 301 and 303; prior or concurrent enrollment in EDU 337 and 338. (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.
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.
460. Early Childhood Special Education Field Experience. EDU 235, 303, 432. (3).

Preparation for work with young children ( $0-8$ years) with special needs in various educational settings. Topics include: atypical development; assessment, identification, intervention, family service plans, IEPs; ecological perspectives on children with special needs; inclusion, mainstreaming, ancillary support; transition to elementary school, and ongoing support in the primary grades. Participation in a seminar and 60 hours of work in special needs early childhood settings required.
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.
481. Literacy Assessment in the Elementary/Middle School. EDU 335 or consent of instructor. (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.
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 SWK 482.
495. Honors Thesis I. EDU 394. Open only to Honors Program students in elementary education. (4).

Credit and grade for EDU 495 is not awarded until successful completion of EDU 496. Also listed as HON 495.
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.

## Social Work (SWK)

454 David M. French Hall

(810) 762-3390

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Chair: Charles W. Bailey
Principal Secretary: Ella Moore
Associate Professors Charles W. Bailey, Everett J. Blakely, Kathleen
L. Woehrle; Clinical Assistant Professor Jacqueline Howard; 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.

## 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 SWK 200 and an additional course in social work with a grade of $\mathrm{C}(2.0)$ or better.

## 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.
Area Options. One of the two required area options must be in a foreign language.

Requirements. A total of 60 credits as follows:
A. SWK 200, 250, 310, 311, 320, 325; 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 ; EDU 331.
3. PSY 230; SOC 220, 325; SWK 300, 314.
C. Professional Block ( 30 credits).
4. SWK 399, 400, 420, 421, 430, 431 ( 18 credits).
5. CRJ 185 or SAT 202 ( 3 credits).
6. One course from SWK 313, 350, 351, 388.
7. Six credits in cognate and elective courses approved by the advisor.

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 227, 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. SWK 200 .

## Requirements.

A. Completion of all requirements for the Generalist Program in Social Work, including SWK 250, normally elected in the sophomore year.
B. Completion of a statistics requirement by electing SOC 215 , PSY 301, or an equivalent approved by the advisor. Recommended for the sophomore year.
C. Completion of SWK 310 and SWK 391 (3 each) in the junior year.
D. SWK 495 and 496, Honors Thesis I and II (4 each).
E. Completion of 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

This program has been put on moratorium status. See the Social Work Department for further information.

## 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.

## 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 (SWK)

200. Introduction to Social Work. (3)s/vi2.

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 $A B C D D->N$.
250. Methods of Research and Evaluation. SWK 200. (3)s/ar2.

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 $A B C D>N$.
300. Mental Illness and Social Work Practice. SWK 200. (3)s/vi2.

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.
[305. Social Work Problems: Vietnam Veterans. SWK 200 or consent of instructor. (3)s.]
310. Social Welfare Policy and Services. SWK 200, 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.
311. Introductory Social Work Techniques. SWK 320 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.
313. Social Work with Aged. SWK 200 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.
314. Death, Dying and Bereavement. (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.
320. Human Behavior in the Social Environment I: Micro Systems. SWK 200, 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.
325. Human Behavior in the Social Environment II: Macro Systems. SWK 320. (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.
350. Patterns of Domestic Violence. SWK 200 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.
351. Protective Services. SWK 200 or consent of instructor. SWK 350 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.
375. Community Building Through Educational Involvement. ANT 100 or SOC 100 or AFA 101 or SWK 200; at least junior standing or consent of instructor. (3).

Participation and observation in schools and communitybased 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 EDU 375.
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.
389. Correctional Practice. SWK 200, CRJ/SWK 388, 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.
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.
399. Field Practicum Planning Seminar. SWK 311 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.
400. Integrative Seminar in Social Work. SWK 200, 310, 311; senior standing; concurrent election of SWK 420 and 430 or 421 and 431. 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.
420. Social Work Intervention I. SWK 399 with a grade of C (2.0) or better; concurrent election of SWK 430. 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. Offered fall semester only.
421. Social Work Intervention II. SWK 420 with a grade of $C$ (2.0) or better; concurrent election of SWK 431. (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.
430. Field Instruction I. SWK 250, 399; concurrent election of SWK 420. 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.
431. Field Instruction II. $S W K$ 430; concurrent election of $S W K$ 421. (4).

Continuation of SWK 430. Offered winter semester only.
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 EDU 482 and PUB 482.
495. Honors Thesis I. Consent of Program Director. Open only to Honors Program students in Social Work. (4).

Credit and grade for SWK 495 is not given until successful completion of SWK 496. Also listed as HON 495.
496. Honors Thesis II. Prior or concurrent election of SWK 495; consent of Program Director. Open only to Honors Program students in Social Work. (4).

Also listed as HON 496.

## Graduate Courses in Social Work

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. 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.
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.
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.
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.
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.
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 PUB 544.
582. 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. Not open to students with credit for EDU/PUB/SWK 482. Also listed as EDU 582 and PUB 582.

## 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 $A B C D D->N$.
307. Drug Substance Abuse: Causes and Effects. SAT 202 and at least junior standing. (3).

Problem of substance abuse; factors contributing to the likelihood of substance abuse. Effects of abuses of alcohol, opiates, barbiturates and amphetamines from psychological, physiological, socio-cultural and pharmacological viewpoints.
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.
[411. Social Work Techniques in Substance Abuse I. SAT 308, senior standing, concurrent election of SAT 413, consent of instructor. (3).]
[412. Social Work Techniques in Substance Abuse II. SAT 411, concurrent election of SAT 414, senior standing. (3).]
[413. Social Work Practicum in Substance Abuse I. SAT 308, senior standing, concurrent election of SAT 411. (3).]
[414. Social Work Practicum in Substance Abuse II. SAT 413, concurrent election of SAT 412. (3).]


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
Director, Urban Health and Wellness Center: Dr. Mary Ann Gregor
Development Officer: Roxanne Caine
Program Coordinator, Health Careers Program: Karen Weissert
Executive Secretary: Terry Baryo
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 grade-point averages:

| Letter Grade | Honor Points |
| :---: | :---: |
| A+ | 4.0 |
| A | 4.0 |
| A- | 3.7 |
| B+ | 3.3 |
| B | 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 (I) Incomplete.

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 <br> (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 $\mathrm{C}(2.0)$ 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 $\mathrm{C}(2.0)$.

## 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 (HCR)

2102 William S. White Building
(810) 762-3172

FAX (810) 762-3003
http://www.umflint.edu/hcr
Director: Dr. Suzanne Selig Principal Secretary: René Marx
Professor Suzanne Selig; Associate Professor Kristine Mulhorn; Assistant Professors Joan Cowdery, Leaden Hickman,

Shandowyn Parker; Lecturer Minnie Bluhm, Leonard Fleck, Dan Coffield, Marc Dedenbach, Kimberly Barber, Sherri Berry, Dan Borton, Chris Clolinger, David DeSimone, Larry Hrinik, Theresa Landis, Tammy Rees, 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) an understanding of the complex set of chemical, biophysical and geophysical factors that are involved in environmental health problems; (4) preparation for admission into the University of Michigan-Flint's doctorate in physical therapy; and (5) preparation for professional programs in health sciences.

## Department Mission and Program Assessment

The overall mission of the Health Sciences and Administration program is to promote the health and well-being of the community by preparing our students, many of whom are parttime 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 the health care option selected. Minors in Health Care Administration, Health Education and Behavior, Gerontology, and Environmental Health are also available although 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 qualify for a degree in the Health Sciences and Administration Programs.

The faculty of the Health Sciences and Administration Department recognizes the value of 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 strongly encourages student involvement in department-sponsored student chapters of the American Colleg eof Heatlhcare Executives (ACHE) and Eta Sigma Gamma. ACHE is an international professional society of healthcare executives who lead our nation's hospitals, healthcare systems, and other healthcare organizations. 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.

## Program in Health Care Administration

The Bachelor of Science in Health Care Administration is intended for credentialed and licensed health care professionals as well as others who want to prepare for a career in health care administration. It is designed to serve those preparing for general or specialized administrative responsibilities in health care.

## Requirements.

A. General Education Program (course selection must include SOC 215)
ENG 111-112 (6), Fine Arts (3), Humanities (9), Social Sciences (9), Natural Sciences (8), Area Options (17-18).
B. Health Administration Foundation (21 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). HCR 420; HCR 418 or 378.
G. Applications (3-6 credits). HCR 390 or 392.
H. Allied Health Credits (if applicable, up to 30 credits by transfer)
If not applicable, student should select a minor in one of the following: communication, general business, marketing, organizational behavior and human resources management, computer science or gerontology (or 2nd major).

## 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), Area Options (17-18).
B. Electives to complete the total of 124 credits or, if applicable, up to thirty (30) credits in professional courses may be transferred and applied to this total.
C. Foundations ( 18 credits).

HCR 300, 304, 315, 362, 368, 377.
D. Health Education Core ( 21 credits). HCR 203, 204, 379, 380, 384, 385, 386.
E. Electives in Health Care ( 6 credits).

HCR 202, 301, 350, 352, 360 or 361.
F. Internship or Co-Op. HCR 390 or 392 . (3-6 credits).

## Program in Health Science

The Bachelor of Science in Health Science 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. Several tracks are available within this degree: prephysical therapy, environmental health, and general health science. The pre-physical therapy track is uniquely designed for entry into the University of Michigan-Flint's Physical Therapy doctoral program. The track in environmental health prepares graduates for positions in public and for private sector settings, including local and state health departments; and for private sector positions such as chemical waste management, and workplace safety. The general health science 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 Science requirements should be made after consulting web sites and other published information available from the specific university program of interest.

The health science curriculum has four basic categories: a) general education, b) biological/physical sciences, c) health sciences, and d) one of three tracks in pre-physical therapy, environmental health or general health science.

## Requirements.

A. General education requirements ( 40 credits).

1. Writing. ENG 111, 112, 345.
2. Humanities. COM 210, PHL 162.
3. Fine Arts. (3 credits to be selected by student).
4. Social Sciences. PSY 100, 237.
5. Values Inquiry. POL 120.
6. MTH 111, 120.
7. Computer Science. CIS 128; CSC 121, 151.
B. Biological/Physical Sciences (20 credits).
8. BIO $111,113,167,168$.
9. PHY 143.
C. Health Sciences (23-24 credits). HCR 200, 300, 302, 304, 315, 420, 421; MTP 320 or 321.
D. Students select either pre-physical therapy, environmental health and safety, or general health sciences track.

Pre-Physical Therapy Track (40-41 credits)

1. HCR 119, 350, 362, 376, 379.
2. CHM $150,151,220^{*}, 350^{*}$.
3. PHY 145.
4. PSY 309.
5. Electives (9-10 credits).
*A combined organic/biochemistry survey course may be substituted for CHM 220 and CHM 350.

Environmental Health and Safety Track (50-52 credits).

1. BIO 326
2. Two from: BIO 328, 425, 435, 436.
3. CHM 160, 161, 162, 163, 220, 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 160, 161, 162, 163, 230, 231, 232, 233.
4. PHY 145.

Final course selection should be based on requirements of specific university professional program of interest; (e.g., physician assistant, dentistry, medicine). Consultation with UMFlint biology/chemistry instructors encouraged.

## Minors in Health Care

Minors are available in Gerontology, Health Care Administration, Health Education and Behavior, and Environmental Health. These minors provide coursework in the basic components of these programs and are available to all students of the School of Health Professions and Studies, the College of Arts and Sciences, the School of Education and Human Services and the School of Management. 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. Course work requirements will differ for students with undergraduate degrees.

Requirements. At least 19 credits, distributed as follows:
A. Sociology (3 cr.). HCR 202
B. Health ( 6 cr.). HCR 350, 352.
C. Psychology ( 3 cr ). PSY 347.
D. Policy and Administration (3 cr.). HCR 306 or 378
E. Social Work (3 cr.). SWK 313 or HCR/SWK 314
F. Practicum/Internship or Independent Research (1-3 cr., depending on experience):
HCR 390 or 388

## Minor in Health Care Administration

Requirements. Eighteen credits, distributed as follows:
A. HCR 300, 305, 376 ( 9 cr .).
B. Three from: HCR 301, 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, 368, 380 ( 9 cr.).
B. Three from: HCR 306, 314, 315, 330, 331, 350, 361, 384, 385, 386, 362, 420, 421 ( 9 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.

A. 16 to 18 credits as follows:

HCR 315 (3), 420 (3), 421 (3) and 428 (1-3);
RPL 486 (3), and PUB 422 (3).
B. Completion of 1, 2 or 3 (5-7 credits):

1. CHM 302 (1), 380 (3), 381 (1).
2. GEO 272 (3) and RPL 485 (3) or GEO 304 (3) and RPL 370 (3).
3. BIO 335 (4), 436 (3).

## 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 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 will be taught and practiced in drills. Recreational and competitive rules will be 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)

This course will identify and explore the seven basic dimensions of wellness - social, physical, spiritual, environmental, mental, emotional, and occupational. Selfassessment and evaluation along with health promotion activities will assist in the process of learning how to balance these dimensions for optimal well-being. May be repeated to a total of three credits.
109. Swimming Skills and Conditioning. (1).

This course will focus on developing and refining swimming skills and stroke mechanics, and swimming as an aerobic conditioning activity. American Red Cross and American College of Sports Medicines guidelines will be 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.
116. Intermediate Golf. (1).

Designed to provide information and enhance ones experience so the student can 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).

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).
120. Medical First Responder. $E N G$ 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 Emergency Response First Aid with CPR for the Professional Rescuer through the American Red Cross.
200. Introduction to Health Sciences. (3).

Introduction to the fields in 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.
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 choice.
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. 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. The American health care system and current health issues of interest to this population. Provide students with tools needed 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.
300. Health Care in the United States. At least junior 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 such areas as 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).

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. "Hands-on" course builds on students' basic micro-processing skills, presents various health care databases, e.g., medical record systems, ADT, laboratory, patient accounting, decision support, clinical, and financial information systems.
302. (402) 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/vi2.

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. Also listed as PHL 304.
305. Public Policy and Health Care. $H C R 300$ 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. (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 SWK 314.
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/csl.

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, 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, a 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. HCR 202 or consent of instructor. (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.
[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.
368. Sociology of Health and IIIness. 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. $H C R$ 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. $H C R$ 300. (3).

Examination of various leadership and human resources theories, principles, concepts, and techniques used by health care managers to maximize the 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. $H C R 300$ 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.
390. Administrative/Teaching Internship in Health Care. Consent of instructor. (1-6).

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.
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 super-visor, and the Coordinator of Cooperative Programs 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.
[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. (307). Race, Health and IIlness. 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. Health Care Planning and Regulatory Processes. $H C R$ 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 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 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, longterm 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.
504. Ethics in Health Care in Physical Therapy. Admission to the entry level or post-entry level 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 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 identifi-cation (research question development). Also listed as PUB 506.
507. Ethics Seminar for Physical Therapy. HCR/PHL 304 or consent of instructor; admission to the entry level or postentry level program in physical therapy. (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. Health Care Planning and Regulatory Processes. 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.
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 $H C R / P U B 477$. 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 entry level or post-entry level program 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.
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. Also listed as PUB 590.
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.
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.

## Medical Technology (MTP)

2102 W. S. White Building<br>(810) 762-3174<br>FAX (810) 762-3003<br>http://www.umflint.edu/hcr/med_tech/index.php<br>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 and contributing to the well being of those receiving medical care. Medical technologists use their educational experience developing the analytical skills and scientific understanding necessary to function effectively in a clinical laboratory environment.

The Bachelor of Science in Medical Technology is designed to provide a broadly based 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 biomedicallyrelated positions in biotechnology companies.

The degree program in Medical Technology is also an excellent foundation for students preparing for graduate studies in a subdiscipline or another health-related area or for pre-professional training in one of the medical sciences (pre-physician assistant, premedicine, pre-denistry). Students intending to pursue graduate studies in a subdiscipline are encouraged to select a program minor which encompasses subject matter in the subdiscipline of interest.

## 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 Universitywide 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 <br> Requirements.

A. Completion of general education requirements including 3 credits of mathematics in the analytic reasoning area option.
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 437 (Mycology), BIO 450 (Parasitology).
C. Chemistry courses. CHM 160, 161, 162, and 163 (Principles of Chemistry); CHM 330, 331; and 332, 333 (Organic Chemistry) 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 and statistics 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. However, BIO 432 (Mammalian Physiology) is strongly recommended for Medical Technology majors. Other courses providing preparation in clinical laboratory science include BIO 438 (Medical Microiology), BIO 467 (Molecular Biology of Prokaryotes), MTP 401 (Clinical Correlation of Lab Data), and MTP 394 (Clinical Chemistry).


## Courses in Medical Technology (MTP)

201. Introduction to Medical Technology. (1).

Overview of the field of medical technology 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. (2).

Analysis of medical terms and components as foundation for recognition of medical language encountered in various health care settings. Specific anatomical, physiological and pathological terminology included.
321. Medical Terminology. Admission to the program in physical therapy or consent of instructor. (1).

Introduction to medical language used in health care settings with focus on terms describing disease states and diagnostic procedures. Also listed as PTP 363.
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.
394. Clinical Chemistry. CHM 162. (3).

Instrumentation and chemometrics utlized in clinical diagnostic chemistry. Test method selection and evaulation in pathodiagnostic testing. Reaction mechanisms and protocol of test development implemented in diagnostic manufacturing industry. Three hours lecture weekly. 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.

## Graduate Course in Medical Technology

501. Clinical Correlation of Laboratory Data. Graduate standing. (2-3).

See MTP 401 for description. Not open to students with credit for MTP 401.

## Nursing (NUR)

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nursing@list.flint.umich.edu
web address: http://www.umflint.edu/nursing
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Principal Secretary: Lynn Kruse
Associate Professors Janet Barnfather, Thomas Schaal; Assistant Professors Janice Brady, Linda Knecht; Clinical Assistant Professors II Brenda Knaack, Maureen Tippen; Clinical Assistant Professor Carol Rossman; Lecturers Constance Creech, Bonnie Hudson, Alice Lorenz, Rose Luster-Turner, Sharon Richards; Adjunct Professor John Thornburg; Lecturers Kathryn Coggins, Susan Colarossi, Sandra Cooper, Laura Dahnke, Mary Deibis, Deborah Dimond, Deborah Filos, Elizabeth Gale-Cuevas, Suzanne Guzelaydin, Carol Higgins, Elizabeth Holifield, Charles Johnston, Jay Littleton, Sandra Miller, Almeta Milow, Margie Murray-Wright, Richard Richardson, Deborah Sarsfield, Deborah Smith, Sandra Smith, Marjorie Stafford, Theresa Stevens, D. Kay Taylor, Max Thomas, Juantia Wells, Denise Will, Michelle Yaste, Lynn Zink.

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 MichiganFlint prepares nurses to be Family Nurse Practitioners, Adult/Psychiatric Mental Health Nurse Practitioners, or Adult Nurse Practitioner.

## Accreditation

The National League for Nursing has granted full eight-year accreditation to the baccalaureate program in nursing at the University of Michigan-Flint Department of Nursing. You may contact them for information at: National League for Nursing Accrediting Commission, 350 Hudson Street, New York, New York 10014; telephone 1-800-669-1656. The Commission on Collegiate Nursing Education (CCNE), the accrediting body of the American Association of Colleges of Nursing, has granted pre-approval to the baccalaureate program in nursing at the University of MichiganFlint 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 of Nursing Memberships

The University of Michigan-Flint Department of Nursing is a Member Agency in the Council of Baccalaureate and Higher Degree Programs of the National League for Nursing, and holds memberships in the American Association of Colleges of Nursing and the Michigan League for Nursing.

## 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 are required before applying to the Nursing Program (at least two of the first four courses must be sciences). All are required before beginning:

BIO 135 Microbiology Basics
BIO 167 Human Anatomy \& Physiology I
BIO 168
Human Anat \& Phys II
CHM 150 General Chem. for Health Sciences
CHM 151 Gen Chem Lab for Health Sciences
ENG 111
College Rhetoric
ENG 112
Critical Writing/Reading
PSY 237
Developmental Psych
NUR 110 Introduction to Professional Nursing
-SWK 320 may also be accepted in place of PSY 237.
-Science credits must be no more than seven years old.
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 207, 209, 233; NUR 308. A few nursing electives (NUR courses numbered between 350 and 399) may also be taken before beginning 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 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 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 (exceptional cases may be considered). A minimum of 129 credit hours is required for completion of the BSN degree. Students must earn a grade of C- or higher in all prerequisite courses. A final grade of C or better is necessary in all required nursing and elective courses (prefix NUR) to progress in the Nursing program. A 2.3 semester and cumulative grade point average must be earned to be eligible to progress from one semester to the next. 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 MichiganFlint/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, each with a grade of C- or higher.
B. Completion of general education requirements as found in the General Education Program section of this Catalog.
-BIO 167 and BIO 168 must both be taken at the same institution.

Recommended area options are Analytic Reasoning and Values Inquiry because program requirements fulfill parts of these area options. A minimum of 50 general education credits is required.
C. Core Nursing Curriculum:

Semester One: CHM 252 (3) Biochemistry; NSC 207* (2) Disease Process; NUR 202 (3) Health Assessment; NUR 220
(6) Fundamentals of Nursing.

Semester Two: NSC 209 (3) Nutrition; NSC 233* (3) Pharmacology; NUR 250 (7) Medical-Surgical Nursing I; NUR 255 (2) Gerontological Nursing.
Semester Three: NUR 310 (3) Health Promotion in Families and Groups; NUR 320 (5) Medical Surgical Nursing II; NUR 308 (3) Research in Nursing; NSC 168 (3) Bioethics.
Semester Four: NUR 330 (5) Maternity Nursing; NUR 335 (6) Parent-Child Nursing.

Semester Five: NUR 405 (5) Mental Health Nursing; NUR 407 (2) Issues and Trends; NUR 410 (6) Community Health Nursing.
Semester Six: NUR 430 (5) Leadership and Management; NUR 435 (5) Synthesis of Nursing Knowledge and Practice.
D. Two nursing electives (4 credits total) from NUR 350-399, 499.
E. A 3-credit course relating to cultural studies is required prior to graduation. Consult with Department of Nursing for a list of approved courses.
*NSC 207 and NSC 233 may not be taken on-line.
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:

1. 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 liscense, 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. A minimum of 125 credit hours is required. 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 a 2.3 semester and cumulative grade point average to be eligible for progression from semester to semester when enrolled in core nursing courses. Students must earn a grade of C- or higher in all prerequisite courses. A final grade of C or better is necessary in all required elective nursing 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.

## 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 32 credits from your RN program as University of Michigan-Flint institutional credit. Additionally, 62 credits may be transferred from a community college; 75 from a 4 -year institution.

## Requirements.

A. The following prerequisite courses must be completed:

Before Semester 1 Nursing courses:
ENG 111 (3), 112 (3); BIO 167 (4), 168 (4).
Pre or co-requisite to Semester 1:
NUR 202 (3); SWK 250 (3) or PSY 201(3) or SOC 210 (3). Pre or co-requisite to Semester 2:
SWK 320 (3) or PSY 237 (3); NSC 168 (3) (preferred) or PHL 162 or HCR 304.
Prerequisite to Semester 3:
NSC 207 (3); NSC 209 (3); NSC 233 (3). (All are available by credit-by-exam.)
B. Completion of general education requirements as found in the General Education Program section of this Catalog. Recommended area options are Analytic Reasoning and Values Inquiry because program requirements fulfill parts of these area options. A minimum of 50 general education credits is required.
C. Completion of the Core Nursing Curriculum:

Semester 1: NUR 300 (3).
Semester 2: NUR 255 (3), NUR 310 (3).
Semester 3: NUR 430 (5), NUR 421 (2).
Semester 4: NUR 407 (2), NUR 410 (6).
NUR 410 and NUR 430 are clinical courses and each requires six hours per week in the clinical setting.
D. Two nursing electives (4 credits total) from NUR 350-399; 499 (1-2 each).
E. A 3-credit course relating to cultural studies is required prior to graduation. Consult with Department of Nursing for a list of approved courses.

## Clinical, Practicum, Lecture and Independent Study Course Credit: 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 earned. Independent study credit is a $3: 1$ ratio.
Lecture courses: NSC 168, 207, 208, 209, 233 and 234; NUR 110, 255, 300, 308, 310, 407, 421.
Seminar/Clinical course : NUR 435.
Lab course: NUR 202.
Lecture/Clinical courses: NUR 220, 250, 320, 330, 335, 405, 410, 430.

Independent study: NUR 399 and 499.

## Nursing Support Courses (NSC)

168. Introduction to Bioethics. Open to all University students. (3). $h / v i l$

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. The online sections are 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.
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, intractions, 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 1. (6).

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 gthe 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 2 or later; 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. $R N / B S N$ 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 reserach 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 gorup 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 condidtions. 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.
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).]
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.
[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.
369. Transcultural Care. Open to all University students. (2).

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 mailmerge, 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).

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.
405. Mental Heath Nursing. Basic BSN Program, Semester 5. (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 4; RN/BSN Program. (3).

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 heath 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 studnets with a guided opportunity to synthesize nursing knowledge with practice while providing cares for
individuals and families. Students provice 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 forcus 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.
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.
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.
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.
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.

## Master of Science in Nursing

See the Graduate Study section of this Catalog.

# Nursing Development and Research 

2180 William S. White Building<br>(810) 762-3420

Interim Director: Linda Knecht
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.flint.umich.edu/departments/radonc/therapy/
Director: Michele R. Fortner
Secretary: Dianne Scrimger
The Bachelor of Science in Radiation Therapy is a four-year, 141credit, 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 patients for signs of any complication, 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. 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 9-4. Seniors attend Monday-Friday from 7:00am to $4: 00 \mathrm{pm}$ in the spring and summer and on Mondays, Wednesdays, and Fridays from 7:00am to 4:00pm 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 March 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 general education 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 goals, methods and outcomes is available at 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 $\mathrm{C}(2.0)$, as follows:

1. ENG $111,112$.
2. CHM 140 or CHM 150.
3. MTH 111, 120.
4. CIS 128.
5. COM 281 or COM 284.
6. PSY 100; SOC 100.
7. Fine arts course.
8. PHL 162 or 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 (3.0):
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 sixteen to twenty hours of observation in a Radiation Therapy Department. To be eligible to do clinic observation, students must have completed a minimum of twenty college credits. 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. The Radiation Therapy program's supplemental application is available at www.umflint.edu/departments/radonc/therapy. Three references are required from:

- an individual actively involved in the applicant's educational process (i.e. instructor, advisor, mentor)
- the current supervisor at the applicant's place of employment
- an individual commenting on the applicant's character
E. Prior to beginning the clinical component of the program, the student is required to have a complete physical exam. The completed physical form will be kept in the office of the school's nurse. 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: http://www.umflint.edu/departments/radonc/therapy.

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.
2. Have sufficient strength, coordination and dexterity to lift and position cerrobend blocks, electron cones and wedges up to 45 pounds to a height of $5^{\prime} 5^{\prime \prime}$.
3. 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.
4. Have sufficient auditory capability to hear warning bells in the treatment rooms and hospital fire alarms, as well as to monitor patients during treatment.
5. Be capable of effective and concise verbal communication with patients, their families and other health care workers.
6. Be physically, intellectually and emotionally able to respond to emergency situations, providing first aid, CPR and patient care until a physician or nurse arrives.
7. 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), PHL 162 or PHL 168 (3), PSY 100 (3)
Winter: **BIO 168 (4), CSC 128 (3), ENG 112 (3), MTH 120 (4), **PHY 143 (4)
Spring/Summer: SOC 100 (3)

## Sophomore year

Fall: CHM 140 or CHM 150 (3), HCR 300 (3), **PHY 145 (4) and one course in values inquiry/humanities (3), one course in fine arts (3)
Winter: COM 281 or 284 (3), HCR 304 (3), HCR 362 (3), HCR 120 or 119 (4), MTP 320 (2)
Summer: RTT 300 (3)

## Junior year

Fall: HCR 301 (3), 315 (3), 376 (3); RTT 301 (2), 311 (2), 351 (4) Winter: HCR 368 (3), 487 (3); RTT 315 (1), 321 (3), 341 (3), 352 (4)
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)
**Minimum grade required is a B (3.0).

## 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. (2).

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. HCR 120; Admission to professional program in radiation therapy. (2).

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. Communication Skills and Image Review Radiation Oncology. Admission to professional program in radiation therapy. (1).

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. 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 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. Admission to professional program in radiation therapy. (4).

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; Admission to professional program in radiation therapy. (4).

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 managment 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 practice taking mock registry exams for the ARRT exam.
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<br>(810) 762-3160<br>Fax: (810) 762-3282<br>Website: http://www.flint.umich.edu/departments/som

Dean: I. Douglas Moon<br>Associate Dean: Keith Moreland<br>Area Coordinators: Seyed Mahdian, Accounting, Finance, Law and Management Information Systems; Betty Velthouse, Management, Marketing, and Operations Management<br>Alumni and Development Officer: Roxanne Caine<br>Business Manager: Dennis Fattaleh<br>Coordinator of BBA Student Services: Lisa Myers<br>BBA Advisor: Brenda Harrison<br>MBA Program Coordinator: D. Nicol Taylor<br>Support Staff: Kendra Atwell, Renee Marble, Kathleen Rosebohm, Sharon Seames, Michelle Virdon, Charles Wright<br>Professors Madhukar Angur, C. Peethambaran Kartha, Vahid Lotfi, Seyed Mehdian, I. Douglas Moon, Fred E. Williams; Associate Professors Antonio Camara, Denise Luethge, Keith A. Moreland, Fataneh Taghaboni-Dutta, Betty A. Velthouse; Assistant Professors Clement Chen, Yener Kandogan, Weiqi Li, Robert Ware; Lecturers Peter Bush, Chris Lezovich, Waheeda Lillevik, Joel A. Litchfield, Jack D. McGaugh, Jim Murdock, Douglas M. Philpott, Pamela Royston, Jack E. Smith, Dale Tuttle.<br>Professors Emeritus: Clark Chastain, Dennis F. Ellis, Walker E. Fesmire, Richard W. Fortner, John A. Larson, Bernard E. Smith.

## 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 community 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 skills. 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.

Bachelor of Business Administration (BBA) programs prepare 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 electives 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 either during day and evening hours. Some classes are offered online to better meet the needs of students. 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) 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 |
| B | 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 |

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 290, Introduction to Cooperative Work 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 400level) 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 $\mathrm{C}(2.0)$ or better must be obtained on this examination in order for credit to be earned. The letter grade earned ( $\mathrm{A}, \mathrm{B}, \mathrm{C}$ 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 problem still remains, 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 complete 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 selfdevelopment, 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. Prior or concurrent enrollment in BUS 290, Career Planning.
B. Completion of 55 credits prior to job placement.
C. 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 grant appropriate college 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. Prior or concurrent enrollment in BUS 290, Career Planning.
D. Minimum 2.50 grade point average.
E. Filing of an application and enrollment in BUS 394, Business Internship Program, 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.flint.umich.edu/departments/som/
Dean: I. Douglas Moon
Associate Dean: Keith Moreland
Coordinator of BBA Student Services: Lisa Myers
Academic Advisor: Brenda Harrison
The School of Management offers seven concentration areas, all leading to the Bachelor of Business Administration degree: General Business, Accounting, Finance, Marketing, Operations Management, Organizational Behavior \& Human Resources Management, and the School of Management Honors Program. The School also offers three minors: 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.

## Bachelor of Business Administration (BBA)

## Requirements.

A. Completion of specific course requirements in English, mathematics, economics, and business administration (including BUS 105/110, ECN 201 and 202, and MTH 118), totaling 120 or more credits.
B. Completion of at least 48 credit hours in business courses, including at least 36 credits in upper-division courses.
C. Minimum grade point averages of 2.0 in the overall college work, 2.0 in courses taken in the School of Management, and 2.0 in the concentration area.
D. Completion of at least 30 credits after admission to the School of Management.
E. Completion of at least 30 credits in business courses at the University of Michigan-Flint.
F. Completion of at least 60 credits in courses other than business, including the general education requirements.
G. Completion of at least 45 credits while enrolled at the University of Michigan-Flint (in residence).
H. Registration as a degree candidate at the University of Michigan-Flint for the last 30 credits (senior year enrollment).
I. Completion of COM/ENG 338.
J. Completion of a two-course, non-business focus from any one of the following topic areas: economics, communications, computer science, foreign language, history, or international studies. Specific listings of approved courses are posted in the BBA Program Office.
K. Completion of the following School of Management core courses: BUS 181, 201, 202, 211, 250, 313, 330, 341, 361, 371, 381, 385, 489.
L. Completion of the additional requirements for the concentration in general business, accounting, finance, marketing, operations management, organizational behavior and human resources management or honors, as detailed below.

## Concentration in General Business

Requirements. In addition to the requirements for the BBA degree specified above, the concentration in general business requires 18 additional credits in business, at least 15 of which are in courses numbered 300 or above.

## Concentration in Accounting

Objectives. The primary objective of the program in accounting is to educate students for professional careers in public, managerial, and governmental accounting. Graduates of the program are also prepared for advanced study in accounting, management, law, or related fields.
Preparation for a successful professional career in public practice, private industry, government, or non-profit organizations should include broad-based, balanced liberal education. The total accounting program curriculum emphasizes development of the understanding of the social, ethical, economic, legal and regulatory environments and development of problem solving, decision-making, communication and leadership skills, in addition to business and accounting knowledge. Accounting faculty members are available to consult with students wishing to pursue careers in accounting in any of the above- mentioned areas.

Requirements. In addition to the requirements for the BBA degree specified above, the concentration requires 15 additional credits distributed as follows:
A. BUS 320, 321, 322, 421.
B. At least one of: BUS 323, 422, 424, 425, 467 (more encouraged).

Students planning to become CPAs in Michigan should consider one of the following paths:
A. Students are required to have completed 150 hours of college credit to become CPA in the State of Michigan, as well as
most other states in the US. One option in Michigan is to take 150 credit hours at the undergraduate level. However, to become eligible to be a CPA under this requirement, the student must complete all courses in requirement A above and BUS 323, 324 (a one credit governmental accounting course), BUS 424 and two of the following: BUS 422, 425, 467 (BUS 425 strongly recommended).
B. The School of Management offers a BBA (Accounting Concentration)/MBA (Master of Business Administration) to students who have demonstrated strong academic performance and capabilities. This program is particularly appropriate for students wishing to become a certified public accountant in a state that requires 150 hours of university education to take the CPA exam, including Michigan. The BBA/MBA Joint Program requires approximately 150 semester hours to complete. Please also see BBA/MBA Joint Program in the Graduate Study, School of Management section.
C. 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 program best fits needs. In some cases students with a BBA degree with an accounting concentration and specific courses may be able to take the CPA exam before completion of all required courses, but counsel from the accounting faculty 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.
D. Many professional certifications are available in accounting and, more generally, in financial services. Examples include CMA (Certified Managerial Accountant), CIA (Certified Internal Auditor), CFE (Certified Fraud Examiner), CISA (Certified Information Systems Auditor), CFP (Certified Financial Planner), CFM (Certified in Financial Management), CGFM (Certified Government Financial Manager) and CBA (Certified Bank Auditor). 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 by seen my many as top accounting designation attainable. Students are encouranged to consult with accounting faculty members regarding certification opportunites.

## Concentration in Finance

Requirements. In addition to the requirements for the BBA degree specified above, the concentration in finance requires 18 credits as follows:
A. BUS 363, 461, 466.
B. Three electives from: BUS 316, 321, 322, 365, 369, 462, 463, 467, 468; ECN 314: MTH 378.

## Concentration in Marketing

Requirements. In addition to the requirements for the BBA degree specified above, the concentration in marketing requires 18 credits in marketing.
A. Required marketing courses: BUS 332, 338, 438.
B. Three from: BUS 316, 331, 336, 413, 430, 431, 432, 435, 436, 443.

## Concentration in Operations Management

Requirements. In addition to the requirements for the BBA degree specified above, the concentration in operations management requires 15 credits as follows:
A. BUS 316 or 413 or 473 ; BUS 373 or 472 .
B. Three from: BUS $347,359,432,435,443,461,467$ (if the student takes more than two courses from requirements A and B above, the additional courses also may be counted as electives).

## Concentration in Organizational Behavior and Human Resources Management

Requirements. In addition to the requirements for the BBA degree specified above, the concentration in organizational behavior and human resources management requires 15 credits as follows:
A. BUS, $344,443,445,449$.
B. One from: BUS 346, 347, 359 .

## Concentration in School of Management Honors Program

Requirements. In addition to the requirements for the BBA degree specified above, the concentration in honors requires satisfaction of honors requirements discussed later in this section.

## Sample Calendars

Students should carefully plan their programs of study to meet the general education requirements and prerequisites for advanced courses. Sample calendars meeting the pre-business and the general business, accounting, finance, marketing, organizational behavior and human resource management, or operations 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 address, and logic are recommended. A good preparation in mathematics is needed for many business courses.

## Freshman Year

## Fall Semester

English composition; fine arts; mathematics (MTH 117 or 120); social science* (psychology or sociology); BUS 105/110.
*Psychology is required for the marketing concentration.

## Winter Semester

English composition; mathematics (MTH 118 or 121); information systems (BUS 181); social science; two humanities courses.

## Sophomore Year

Fall Semester
BUS 201, 250; ECN 201; natural science

## Winter Semester

BUS 202, 211; ECN 202; humanities; natural science.

## General Business Curriculum

(Two Years of Professional Management Education)

## Junior Year

Fall Semester
BUS 313, 330, 341; ENG 338; second area option.
Winter Semester
BUS 361, 371, 385; non-business focus; second area option.

## Senior Year

## Fall Semester

BUS 381; non-business focus; two business electives; second area option.

## Winter Semester

BUS 489; three business electives; two free electives.

## Accounting Curriculum

(Two Years of Professional Accounting Education)

## Junior Year

Fall Semester
BUS 313, 320, 321, 341; ENG 338.

Winter Semester
BUS 322, 361, 371, 381; non-business focus.

## Senior Year

## Fall Semester

BUS 330, 385, 421; non-business focus; second area option.

## Winter Semester

BUS 489; accounting elective; courses for second area option, free or accounting electives.
*Students planning to take the CPA examination are advised to take additional accounting coures, including BUS 425 as one of their accounting electives.

## Finance Curriculum

(Two Years of Professional Finance Education)

## Junior Year

Fall Semester
BUS 313, 341, 361; ENG 338; second area option.
Winter Semester
BUS 330, 363, 371; non-business focus; second area option.

## Senior Year

Fall Semester
BUS 381, 385, 461; finance elective; second area option.
Winter Semester
BUS 466, 489; two finance electives; non-business focus free elective.

## Marketing Curriculum

(Two Years of Professional Marketing Education)

## Junior Year

Fall Semester
BUS 313, 330, 341; ENG 338; second area option.
Winter Semester
BUS 332, 361, 371; non-business focus; second area option.

## Senior Year

Fall Semester
BUS 338*, 381, 385; marketing elective; second area option.
*A course in psychology is a prerequisite for BUS 338.
Winter Semester
BUS 438, 489; non-business focus; two marketing electives.

## Organizational Behavior and Human Resources Management Curriculum

(Two years of Professional OB/HRM Education)
Junior Year
Fall Semester
BUS 313, 330, 341; ENG 338; second area option.
Winter Semester
BUS, 344, 371; non-business focus; second area option; free elective.

## Senior Year

Fall Semester
BUS 361, 381, 385, 443; second area option.
Winter Semester
BUS 445, 449, 489; OB/HRM elective; non-business focus.

## Operations Management Curriculum <br> (Two Years of Professional OM Education)

Junior Year
Fall Semester
BUS 313, 330, 341; ENG 338; second area option.

## Winter Semester

BUS 361, 371; non-business focus; one OM elective; second area option.

## Senior Year

Fall Semester
BUS 371, 381, 385, 413; one OM elective; second area option.
Winter Semester
BUS 472, 489; one business elective; non-business focus free elective.

## Honors Program

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:
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 Concentration 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 student's major area 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. Participants enroll in the School of Management Honors Program. On completion they are named School of Management Honors Program Scholars, and have such 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, 342, 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.
B. 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 minors in any College of Arts and Sciences department offering such work, virtually without restriction.

## 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; and a course in statistics (e.g., BUS 211).

Requirements. Completion of 24 credits as follows, with a grade of C or better in each course: BUS 201, 202, 250, 313, 330, 341, 361, 371.

## Minor in Marketing

Prerequisite. ECN 201.

Requirements. Completion of 21 credits as follows, with a grade of $C$ or better in each course.
A. BUS 201, 330, 341.
B. A course in statistics (e.g., BUS 211).
C. Three from: BUS 332, 336, 338, 430, 432, 435.

## Minor in Organizational Behavior and Human Resources Management

Prerequisite. A course in statistics (e.g., BUS 211).
Requirements. Completion of 18 credits for students outside SOM, 15 credits for SOM students, with a grade of C or better in each course, as follows:
A. BUS 201.
B. BUS $341^{*}, 344,445,449$. *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.
C. One from: BUS $346,347,443$.

## Courses in Business (BUS)

105. Introduction to Business. (2).

The role and functions of business in society. How the business world affects the lives of us all; careers in business. Not open to students with 55 or more credits.
110. Business Concepts and Careers. (3).

Introduction to basic business concepts and protocol. Introduction to career development techniques. Not open to students with 55 or more credits.
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. (311). Business Statistics. CSC 121; MTH 117 or 120, MTH 118 or 121. (3) ar2.

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; 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. (1).

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 363 and its 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. Not open to students who have completed BUS 206.
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 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, modelbased 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 117or 120. (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.

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.
392. Management Cooperative Experience. BUS 290; 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. BUS 290; at least junior standing. (3).

Continuation of work experience, with evaluation of assignment planned and completed as for BUS 392.
394. Business Internship Experience. BUS 290; 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.
413. (312). 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 decisionmaking 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 organizationwide 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 321 or 361 and their 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.
496. Honors Thesis II. BUS 496 and its prerequisites. Open only to School of Management Honors Program students. (4).
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<br>251 Frances Willson Thompson Library<br>Phone: (810) 762-3171<br>Fax: (810) 766-6789<br>Web site: graduateprograms.umflint.edu<br>Associate Provost: Dr. Vahid Lotfi<br>Administrative Associate: Ann Harper Briggs<br>Promotion Coordinator: Brad Maki<br>Programmer Analyst: Jana Richmond<br>Principal Secretary: Erin Carrasco

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 information specific to the various degree programs.

## 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 Fees

The application fee for all graduate programs is $\$ 55$. The
application is non-refundable and does not apply to any other University fee. The fee may be paid by check or money order or credit card payment form. (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 Non-Candidate for Degree (NCFD)

Individuals holding bachelor's degrees who want to elect graduate courses or those seeking admission to a graduate program but not yet enrolled in a graduate program may elect to take courses as a Non-Candidate for Degree graduate student.

Applicants must provide proof of bachelor's degree and complete a graduate NCFD application through the Office of Graduate Programs each semester in which they seek to enroll as a graduate NCFD student. The instructor's signature and the NCFD advisor's signature are required on the form, NCFD Graduate Student Request for Approval to Elect a Graduate Course(s).

Graduate NCFD students are not eligible for Financial Aid. Graduate NCFD students are subject to all UM-Flint rules and regulations concerning add/drop, disenrollment/cancellation, late fee charges and penalties.

In general, eligible students are limited to electing two graduate courses under graduate NCFD status. Courses elected under graduate NCFD status cannot count toward a UM-Flint graduate degree program unless the student formally applies and receives regular admission to a graduate program. The graduate program makes the determination as to whether or not the courses elected under NCFD status will be accepted.

## 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 documents must be received before a decision on admission can be made:
A. Official transcripts from post-secondary school(s) (college/university). All transcripts (official records) for education completed outside the United States must 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.
B. 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) or the International English Language Testing System (IELTS) must be submitted to the Office of Graduate Programs. The scores submitted must be official and taken within the last two years. Applicants who take the TOEFL must take the TOEFL exam that includes the Test of Written English (TWE).
C. Certification of financial resources adequate to provide for all expenses while attending the University of MichiganFlint. An Affidavit of Support must be completed,
notarized, and returned with all supporting documents.

## 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.

## Scholarships/Fellowships/Grants

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.

## College of Arts and Sciences

The College of Arts and Sciences offers a Master of Science program in Biology.

## 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, Joseph F. Sucic; Assistant Professors Jerry D. Sanders, Ann Sturtevant; 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.
E. 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

1. 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.
2. 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 nonbiological 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 |
| B | 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. (401). 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 404 or HCR 402 or its equivalent. Also listed as HCR 502.
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. 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.
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.
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. 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.
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.
534. Human Anatomy. Graduate standing; 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. Not open to students with credit for BIO 434.
539. (537) Mycology Lecture. Graduate standing; BIO 111, 113, 326. Concurrent enrollment in 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 enrollment in 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.
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.
560. Conservation Biology. Graduate standing; BIO 111, 113, 326, 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.
562. Molecular Biology of Plants. Graduate standing; BIO 111, 113, 326, 328; concurrent enrollment in 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.
563. Molecular Biology of Plants Laboratory. Graduate standing; BIO 111, 113, 326, 328; concurrent enrollment in 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 230; 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 posttranscriptional 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 230; 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, 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.
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.
582. Neuroscience. Graduate standing; BIO 434/PTP 410; 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.
583. Special Topics. Graduate standing; consent of instructor. (14).

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.
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.
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).
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).
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).

## Master of Science in Computer Science and Information Systems

Director: Dr. Stephen W. Turner<br>Program Faculty: Associate Professors R. Shantaram, Mudasser Wyne; Assistant Professors Song Ci, Michael Farmer, Stephen W. Turner

## 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 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

The application deadline is March 15 for the following Spring or Summer term, July 15 for the following Fall term, and November 15 for the following Winter term. Conditional admission may be granted if not all the prerequisites are completed. 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.
D. 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

A. Core Curriculum ( 12 credits).

CSC 535, 565, 575, 582.
B. Completion of one of the following tracks ( 12 credits).

Computer Science Track. CSC 544, 546, 549, 577.
Information Systems Track. CIS 510, 520, 530, 550.
C. Completion of one of the following options ( 6 credits).

Thesis Option. Six (6) additional credits in thesis research consisting of a research project with a final thesis paper and an oral defense.

Non-Thesis Option. Six (6) additional credits in elective graduate-level credits in Computer Science or Information Systems and satisfactory performance on a Master's level exit examination.

## Graduate Courses in Computer Science (CSC)

535. Advanced Computer Networking. Admission to the $M S$ in CIS 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.
544. Computer Simulation and Modeling. Admission to the M.S. in CIS 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.
546. Advanced Artificial Intelligence. Admission to the M.S. in CIS program. (3).

Problem solving techniques including searching and game playing. Knowledge and reasoning; knowledge bases; firstorder logic. Planning; uncertainty and probabilistic reasoning. Learning techniques including observations, neural networks,
and reinforcement learning. Communication.
549. Computer Ethics and Security. Admission to the M.S. in CIS 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.
565. Computer System Architecture. Admission to the M.S. in CIS 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.
575. Algorithm and Complexity Analysis. Admission to the M.S. in CIS 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.
577. Distributed Operating Systems. Admission to the M.S. in CIS 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.
580. Advanced Software Engineering. Admission to the M.S. in CIS 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.
581. Theory of Computation. Admission to the M.S. in CIS program. (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.
582. Advanced Database Concepts and Emerging Applications. Admission to the M.S. in CIS 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.
592. Special Topics in Computer Science. Admission to the M.S. in CIS program. (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.
595. Master's Thesis I. Admission to the M.S. in CIS program. (3).

Advanced topics of particular interest to the student chosen in consultation with the thesis advisor. Directed research under the supervision of thesis advisor, thesis document preparation, preparation for oral thesis defense. Requires election of the thesis track.
596. Master's Thesis II. CSC 595. (3).

Continuation of thesis research. Requires election of the thesis track.

## Graduate Courses in Computer Information Systems (CIS)

510. Information Systems. Admission to the M.S. in CIS 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.
520. Advanced Information Systems. CIS 510; admission to the M.S. in CIS 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.
530. Information Storage and Retrieval. Admission to the M.S. in CIS program. (3).

Concepts, principles, issues and techniques for managing data resources. Query structure and matching process. Retrieval effectiveness. Document access and output presentation.
550. Decision Support Systems. CIS 510; admission to the M.S. in CIS program. (3).

Decision making and available support. Evolution of computerized decision aids. Decision making models and systems; decision support systems.
592. Special Topics in Information Systems. Admission to the M.S. in CIS program. (3).

Topics of interest in computer information systems 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.
595. Master's Thesis I. Admission to the M.S. in CIS program. (3).

Advanced topics of particular interest to the student chosen in consultation with the thesis advisor. Directed research under the supervision of thesis advisor, thesis document preparation, preparation for oral thesis defense. Requires election of the thesis track.
596. Master's Thesis II. CIS 595. (3).

Continuation of thesis research. Requires election of the thesis track.

## 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. 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 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, E or F are earned cannot be used in fulfillment of degree requirements.

| Letter Grade | Honor Points |
| :---: | :---: |
| A+ | 9 |
| A | 8 |
| A- | 7 |
| B+ | 6 |
| B | 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. 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 $\mathrm{B}(5.0)$ 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 Office of Graduate Programs for more information concerning transfer of credit.

## Time Limit to Complete Degree

A student must complete all work toward the master's degree within six consecutive years from the date of first enrollment in
the graduate program. In certain circumstances, students may request an extension of time to complete the program. Requests are made by completing a Petition for Modification of Waiver of Regulation form. Students submit completed forms with required signatures to the Office of Graduate Programs, 251 Thompson Library.

## 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

Contact the Office of Graduate Programs for further information concerning academic policies and procedures.

## Master of Liberal Studies in American Culture

Program Director: Dr. Bruce Rubenstein (History)

Program Faculty: Mr. Charles Bailey (Social Work), Dr. Lauren Friesen (Theatre), Dr. Jan Furman (English), Mr. Robert Houbeck (Library), Dr. Larry Koch (Sociology), 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 credits): 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).

AMC $500 \quad$ Thesis Writing and Research
AMC $591 \quad$ Thesis
C. Approved Electives ( 15 credits). Select courses from at least two departments:
AMC $501 \quad$ The Mind of America
AMC 502 American Institutions
AMC 503 The American Character
AMC 504 The United States in Comparative Perspective
AMC $590 \quad$ Directed Research
AMC $598 \quad$ Selected Topics
AMC $599 \quad$ Cross-Cultural Research
ANT 555 Anthropological Interpretation of American Socio-Cultural Systems
ANT $570 \quad$ American Ethnic and Cultural Diversity
ART $509 \quad$ 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 $522 \quad$ Jazz in American Culture
MUS 555 American Music
PHL 543 American Philosophy

POL 501
POL 537
American Political Thought
POL 541 Comparative Social Policy
SOC 545 Ethnicity in American Society
SOC 558 Religion in American Society
SOC $562 \quad$ Work in American Society
SOC/EDU 569 Sociology of Education
SOC $570 \quad$ Social Stratification
SOC $571 \quad$ Social Movements in America
SOC/WGS 574 Gender and Society
THE 505 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.
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.
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
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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 585.
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, 582.
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 527.
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 service-providing 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 $H C R / P U B$ 403. Also listed as HCR 508.
509. Health Care Planning and Regulatory Process. 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 costbenefit 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 profit-making ventures by nonprofit organizations. Also listed as SWK 520.
[521. Entitlement Program Law and Policy. Graduate standing. (3). Not open to students with credit for PUB 421. Also listed as SWK 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 POL/PUB 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 SWK 525.
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.
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 POLPUB 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 $E D U / M A S / P U B 438$. Also listed as $E D U$ 538. Graded $A B C D>N$.
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.
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 SWK 540.
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 441. Also listed as POL 541.
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 SWK 542.
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 SWK 543.
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 SWK 544.
550. Leadership Strategies. 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. Also listed as EDU 550.
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 EDU 562.
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 EDU 563.
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 EDU 564.
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 EDU 565.
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 EDU 566.
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 EDU 567.
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, labor-management 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 $P U B / H C R ~ 476$. Also listed as HCR 577.
578. Instructional Practice and Evaluation. Graduate standing. (3).

Contemporary theories of instruction and evaluation with and their application to classroom practice. Emphasis on the building and central office administrator as an instructional leader. Also listed as EDU 568.
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. 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. Not open to students with credit for EDU/PUB/SWK 482. Also listed as EDU 582 and SWK 582.
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 EDU 585.
587. Legal Issues In Health Care. Graduate standing, $H C R$ 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.
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 computermediated technology to link faculty, administrators and candidates at various sites across the region for communication, instruction and networking activities. Also listed as EDU 592.
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.
594. Grantwriting and Administration in Public and Nonprofit Agency Settings. (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 EDU 594.
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.

## 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, Education with a specialization in Technology in Education, Elementary Education with Certification (MAC program), Literacy (K-12), Technology in Education, and Urban/MultiCultural Education. An Early Childhood endorsement programand a planned program in Special Education is 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: Rose Casement
Program Faculty: Judith Ableser (Education), Sharman Siebenthal Adams (Education), Janice Bernsten (English), Wei Cao (Education), Rose Casement (Education), Aviva Dorfman (Education), Patricia Emenyonu (English), Mary Jo Finney (Education), Patricia Gallant (Education), Susan Gano-Phillips (Psychology), Kazuko Hiramatsu (English), Tara Huls (Early Childhood Development Center and Education), Jeffrey Kupperman (Education), Marianne McGrath (Psychology), Michael Pardales (Education), Sungho Park (Education), Linda Pickett (Education), Beverly Schumer (Education), Sapna Taggar (Education), Traki Taylor (Education), Sue Woestehoff (Education), Eric Worch (Education).

The Master of Arts Degree in Education offers specializations in Early Childhood Education, Elementary Education with Certification (MAC program), Literacy (K-12), Technology in Education, and Urban/Multicultural Education. 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. A 21 -credit-hour early childhood education endorsement program and an 18-credit-hour planned program in Special Education 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:

- an awareness of the unique characteristics and needs of diverse student populations in an urban setting
- an understanding of principles of motivation and learning and how these translate into the classroom
- an awareness of the historical, sociological, political, and philosophical factors that promote equal educational opportunity
- an opportunity to examine school and classroom environments and 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
- an 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 the 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 goals, methods and outcomes is available at http://assessment.umflint.edu.

## Admission Requirements

The number of individuals admitted into the Master of Arts in Education program is limited. Applications for admission must be received by July 15 for Fall semester, by Nov. 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. As noted in the specialization descriptions, below, in certain specializations individuals with unique expertise in the subject area may petition to have this requirement waived. (Not applicable to students applying to the MAC program.)
C. 3.0 or higher undergraduate overall grade-point average based on a 4.0 scale.
D. Students applying to the MAC program must also have completed 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.
E. 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 (Students applying to the MAC program must submit two official transcripts from the institution granting their bachelor's degree and one from 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


## 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.

| Letter Grade | Honor Points |
| :---: | :---: |
| A+ | 9 |
| A | 8 |
| A- | 7 |
| B+ | 6 |
| B | 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 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 hours of coursework at the graduate level. The Early Childhood endorsement requires 21 graduate credit hours. The Planned Program in Special Education consists of 18 graduate credit hours. All graduate level courses are numbered 500 and above and are open only to graduate students. Students must be formerly admitted to the specialization 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 Literacy (K-12) Specialization

This specialization offers courses that focus on issues and practices related to an integrated language arts curriculum.

Material will be considered in terms of learners from diverse backgrounds and school settings. Coursework outside of the specialization strand has been designed to support and enhance the concepts presented. Students select the 33 -credit-hour thesis option or 36-credit-hour non-thesis option. 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 specialization complies with the guidelines on Advanced Reading Education of the International Reading Association.

The Literacy specialization is open only to individuals who hold elementary or secondary teaching certificates. Upon successful completion of the degree program and the Michigan Test for Teacher Certification in Reading Specialist, graduates with teaching certificates from the State of Michigan will be eligible for a certificate endorsement in reading (coded BR in Michigan). This endorsement will allow students to teach reading as a special subject in grades $\mathrm{K}-12$.

## Requirements.

A. Core education courses ( 6 credits).

EDU 520 or 530; 561
B. Literacy strand ( 18 credits).

1. EDU 545, 546, 580, 581.
2. Two from: EDU 535, 543, 544, 547, 548, 549, 574, 599; EDU/ENG 512; ENG 532, 533; ENG/THE 534.
C. Cognate course ( 6 credits). LIN 520, 521.
D. Thesis/non-thesis option (3-6 credits). Students must select either the 36-credit non-thesis option or the 33-credit thesis option.
3. Non-thesis option (6 credits). Credits can be selected from any courses listed under A above, B2 above, and/or EDU 504.
4. Thesis option (3 credits). EDU 560 Masters Project/thesis (prerequisite: completion of at least 24 credit hours).

## MA with Early Childhood Education Specialization

This specialization is designed for individuals who currently have or are seeking careers as educators of young children, birth through eight years of age. It will focus on educational issues and practices appropriate for this population. Coursework outside of the specialization strand has been designed to support and enhance the concepts presented. Students select the 33 -credithour thesis option or 36 -credit-hour non-thesis option. 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 specialization 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 to the specialization. Michigan teaching certificate holders seeking to add the early childhood endorsement must complete a minimum of 300 contact hours in two of the three following age groups: infant-toddler, preprimary, and K-3 ${ }^{\text {rd }}$ grade ( 150 hours in each setting selected). Upon successful completion of the degree program and the Michigan Test for Teacher Certification in Early Childhood Education, 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)

EDU 520 or 530; 561.
B. Early childhood education strand ( 18 credits).

1. EDU 555, 556, 557, 558 .
2. Two from: EDU 501, 506, 507, 532, 537, 543, 547, 548, 549, 551, 552, 553, 554, 599.
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 EDU 551, 552, and 553. 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/non-thesis option (3-6 credits).

Students must select either the 36-credit non-thesis option or the 33 -credit thesis option.

1. Non-thesis option ( 6 credits). Credits can be selected from any courses listed under A above, B2 above, and/or EDU 504.
2. Thesis option (3 credits). EDU 560 Masters Project/thesis (prerequisite: completion of at least 24 credit hours).

## Early Childhood Endorsement

This 21-credit-hour program is developed for individuals who hold elementary teaching certification and wish to add the early childhood endorsement to their teaching certificates. All course work applied toward the endorsement may also be applied toward a master's degree in education with a specialization 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-3 ${ }^{\text {rd }}$ 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. EDU 555, 556, 557, 558.
2. Two from: EDU 551, 552, 553.
B. Electives (3 Credits).

One from: EDU 501*, 506, 507, 520, 530, 532, 537, 543, 547, 548, 549, 554, LIN 520, 521; PSY 500.
*Prerequisite: EDU 438/538.

## MA with Elementary Education and Certification Specialization (MAC)

This is a 38 -credit-hour specialization leading to an MA in Education degree and elementary teacher certification. The MAC is an accelerated teacher preparation program offering a full-time curriculum, 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. 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 specialization 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 of 2.75 or better (based on the UMFlint 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)

EDU 520, 521, 532.
B. Elementary education specialization ( 15 credits). EDu 505, 515, 525, 545, 546.
C. Cognate course ( 3 credits). PSY 500.
D. Teaching practicum and student teaching (11 credits). EDU 595, 596, 597.
E. Majors and minors (50-60 credits).

In addition to the requirements for the master's degree listed in A-D, students must complete one teaching major (30-36 credits) and one 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.

## Planned Program in Special Education

This 18-credit-hour focused planned program will provide students with valuable knowledge, skills, and competencies in working with special needs individuals. Courses will include a comprehensive understanding of issues in teaching and learning, individuals with special needs from a developmental life-span perspective, and special education in American schools. In addition, students will master skills in assessment, program planning, behavioral and instructional interventions, and working as part of an interdisciplinary team with the school, family, and community.

The planned program meets the 18 -credit-hour continuing eduation/professional development requirement for teachers to progress from a "provisional certificate" to a "professional education certificate" in the State of Michigan. The program is designed to meet the diverse needs of working professionals.

Please check the Education website and/or Online Catalog for regular updates on the status of a new Special Education specialization in the Master of Arts in Education program with
certificate endorsements in learning disabilities and cognitive impairments.

## Requirements.

A. Core special education courses ( 18 credits) .

EDU 508, 509, 511, 513, 514, 533.

## MA with Technology in Education Specialization

This specialization is for individuals who wish to enhance their knowledge and skills in the use of technology as it relates to education. The specialization 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 specialization 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 specialization 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 33 -credit-hour thesis optioin or the 36 -credit-hour non-thesis option. Individuals who wish to pursue a research careeer, coordinative/administrative position, and/or doctoral degree in eduation are encouraged to select the thesis option.

## Requirements.

A. Core education courses ( 6 credits)

EDU 520 or 530; 561.
B. Technology in education strand ( 18 credits).

1. EDU 522, 523, 524, 526.
2. Two from: EDU 527, 528, 529, 533, 542, 544, 599.
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/Non-Thesis option (3-6 credits).

1. Non-Thesis Option (6 credits). Credits can be slected from any courses listed under A above, B2 above, and/or EDU 504.
2. Thesis Option (3 credits).

EDU 560 Masters Project/Thesis (prerequisiste: completion of at least 24 credit hours).

## MA with Urban/Multicultural Education Specialization

This specialization includes courses that focus on content and issues that are of particular interest to teachers seeking knowledge about urban communities and diverse populations. The courses in this specialization are designed to provide theoretical knowledge and practical skills necessary to understand the demands of teachers and human service professionals in a pluralistic society. Coursework outside of the specialization strand has been
designed to support and enhance the concepts presented. Students select the 33 -credit-hour thesis option or 36 -credit-hour nonthesis option. Individuals who wish to pursue a research career, administrative position and/or doctoral degree in education are encouraged to select the thesis option.

The Urban/Multicultural Education specialization is developed for elementary and secondary teachers. Other individuals working in or planning to work in schools or service agencies in urban or multicultural settings may also be considered for admission.

## Requirements.

A. Core education courses ( 9 credits).

EDU 520, 530, 561.
B. Urban/multicultural education strand ( 18 credits).

1. EDU 501, 503, 566, 570.
2. Two from: EDU 532, 538*, 540, 547, 549, 573, 582, 599.
*Students who have not taken EDU 438 must elect EDU 538.
C. Cognate courses ( 3 credits).

One from: ANT 570; HIS 530, 531, 536; LIN 520; PUB 568; SOC 545, 569, 570; SOC/WGS 574.
D. Thesis/non-thesis option (3-6 credits).

Students must select either the 36 -credit non-thesis option or the 33 -credit thesis option.

1. Non-thesis option (6 credits). Credits can be selected from any courses listed under B2 above, C above, and/or EDU 504.
2. Thesis option (3 credits). EDU 560 Masters Project/thesis (prerequisite: completion of at least 24 credit hours).

## Graduate Courses in Education (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 EDU 400. Graded ABCD>N.
501. Instructional Issues in Multicultural Education. Graduate standing; EDU 438/538. (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.
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.
503. Educational Equality. Graduate standing. (3).

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.
504. Beginning Teacher Seminar. Graduate standing; consent of instructor. (3).

The Beginning Teacher Seminar focuses on the components of professional practice. Students explore issues that impact the effectiveness of the learning environment.
505. Seminar in Mathematics Teaching. Graduate standing. (3).

Current conceptions and new directions in mathematics, along with attention to issues of diversity.
506. Early Childhood Special Education. Graduate standing. (3).

This course prepares students to work with young children (birth-8) with special needs in various educational settings. Topics include: developmental and ecological perspecties on young children with special needs, assessment, identification, IFSP's, IEP's, least restrictive environments ranging from inclusive settings to self-contained classrooms, intervention strategies and techniques, ancillary supports, family supports, transition to primary grades and ongoing supports in the primary grades. The course includes work with special needs students in approved educational settings. (With consent of instructor, K-3 grade teachers serving children with special needs may use their own classroom to fulfill part/all of this requirement).
507. Topics in Education. Graduate standing. (1-6).

Focus on various topics, involving instensive study of specific areas related to education. This course 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. The course may not be elected for more than six credits and may not repeat the same topic for credit in the MA in Education program. Students should consult with an academic advisor about applying credits to an MA in Education specialization.
508. Individuals with Special Needs. Graduate standing. (3).

Provides the student with an in-depth understanding of the range of disabilities/exceptionalities from a development, learning theory and ecological perspective. Typical and atypical development, from conception to adults, covering affective, social, emotional, behavioral, language, cognition, physical, and sensorimotor development will be examined. Learning theory and educational implications and factors affecting special needs individuals, including pre-natal, environmental and social, economic, family, school, peers, community, recreation, vocational, government, and society will be studied.
509. Special Education in American Schools. Graduate standing. (3).

Focuses on special education in American schools from organizational, instructional, historical, philosophical, and legal perspectives. Emphasis will be placed on the 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. The roles, responsibilities and skills effective team/multidisciplinary planning and
program implementation aimed at providing total services for students with special needs will be explored. The couse will include site-visits and observations in a variety of programs.
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 EDU/ENG 410. Also listed as ENG 510.
511. Assessment, Identification, and Program Planning for Students with Special Needs. Graduate standing. (3).

Provides the knowledge and skills that are required in assessing, teaching, and evaluating students with special needs. Teachers will learn how to administer and interpret various language, social, emotional, cognitive, academic functional, and adaptive behavior assessments in order to develop individual education plans.
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 EDU/ENG 412. Also listed as ENG 512.
513. Behavioral and Instructional Interventions for Students with Special Needs. Graduate standing. (3).

Techniques for teachers to adapt their instruction to meet the behavioral and curricular needs of special education students. Interventions will include positive behavioral supports, behavioral analysis, developing 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 will be highlighted. In addition, this course will provide teachers with multicultural perspectives regarding how behavior and learning are shaped within cultural contexts.
514. Family, School, and Community Collaboration for Students with Special Needs. Graduate standing. (1-6).

Provides the knowledge and skills required in working as part of a multi-disciplinary team to provide comprehensive wraparound services for individuals with special needs. Topics include working collaboratively within the school setting with a variety of professionals, strategies for collaborating with community agencies, understanding of the child study/team planning process, communicating the needs and rights of the students, utilizing various community settings and activities in designing an educational program, and understanding families' strengths and preferences as well as their needs. Also, students will be able to develop cultural competencies and learn how to use local, state, and national resources.
515. Seminar in Science Teaching. Graduate standing. (3).

Current conceptions and new directions in science, along with attention to issues of diversity.
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 EDU 416.
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.
521. Using Technology in Education. Graduate standing or consent of instructor. (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 EDU 421.
523. Web-based Educational 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. Not open to students with credit for EDU 423.
524. Advanced Web-based Educational Design. EDU 523. (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 EDU 424.
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 EDU 425.
526. Classroom Enactment of Interactive Communications \& Simulations. Consent of instructor. (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.
527. Mentoring and Management of Interactive Communications and Simulations. 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. Not open to students with credit for EDU 427.
528. Leadership of Interactive Communications \& Simulations. Consent of instructor and at least one of the following courses: EDU 523, 526, 527. (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.
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. Contemporary Issues in Learning and Teaching. Graduate standing. (3).

Critical examination of issues of learning, instruction, motivation, assessment, and student diversity pertinent to K12 educational contexts. Topics investigated from cognitivedevelopmental, 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.
532. Disability and Classroom Teaching. Graduate standing. (3).

Introduction to and critique of the theory and practice of inclusive education, or the education of all students with disability 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 current inclusion strategies. Not open to students with credit for EDU 432.
533. Technology for Special Needs. Graduate standing. (3).

Introduction to the latest technology for supporting special-needs learners, and strategies for using technology in consideration of individual differences. Hands-on experience with adaptive technologies and software for students with physical or cognitive special needs. Strategies for using technology to support inclusion of special-needs students in classroom activities. Relation of recent technologica innovationsto research and legislation about special-needs learners.
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.
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 EDU/MAS/PUB 438. Also listed as PUB 538.
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 EDU/WGS 440. Also listed as WGS 540.
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.
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.
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.
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 student's literacy. Emphasis on study of practices relevant to contemporary classroom.
546. Integrated Language Arts throughout the Curriculum: Theory into Practice. EDU 545; graduate standing. (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.
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.
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 EDU448 or ENG 448. Also listed as ENG 548.
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 EDU/THE 449. Also listed as THE 549.
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 who have completed EDU 201 or EDU 400 or PUB 450. Also listed as PUB 550.
551. Advanced Supervised Field Experience in InfantToddler 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.
552. Advanced Supervised Field Experience in PrePrimary 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.
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.
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.
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.
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.
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.
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.
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.
561. Research Seminar. Graduate standing; a course from specialization strand. (3).

Seminar providing support for professional development and evaluation and execution of research.
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.
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.
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.
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.
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.
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.
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.
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 EDU/SOC 452. Also listed as SOC 569.
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.
571. Equity 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.
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.
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.
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 EDU/ENG 474. Also listed as ENG 574.
580. Literacy Instruction for Students Identified with Special Needs. EDU 545. (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.
581. Literacy Assessment. EDU 545. (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 EDU 481.
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 EDU/SWK 482. Also listed as PUB 582 and SWK 582.
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.
590. Africana Studies for Teachers. Graduate standing; AFA 201 or 220 or consent of instructor. (3).

Overview of Africana Studies content useful to teachers of public schools. Not open to students with credit for AFA/EDU 399. Also listed as AFA 590.
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 computermediated technology to link faculty, administrators and candidates at various sites across the region for communication, instruction and networking activities. Also listed as PUB 592.
594. Grantwriting and Administration in Public and Nonprofit Agency Settings. (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.
595. Field Practicum and Seminar. Admission to the Master of Arts in Education program. (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.
596. Student Teaching in Elementary School. Admission to the Master of Arts in Education program; no less than a B- (4.0) in the following courses: EDU 505, 515,520, 521, 525, 532, 545, 546, 595, PSY 500; 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 EDU 597. (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. Graded Pass/Fail.
597. Student Teaching Seminar. Admission to the Master of Arts in Education program; concurrent election of EDU 596. (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.
598. Culture, Learning and Identity in India. Graduate standing, PSY 100; consent of instructor. (3).
599. Independent Study in Education. Graduate standing; consent of instructor and advisor. (1-3).

Directed reading or research in a topic relevant to the student's area of specialization. May be repeated for a total of 3 credits.

## 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.hurleymc.com/Education/anesthes/index.htm
2102 W. S. White Building
(810) 762-3172

FAX (810) 762-3003
Director: Lynn L. Lebeck, CRNA, DNSc.
Educational Coordinator: Shawn Fryzel, CRNA, MS
Secretaries: Debra McFarlan, Deb Berg
Program Faculty: Lynn L. Lebeck (Anesthesia), Steve Myers (Biology), Shan Parker (Health Sciences and Administration), Jerry Saunders (Biology), Suzanne Selig (Health Sciences and Administration), Harland Verrill (Health Sciences and Administration).
Lecturers: Mohan Achwal, Roy Alisoglu, Kevin Bur, Yong Chung, 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.
Clinical Faculty: Felix Beltran, Dorothy Dillard, Bruce Hausauer, James Santala, Barbara Watson, Leslie Wizauer.

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 a BS in a basic science to become a certified registered nurse anesthetist (CRNA). A second, non-clinical track is for nurse anesthetists with bachelor's degrees seeking graduate preparation in anesthesia.

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.

A Master of Science in Anesthesia degree is also offered on a non-clinical track for nurses with bachelor degrees who have already successfully completed a nurse anesthetist program. The curriculum design includes 32 semester hours and mirrors the two year program excluding the clinical education and practice component. This track is designed for the working nurse anesthetist and may be pursued on a part-time basis.

## 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 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. An additional non-clinical track for the practicing CRNA is also available.

## 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 a basic science (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 UMFlint/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 MichiganFlint/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 Inorgainc 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 and non-clinical tracks is available at the Office of Graduate Programs, the Health Sciences and Administration Department, or the Department of Anesthesia, Hurley Medical Center. 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 |
| B | 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 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.
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.
587. Masters' Thesis. Admission to the graduate program in anesthesia. (3).

Completion of a masters project which addresses a current area of anesthetic practice.
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<br>(810) 762-3172<br>FAX (810) 762-3003<br>Website: http://www.umflint.edu/hcr/hed_g/index.php<br>Program Director: Dr. Suzanne Selig<br>Program Faculty: Professor Suzanne Selig; Associate Professor Kristine Mulhorn; Assistant Professors Joan Cowdery, Leaden Hickman, Shandowyn Parker

The Master of Science in Health Education makes an advanced degree possible for those already working in the field, as well as those 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 and weekend courses on campus. 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. Typical jobs range from being the director of a corporate wellness program to the health educator for an AIDS Prevention program, or a researcher on a disease management or prevention program.

Some of the 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 managment 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 theorybased practice, by contributing to the knowledge base of health education, and by serving 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. 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 (recommended but not required).
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 Non-candidate for Degree (NCFD) 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. 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 |
| B | 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 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, illness, sick-role, 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. 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.
590. Internship. Admission to the Health Education program and consent of instructor. (1-6).

Students intern in agencies under supervision of agency personnel and faculty, and attend seminars to discuss field experience and related readings. Not required of those currently in professional health education positions. Graded Pass/Fail.
594. Thesis Preparation Seminar. HCR 403, 500; HED 540, 541; 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.
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.
597. Thesis Continuation. Graduate standing, HED 595, and consent of instructor. (1).

Continuation of thesis submission.

## 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: Dr. Thomas C Schaal (810-766-6858)
Program Faculty: Associate Professors Janet Barnfather, Thomas Schaal; Clinical Assistant Professor Carol Rossman; Adjunct Professor John Thornburg; Lecturers Connie Creech, Elizabeth Gale-Cuevas, Diane Gutchak, Charles Johnston, D. Kay Taylor.

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 diagnose, interpret lab findings and x-rays, perform physical exams, take medical histories, 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. Course work in Individual/Couple/Family Psychotherapy; Group Psychotherapy and the Consultation process combines the best of the traditional Nurse Practitioner program and Clinical Nurse Specialist program to produce a highly qualified, cost effective practitioner. Clinical experiences include working with current problems encountered in the community such as substance abuse; domestic violence; depression; family stress as well as problems encountered by the chronic and persistent mentally ill population.

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 Mgt 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 Mgt of patients with acute and chronic multisystem 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. Most Adult Nurse Practitioners practice in primary care settings, which include general and specialty practices. The ANP provides consultation, collaboration, continuing education, certification and evaluation. Upon entry into practice the adult nurse practitioner demonstrates competence in the categories of health promotion, health protection, disease prevention and diagnostics. 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 is May 1 prior to the fall semester.

## Transfer Credit

Up to six 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 to 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
- College level Statistics
- 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 preferred


## 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 |
| B | 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)
- American Academy of Nurse Practitioners
- National Task Force on Quality Nurse Practitioner Education

The UM-Flint Master of Science in Nursing program is fully accredited through December 31, 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
NUR 597 Research/Theory III
Winter Semester
NUR 507 Dynamics of Family Counseling
NUR 531 Women's Health Theory \& Practicum
NUR 598 Research/Theory IV

## Spring/Summer Semester

NUR 510 Office and Minor Emergency Procedures
NUR 526 Pediatric H\&P Theory and Practicum**
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 599 Research/Theory V
NUR 570 Individual/Couple/Family Theory***
NUR 571 Individual/Couple/Family Psychotherapy Practicum***

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.

## 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.
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.
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. Concurrent enrollment in NUR 524. (4).

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.
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.
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.
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.
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.
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.
571. 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 P/F.
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.

## 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.
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.
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.
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.

# Doctor of Physical Therapy (DPT) 

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Professor Emeritus: Richard E. Darnell
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 seven 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 for a 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 offers a three-year professional preparation program that follows completion of all program prerequisites and admission requirements. Students who do not hold an earned baccalaureate degree upon admission will have the opportunity to receive a BS in Health Science degree upon completion of all requirements for that degree. The professional DPT program is accredited by the Commission on Accreditation in Physical Therapy, 1111 N. Fairfax Street, Alexandria, VA 22314: accreditation@apta.org; (703) 684-2782 or (703) 706-3245, the national body which accredits educational programs in the profession. The DPT degree is a professional degree comparable to other entry-level professional degrees, such as a Doctor of Podiatric Medicine (DPM) or a Doctor of Pharmacology (Pharm D). This degree prepares graduates as practitioners within their respective disciplines, but is not a post-professional degree equivalent to a Ph.D., or other advanced academic degree.

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 behaviorial 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 entrylevel physical therapists should be competent to treat persons from infancy through the elder years. This life-span 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 by using a collegial model, which incorporates mutual respect and understanding between the faculty, staff, and physical therapy student 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 the student 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 selfinstructional 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.

The DPT degree requires completion of a three-year academic program following satisfactory completion of all prerequisite courses, including coursework and clinical education experiences. Clinical education is an important aspect of the program. Initial exposure to clinical practice occurs in Fall,Year 3 and Fall and Winter Year 4. The student is then placed into full-time clinical experience for two, two-week periods during Winter Year 5. Following the satisfactory completion of all didactic courses, students engage in three, eight-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. All course work and clinical education must be successfully completed to fulfill the degree requirements for the DPT.

Students may be assigned to hospitals or other institutions in Flint, other cities in Michigan, or other states. Approximately 123 facilities/agencies at nearly 200 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.

## Admission to the DPT Program

## (Prerequisite Requirements, General Education and Application Process)

Applicants who hold an earned baccalaureate degree and who have met all prerequisites, or applicants who have met all prerequisites and who have completed work toward a major with both lower and upper division courses will be given preference for admission. This policy does not preclude the application of those students who have completed the prerequisites only. For admission commencing in 2006, all candidates must provide evidence of an earned baccalaureate degree and have completed the prerequisites for admission. For further information regarding admission for 2006 and beyond, please visit our web site: http://www.umflint.edu/pt/.

Admission to the professional DPT Program is the prerogative of the faculty of the program, working in conjunction with the University of Michigan-Flint Office of Admissions and Recruitment. Applicants are reminded that the supplemental application and reference forms are data sources that provide quantitative data and qualitative data which are subject to faculty interpretation. These data are considered by the faculty as it exercises its professional judgment in making the final admissions decisions.

Admission to the program is competitive, and students are admitted in the fall semester only. Positions in the class are assigned to those candidates ranking highest among applicants eligible for consideration. The number of available spaces in the class is currently 36 full-time and 2 part-time.

Students may apply for admission to the professional DPT program upon completion of all prerequisite courses or if they can complete all prerequisite courses by the start of the fall semester of the year in which they apply. A reasonable plan for completion of remaining course prerequisites will be required. If the candidate is admitted and the plan is not satisfactorily completed, admission will be rescinded. Students must also meet all other qualifications for admission to the professional preparation program as listed.

Students who have not fulfilled the prerequisite requirements for the professional DPT in the United States must apply for a course-by-course credit evaluation through an approved credentialing service. There is a fee for this service. Contact the Office of Admissions and Recruitment for a listing of approved agencies.
A. Prerequisite List. Prerequisites are the same for Transfer Students as they are for UM-F Students. Transfer students may meet the prerequisite requirement by equivalent course(s) from other institutions. To determine whether or not the course(s) you have taken will transfer, please contact the Office of Admissions and Recruitment. For information regarding prerequisites in 2006 and beyond, please see our web page at http://www.umflint.edu/pt/. The following substitutions may be made:

## SCIENCE

CHM 150 General Chem for Health Science
CHM 151 Chem Lab for Health Science OR 160, 161, 162 \& 163
Transfer students may substitute a 1 semester survey course with laboratory in general chemistry for health sciences, or a 2 semester sequence in general chemistry, with laboratory, to meet this requirement.
CHM 160 Principles of Chemistry I
CHM 161 Intro to Quantitative Analysis Lab I
CHM 162 Principles of Chemistry II
CHM 163 Intro to Quantitative Analysis Lab II
CHM 220 Fundamentals of Organic Chemistry
CHM 350 Intro to Bio Chemistry
BIO 111 Organismal Biology
BIO 113 Principles of Biology (preferred) (OR) BIO 328 Genetics
BIO 326 Cell Biology
BIO 432 Mammalian Physiology (OR) BIO 167, Anatomy and Physiology I AND BIO 168, Anatomy and Physiology II.
Transfer students may substitute an upper level (300-400 course number) mammalian or human physiology course
PHYS 143 College Physics I
PHYS 145 College Physics II
MATH
MATH 120 Pre-Calculus
BIO 404 Biostatistics (preferred), OR PSY 301 OR SOC 215
PSY 301 Basic Statistics
SOC 215 General Statistics

## SOCIAL SCIENCE

| 1 course | Sociology |
| :--- | :--- |
| 2 courses | Psychology |
| PSY 100 | Principles of Psychology |
| PSY 237 | Intro to Developmental Psychology |

## COMPUTER SCIENCE

CSC 121 Using a Computer System I
CSC 123 Word Processing OR Computer Literacy Form Transfer students may demonstrate computer literacy with 3 semester hours of computer science credit.
B. General Education Requirements. If you currently hold a baccalaureate degree, you will need science, math, social science and computer science prerequisites only.

ENG 112 English Composition
3 hours
Fine Arts

Nine credits from among the courses listed below, including courses from both of the following categories.
vil. Courses that present and critically examine different theories and types of reasoning involving diverse values in such areas as ethics, politics, religion, art, and literature.
AFA/PHL 205, African Religions and Philosophy, $h$ AFA/ANT 369, African Religions
ENG 241, Elements of Literary Analysis, $h$
ENG/PHL 373, Philosophy in Literature, $h$
HIS 360, An Introduction to Holocaust History, $s$
HIS 387, Islam and Political Change, $s$
HON 251, Great Ideas I, $h$ or $s$
HON 252, Great Ideas II, $h$ or $s$
PHL 162, Introduction to Ethics, $h$
PHL 165, Philosophy of Religion, $h$
PHL/NSC 168, Introduction to Bioethics, $h$
PHL 261, Morality and its Foundations, $h$
PHL 272, Philosophy and the Environment, $h$
PHL 320, Computers and Society, $h$
PHL 361, The Study of Ethics, $h$
PHL 368, Social and Political Philosophy, $h$
PHL 376, Existentialism, $h$
POL 120, American National Government and Politics, $s$
POL 261, Contemporary Ideologies, $s$
POL 365, Marxist Political Thought, $s$
POL 380, The American System of Law, $s$
SOC 384, Criminology, $s$
vi2. Courses involving rigorous thinking about value-laden issues.
AFA 363, Black Cultural Criticism
AFA 358/HIS 359, The History of African-American Religion, s
AFA/SOC 270, Race and Ethnic Relations, $s$
BIO 314, The Evolution Controversy
COM/LIN 231, Language and Law
COM/PHL 163, Rhetoric of Hate and Fear, $h$
ENG 353, American Poetry in the Modernist Tradition, $h$
ENG 383, Modern Novel, $h$
ENG/WGS 228, Women and Literature, $h$
ENG/WGS 337, Topics in Women's Literature, $h$
HCR/PHL 304, The Ethics of Health Care, $h$
PHL 160, Values in Contemporary Life, $h$
PHL 167/WGS 167, Race, Gender and Sexuality, $h$
PHL 266, Philosophy of Art, $h$
PHL 271, Ethics in Business, $h$
PHL 362, Philosophy of Law, $h$
PHL 364, Philosophy, Work, and Economic Freedom, $h$ PHL/WGS 264, Introduction to Feminist Theory, $h$
PHL 374, Philosophy and Children's Literature, $h$
PHL/THE 372, Philosophy in Film and Literature, $h$
POL 329, Civil Liberties and the Constitution, $s$
POL 381, The Bill of Rights, $s$
POL 387, Sex, Drugs, and Politics, $s$
PSY 230, Psychology of Adjustment, $s$
SOC/WGS 354, Sociology of the Family, $s$
SWK 200, Introduction to Social Work, $s$
SWK 300, Mental Illness and Social Work Practice, $s$
C. Application Process. If you are applying for admission beginning 2006, please see our web page at http://www.umflint.edu/pt/.

If you are currently a UM-F student, you will need to complete the following steps:

1. Complete an Intra-Campus transfer request available at the

Office of Admissions and Recruitment.
2. Prerequisites must be completed prior to the beginning of the Physical Therapy curriculum. A student may apply with some prerequisites remaining to complete, however, all prerequisites must be completed prior to the beginning of Physical Therapy Classes. All prerequisite courses must have a grade of C - or better if taken at University of MichiganFlint, or a C or better if prerequisites are taken elsewhere.
3. The Office of Admissions and Recruitment will calculate the GPAs for applicants. Qualified applicants must have the following Grade Point Averages (GPA): Prerequisite GPA 2.5; Science Prerequisite GPA 2.5; Early Admission GPA: 3.0
4. The Office of Admissions and Recruitment will evaluate your transcript. The Physical Therapy department will send a letter of deficiency outlining coursework lacking or that does not meet requirements. The applicant must respond to this letter with an educational plan in order to receive a Supplemental Application which will be mailed to the student once all other application documents are submitted.
5. Supplemental application. Components of the supplemental application include: essay questions about the applicant's life experiences and exposure to physical therapy, a reference form from a physical therapist who has observed the applicant, a reference form from a university professor who has taught the applicant, and the Clinical Observation Hours form. A minimum of 60 hours of observation, under the supervision of a licensed physical therapist in 3 or more different patient settings is preferred. The clinical experience may be as a student, volunteer or employee. The different patient settings may be at one site with three different types of clinical experiences, eg., a hospital where both in-patient and out-patients are seen or a clinic where pediatric and geriatric patients are seen.
6. Deadlines: Early Admissions: University Application October 15th; Supplemental Application - November 20th. Standard Admissions: University Application prior to February 15th; Supplemental Application -February 15th

If you are a student transferring in from another university, you will need to complete the following steps:

1. Apply to the University. You can contact the Office of Admissions and Recruitment at (810) 762-3300 or apply online at www.umfliint.edu/departments/admissions.
2. Prerequisites List. An authorized transcript from all colleges/universities is required for the Office of Admissions and Recruitment to determine course equivalency of the prerequisites taken.
3 Prerequisites. All prerequisite courses not taken at UM-F must have a grade of C or better. C- or better if taken at UMF. The following GPA's are needed for consideration to enter the program: Prerequisite GPA: 2.5; Science Prerequisite GPA: 2.5; Early Admission GPA: 3.0.
3. The Physical Therapy department will send a letter of deficiency outlining coursework lacking or that does not meet requirements. The applicant must respond to this letter with an educational plan in order to receive a Supplemental Application, which will be mailed to the student once all other application documents are submitted.
4. Supplemental application. Components of the supplemental application include: essay questions about the applicant's life experiences and exposure to physical therapy, a reference form from a physical therapist who has observed the applicant, a reference form from a university professor who has taught the applicant, and the Clinical Observation Hours form. A minimum of 60 hours of observation, under the supervision of a licensed physical therapist in 3 or more different patient settings is preferred. The clinical experience may be as a student, volunteer or employee. The different
patient settings may be at site with three different types of clinical experiences, eg. a hospital where both in-patient and out-patients are seen or a clinic where pediatric and geriatric patients are seen.
5. Deadlines: Early Admissions: University Application October 15th; Supplemental Application - November 20th. Standard Admissions: University Application prior to February 15th; Supplemental Application -February 15th

## International Students must complete the following steps:

1. Apply for admission to the University of Michigan-Flint. The application is available on the web at www.umflint.edu/admissions.
2. Prerequisite List. International students who have taken prerequisites in a foreign country must have their transcripts reviewed and evaluated by a credentialing service. A list of credentialing agencies is available from the Office of Admissions \& Recruitment, 245 Pavilion, University of Michigan-Flint, Flint, MI 48502-1950 Phone: (810) 7623300.
3. All prerequisite courses not taken at UM-F must have a grade of C or better. The following GPA's are needed for consideration to enter the program: Prerequisite GPA: 2.5; Science Prerequisite GPA: 2.5; Early Admission GPA: 3.0.
4. The Physical Therapy department will send a letter of deficiency outlining coursework lacking or that does not meet requirements. The applicant must respond to this letter in order to receive a Supplemental Application, which will be mailed to the student once all other application documents are submitted.
5. Supplemental application. Components of the supplemental application include: essay questions about the applicant's life experiences and exposure to physical therapy, a reference form from a physical therapist who has observed the applicant, a reference form from a university professor who has taught the applicant, and the Clinical Observation Hours form. A minimum of 60 hours of observation, under the supervision of a licensed physical therapist in 3 or more different patient settings is preferred. The clinical experience may be as a student, volunteer or employee. The different patient settings may be at at one site with three different types of clinical experiences, eg. a hospital where both in-patient and out-patients are seen or a clinic where pediatric and geriatric patients are seen.
6. For information concerning VISA's while studying at University of Michigan-Flint, please contact Sue Taylor, International Student Advisor in the Office of Admissions and Recruitment

NOTE: For any student whose native language is not English, evidence of proficiency in English is required. Either the Test of English as a Foreign Language (TOEFL) or the Michigan English Language Assessment Battery (MELAB) is necessary to meet this requirement. Such students must obtain a score of at least 550 on the TOEFL (above a 213 on the computer-based scale) or 85 percent on the MELAB in order to qualify for admission.

## Part-Time Doctor of Physical Therapy Program

The University offers a part-time course of study that, when completed, awards the Doctor of Physical Therapy (DPT) degree. The part-time program is specifically designed to accommodate those students who are unable or who otherwise choose not to attend the University on a full-time basis. See section on admission to the DPT program for requirements and further information.

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 is limited.

The sequence of courses for each student in the part-time program is determined within an established part-time curriculum plan. The part-time program means a reduced credit load per semester and does not imply a limited number of days per week on campus. Since courses are scheduled according to many constraints in the overall program sequence, students in the parttime track may or may not be able to fully elect and schedule courses to meet their own personal, employment or other needs.

## 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 which is established following admission to the program.
C. Complete the professional DPT program within a 6 year period.
D. Enroll as a full-time student in Clinical Education I, II, III and IV (last year of study).
E. Are not eligible for the Physical Therapy Honors Program.

## Criteria for Consideration for Admission to the Professional Doctor of Physical Therapy Program

Since the physical therapist works closely with patients who are ill or physically challenged, and also works in cooperation with all types of people, 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.

To be considered for admission, students must meet the following requirements and qualifications by the time they are admitted:
A. Completion of the prerequisite courses for admission.
B. Ability to complete the general education requirements of the University of Michigan-Flint by the end of fall, Year 4 to receive a BS in Health Science if a pre-existing baccalaureate degree has not been earned.
C. Knowledge of the role of the physical therapist.
D. Overall prerequisite grade point average of at least 2.50
E. No grade less than C- (C for transfer students) in the major basic science courses (biology, chemistry, physics) and a science grade point average of at least 2.50 .
F. Acceptable expressive and receptive written and oral communication skills, personal maturity, and capacity for leadership.
G. Capacity to complete the course of studies in the usual time schedule independent of personal responsibilities or obligations.
H. Willingness to abide by the policies and procedures of the Physical Therapy Department and the School of Health Professions and Studies.
I. Completion of the appropriate applications to the University and the program.
J. Each applicant will be required to submit one reference form from a licensed physical therapist and a second reference form from a university professor who has taught the student. The forms are supplied with the Supplemental Application.
K. Ability to function well in a collegial setting and in a profession that requires self-motivation, self-regulation, and accountability.
L. Willingness to learn and adopt professional behaviors (generic abilities) acceptable within the physical therapy profession.

Attendance at Physical Therapy Department Applicant Orientation Session is optional, but applicants are urged to attend. Contact the Physical Therapy Department at 810-7623373 for further information.

## Costs

Students should be aware that they will be required to purchase uniforms, evaluation tools to be used in the classroom or clinical practice, professional liability insurance, and professional textbooks. Clinical Education I, II, III and IV requires that many of the students go outside 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 of the facilities no longer provide housing arrangements. A physical examination, immunizations, TB test, proof of CPR certification and health insurance will be required of students at their expense at appropriate points throughout the program. Part-time employment is discouraged during the professional part of the DPT program because of demands on students due to the nature and scheduling of the program. Current estimates for costs which 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 for 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 such 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 their consideration the description of job duties of a
physical therapist in the Dictionary of Occupational Titles, 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 in 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 special resources needed provided by the University if it is reasonably capable of doing so.

Given the above, the possibility exists that a student may be admitted whose needs cannot be reasonably accommodated. 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, Room 264 UCEN, University of Michigan-Flint, Flint, MI 48502. Phone: (810) 762-3456, TDD (810) 766-6727.

## Maintenance of Quality

Students are expected to maintain satisfactory performance with regard to their academic standing, clinical practice, and ethical conduct. While engaged in the professional portion of the 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.

## Academic Regulations and Procedures

All regulations of the University of Michigan-Flint apply to students in the Physical Therapy Department, School of Health Professions and Studies. The student should note these regulations printed in subsequent 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; C, fair; D, poor; E, failure; I, incomplete; Y , work in progress; W , officially withdrawn (without penalty). The following scale is used in computing grade-point averages:

| Letter Grade | Honor Points |
| :---: | :---: |
| A+ | 4.0 |
| A | 4.0 |
| A- | 3.7 |
| B+ | 3.3 |
| B | 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 the total number of honor points by the 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 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. After the end of the semester a copy of the official grade report is mailed to each student at the address of record.

## Credit Without Grade (Pass/Fail)

The pass/fail option applies only to specific courses so designated in the course schedule by individual School of Health Professions and Studies 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. 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 that, the student must obtain a drop/add form from the administrative associate and have it signed by the instructor or instructors concerned. The student continues to be registered in the class of original choice until the drop/add form, properly signed, has been returned 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. It is the student's responsibility to be knowledgeable of university and/or school guidelines for making changes in course elections.

Granting withdrawal from the Professional DPT Program (with intent to return) is a prerogative of the Physical Therapy Department Faculty.

## Recognition of Superior Scholarship

A full-time student who earns a 3.5 grade point average for any semester receives the honor of being designated a "University of Michigan-Flint Scholar" for that semester. In computing averages, only courses taken at the University of Michigan-Flint or in another school or college of the University of Michigan are included, and only complete terms are counted.

Graduating seniors with grade point averages of 3.5 or higher, based on the last 45 credits completed in the School of Health Professions and Studies and excluding credits earned on a pass/fail basis, are recommended for the BS in Health Science "with 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 DPT program.

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

## 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 phase of the DPT program any student whose academic standing, in the judgment of the faculty, is regarded as unsatisfactory.

Unsatisfactory academic performance is defined as any student receiving less than a C- (B- if graduate student) or P in any support or core course, less than a 2.5 GPA in any given term ( 3.0 if graduate student) or less than a 3.0 cumulative grade point average at the conclusion of fall semester, year 4.

The academic records of all students are reviewed at the end of each semester by the administrative staff of the Physical Therapy Department. Students whose academic performance is unsatisfactory will be informed orally and in writing by the Director of the Department that they are being subjected to the academic discipline policy and that the matter will be reviewed at a forthcoming meeting of the faculty and director. The complete policy can be found in the Physical Therapy Department Student Handbook.

## Appeals Procedure

Students admitted to the 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 Affirmative Action Coordinator or the Dean of the School of Health Professions and Studies. Formal complaints must be filed with the Office of Equity and Diversity Services.

## Further Information

The University of Michigan-Flint provides complete information and counseling for prospective students. In writing for information, the student should indicate educational background, work experience, and educational objectives. The University of Michigan-Flint then sends the student a variety of printed materials designed to provide necessary information. For students exploring both a career and the educational program at UM-F, the Physical Therapy Department offers a pre-physical therapy course, PTP 201, Introduction to Physical Therapy. Check the current course catalog for course scheduling.

Trips to the campus for conferences and visits to instructional facilities are the best ways to procure information and to make educational plans. If a visit to the University of Michigan-Flint is feasible, requests for appointments should be made in advance and two or three dates suggested. Appropriate arrangements are made for the visit and the student is so notified.

A student who wishes to discuss the probability of admission should submit an application for admission before the visit to campus. For these services, contact the Office of Admissions and Recruitment.

## Sequence Requirements

Courses in the professional preparation program are intended to be taken in the sequence described. It is important for students to recognize that the Physical Therapy Professional Preparation Program is not a series of courses but rather a professional preparation program in which appropriate sequence is critical for assuring intended educational outcomes. Waiver of courses in Years 3-5 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

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 and SOC 323.
331. Clinical Orientation I. Admission to the professional program in physical therapy. (1).

Planned clinical learning experiences 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.
341. Clinical Orthopedics. Admission to the professional program in physical therapy. (2).

Coordinated presentation of information from various health care professionals. Provides foundations for physical therapy courses which develop clinical skills in the evaluation and treatment of orthopedic conditions. Lecture and demonstration.
343. Introduction to Patient Management. Admission to the professional program in physical therapy. (1).

Introduction to basic concepts of body mechanics, transfers, and mobility training.
346. Pharmacology and Medical Diagnostics. Admission to the professional program in physical therapy. (2).

Basic principles of pharmacology and reference sources available to physical therapy practitioners. Drug usages for eight different systems with emphasis on rationale for use, mechanism of action, side effects, implications for treatment. Common laboratory evaluations, specialized neurological and medical imaging.
362. Functional Anatomy and Kinesiology. Admission to the professional program in physical therapy. (5).

Application of gross anatomy to surface anatomy and kinesiology. Basic principles of normal human movement with their application to the analysis and treatment of physical disabilities. Lecture and laboratory experiences.
363. Medical Terminology. Admission to the professional program in physical therapy or consent of instructor. (1).

Introduction to medical language used in health care settings with focus on terms describing disease states and diagnostic procedures. Also listed as MTP 321.
364. Clinical Observation Skills. Admission to the professional program in physical therapy. (1).

Development of systems of observation utilizing all sensory systems. Experiential methods used to develop observation skills; varied approaches to observation are applied in laboratory and public settings.
365. Evaluation Procedures I. Admission to the professional program in physical therapy. (3).

Lecture and laboratory experiences in manual muscle testing, goniometry, posture evaluation, gait evaluation, evaluation of joint integrity, assessing skin thickness, and palpation of anatomical structures. Overview of data collection methods for various anatomical and physiological systems. Relates to content presented in clinical orthopedics.
380. Professional Orientation. Admission to the professional program in physical therapy. (1).

Introduction to physical therapy and to the developments and trends influencing the profession; professional ethics, standards of practice, and relationships with other health care disciplines.
381. Foundation of Teaching and Learning in Physical Therapy. Admission to the professional program in physical therapy. (3).

Introduction to principles of teaching and learning as applied to professional and patient education, patient compliance, and other relevant educational situations. Basic principles of communication applied to health professional/patient interaction and intra- and inter-disciplinary communications.
382. Development and Maturation Throughout Life Stages. Admission to the professional program in physical therapy. (3).

Provides a basic understanding of biological aspects of development, maturation and aging. Addresses the progression of psycho-motor skills throughout life stages and the interaction of psycho-motor development with cognitive and affective development at each phase of development.
385. Impact of Physical Disability on Psycho-Social Dynamics I. Admission to the professional program in physical therapy. (1).

Fundamental elements of the psycho-social dynamics relevant to disability. Focuses on interactions between family, health care professionals and society. Attention given to reactions to disability, adjustments to disability and the role of the therapist as a vehicle for productive adjustment.
400. Independent Study. Admission to the professional or postprofessional 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.
410. (310). Human Anatomy. BIO 432, or 167 and 168; admission to the professional program in physical therapy or consent of instructor. (6).
Detailed study of the gross structure of the human body. Laboratory involves cadaver dissection. Lecture and laboratory. Also listed as BIO 434.
412. (312). Neuroscience. BIO 434/PTP 410; admission to the professional program in physical therapy or consent of instructor: (3).

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 recitation/laboratory. Also listed as BIO 482.
413. (313). Lectures in Histology and Organology. BIO 111, 113, 326; or consent of instructor; admission to the professional program in physical therapy or concurrent enrollment in BIO 410. (3).

Microscopic structure and function of mammalian cells, tissues and organs. Lecture. Also listed as BIO 409.
414. Pathology. BIO 111, 113, 326, 432; admission to the professional or post-professional program in physical therapy or consent of instructor. (3).

Human structural and functional disorders primarily related to physical therapy. Lecture. Also listed as BIO 485. BIO 425 and BIO 485/PTP 414 cannot both be counted toward a Biology major.
415. Application of Exercise Physiology to Physical Therapy Practice. BIO 111, 113, 326, 432; admission to the professional or post-professional program in physical therapy or consent of instructor. (4).

Detailed study of the physiological basis of exercise. Includes lecture and laboratory.
421. Evaluation Procedures II. Admission to the professional or post-professional program in physical therapy. (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.
441. Clinical Neurology. Admission to the professional or postprofessional 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.
450. Physical Agents I. Admission to the professional or postprofessional program in physical therapy. (3).

Physical basis and physiological effects of superficial heat and cold, massage, diathermy, ultrasound, and ultraviolet; practice in therapeutic application. Lecture and laboratory experiences.
460. Introduction to Critical Inquiry. Admission to the professional or post-professional program in physical therapy or graduate standing. (3).

Introduction to principles and methods of research with special applications to research in physical therapy. Foundation for subsequent research courses in the professional program.
480. (361). 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 professional or postprofessional program in physical therapy. (1).

Seminar focusing on moral issues for physical therapists. Also listed as HCR 507.
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.
532. (432). 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. (433). 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 postprofessional 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.
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.
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.
540. (440). 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 multidisciplinary invention approach.
541. (422). 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.
544. (444). 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. (445). 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.
551. (451). 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.
561. (461). 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.
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.
570. (470). 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. (471). 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.
581. (481). Foundation of Teaching and Learning in Physical Therapy. Admission to the post-professional program in physical therapy or graduate standing. (3).

Introduction to principles of teaching and learning as applied to professional and patient education, patient compliance, and other relevant educational situations. Basic principles of communication applied to health professional/patient interaction and intra- and inter-disciplinary communications.
582. (482). Development and Maturation Throughout Life Stages. Admission to the post-professional program in physical therapy or graduate standing. (3).

Provides a basic understanding of biological aspects of development, maturation and aging. Addresses the progression of psycho-motor skills throughout life stages and the interaction of psycho-motor development with cognitive and affective development at each phase of development.
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.
590. Physical Therapy Management of Complex Clinical Problems. Admission to the professional or postprofessional program in physical therapy. (3).

Clinical judgment and decision making. Clinical problems such as spinal cord injury, stroke, pain and developmental disabilities considered from a holistic perspective with attention given to initial through final discharge decisions.
591. Ethics in Health Care in Physical Therapy. Admission to the professional or post-professional 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 professional or post-professional program 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 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 postprofessional 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 postprofessional level program in physical therapy. (1-6).

Planning clinical learning experiences in a specialty area of physical therapy in designated clinical education sites.
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.
702. Clinical Decision Making in Physical Therapy Practice. Admisstion to professional physical therapy program. (2).

A case-study course employing evidence based practice in a
direct access setting with emphasis on decision making with regards to keep/refer consultation, and the determination of medical emergencies.
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.

## School of Management Program

The University of Michigan-Flint offers one graduate degree through the School of Management: the Master of Business Administration (MBA). This part-time program is offered in two tracks to accommodate working adults: a traditional evening classroom format or a mixed-mode (online and weekend classroom activities) NetPlus! MBA. School of Management business programs are accredited by AACSB INTERNATIONAL, The Association to Advance Collegiate Schools of Business. http://www.AACSB.edu.

## Admission to the MBA Program

Applications for admission are available from the School of Management MBA Program Office, the MBA website, http://www.umflint.edu/departments/som, or from the Office of Graduate Programs. Admission procedures include filing a completed application, an official transcript from each college or university attended, a resume of work and related experience, three letters of recommendation, and the scores on the Graduate Management Admission Test (GMAT). Priority application deadlines are August 1 for fall entry, December 1 for winter entry, and February 1 for spring entry. Completed files received by the deadline receive priority in review; files completed after the deadline are reviewed if seats remain.

The School of Management Graduate Committee weighs these materials in admissions 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 diverse, wide ranging experiences and perspectives. Applicants are admitted to a specific class with a specific starting date. Each class is limited in size.

## Master of Business Administration (MBA)

3177 William S. White Building
(810) 762-3163

Dean: I. Douglas Moon
Associate Dean: Keith Moreland
MBA Program Coordinator: D. Nicol Taylor

## 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 community 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 MBA program provides:
A. Convenient accessible delivery in two tracks: (1) Traditional evening classes and (2) NetPlus! MBA, a mixed-mode combination of online learning and weekend residencies. Visit http://www.umflint.edu/departments/som for detailed information on both tracks.
B. Understanding of the basic disciplines and skills important to decision making: behavioral science, economics, communication, and quantitative methods.
C. Knowledge of the functional areas of business: accounting, finance, human resource management, 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. Flexibility beyond the fourteen required courses that allows focus of the MBA educational experience in a manner most meaningful to the individual student. A choice from each of the following two groups completes the student's 48 semester hour MBA curriculum.

1. A course in marketing (MGT 532), contemporary issues in management (MGT 549), finance (MGT 562), quality management (MGT 573), accounting (MGT 522, 525 or 567), or selected topics in management (MGT 599).
2. A choice of the three one-credit selected readings courses (MGT 502, 503 and 504, as a group), a second course* from the list in group 1 above, or completion of an independent project (MGT 591).

* Because of scheduling constraints, selecting a second course from group 1 might require more than the normal elapse time to complete the traditional MBA program.


## Modes of Delivery

A. The Traditional MBA mode of delivery includes on campus classes held in the evenings twice a week with occasional online courses. Normal completion time is 33 months for fall entry and 36 months for winter term entry. Generally, classes are offered during fall, winter and spring semesters, with summers off.
B. The NetPlus! MBA track is a two-year, year-round program divided into eight three-month terms, each consisting of two courses. NetPlus! MBA students begin the program with one full day of orientation on the University of Michigan-Flint campus. The remainder of the term consists of three weeks of online learning, two full days of on-campus classes, six more weeks of online learning, two full days of on-campus class,
and three more weeks of online learning. For additional information, visit the website at http://mba.umflint.edu.

## 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.

## Admission Requirements

Admission to the MBA program is open to qualified graduates of colleges and universities of the United States and elsewhere, whether the bachelor's degree is in the arts, sciences, engineering, or business administration, and without regard to race, color, age, sex, or creed.

In evaluating applications, consideration is given to the applicant's academic record, extracurricular activities, work experience, completed recommendation forms, results of the Graduate Management Admission Test (GMAT), and other indications of aptitude and preparedness for graduate study in management.

Admission to the program is not granted until the following materials are submitted and reviewed:
A. Completed application, including personal statement of objectives.
B. Official transcripts of all completed college work.
C. A professional resume including work experience and extra curricular activities.
D. Three recommendations from professors or employers.
E. Scores from the Graduate Management Admission Test (GMAT), administered by Educational Testing Service.

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.

Admission is granted for a particular starting date. Occasionally, an applicant may be asked to defer starting the program and to join a later class. New cohort groups typically are formed in both January and September for the Traditional MBA mode of delivery and in March and September for the NetPlus! MBA.

Completed applications should be received by the School of Management by the published deadlines. For additional information consult:
D. Nichol Taylor

MBA Program Coordinator
School of Management
303 East Kearsley St.
University of Michigan-Flint
Flint, MI 48502-1950
(810) 762-3163

## Grades and Scholastic Requirements

Grades are assigned by letters, some with + and - suffixes. Grades of P (pass) and F (fail) do not affect the grade point average. 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 |
| B | 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 MBA program.

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. Credit toward satisfaction of degree requirements is not granted for courses in which a grade below a C (e.g., C-) is received.

## 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. All requirements must be completed within seven calendar years of initial enrollment in the program.
A. Satisfactory completion of the following 48 Management credits:

1. Functional.

MGT 521, 531, 542, 561, 571.
2. External Environment.

MGT 551, 552, 585.
3. Managerial Support.

MGT 501, 511, 512, 541.
4. Integrative.

MGT 581, 589.
5. Focus Electives. One from each group, or two from Group a:
a. MGT 522, 525, 532, 543, 549, 562, 567, 573, 599.
b. MGT 502, 503, 504, 591 or a graduate-level course outside the School of Management approved by the SOM Graduate Programs Committee.
B. An overall grade point average of at least 5.0 is required for program completion. A grade point average of less than B (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.
C. Transfer credit is accepted only in unusual circumstances and then only by approval of the SOM Graduate Programs Committee. Such credit, when approved, is limited to no more
than nine credits and must have been completed 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.
D. With the approval of the SOM Graduate Programs Committee, students with appropriate undergraduate coursework may be allowed to take proficiency examinations for no more than two of the following four courses: MGT 511, 512, 521, 531. Passing a proficiency examination does not generate credit toward the 48 credit hours required for completion of the MBA Program. Substitute coursework must be elected from either the MBA elective option courses MGT 502, 503, 504, 522, 525, 532, 543, 549, 562, 567, 572, 573, 591, and 599 (assuming that the course(s) selected are not being used to meet other program requirements), or from any other 400 -level or higher course for which the student meets the prerequisite requirement and which is not an undergraduate version of an existing MBA course. The number of courses in which students may request proficiency examinations is reduced by one for each three-credit course transferred into the program. Students who have CPA standing may elect to substitute a graduate-level, 3-credit course for MGT 521.

The MBA program typically requires 33 calendar months to complete 48 semester hours. Students attend three terms and take five courses each year. The academic year begins in early September and ends in late June.

## Sample Calendar (Traditional Track)

Following is a typical calendar illustrating the sequence of management courses for those students entering the traditional track of the program in the fall. The calendar for those entering in the winter is similar. This calendar is subject to change and students are notified of specific courses offered each semester.

## Year One

Fall Semester: $\quad$ MGT 501, 552.
Winter Semester: MGT 521, 541.
Spring Term*: MGT 511.
Year Two
Fall Semester: MGT 551.
Winter Semester: MGT 531, 581.
Spring Term: MGT 571.

## Year Three

Fall Semester: MGT 585.
Winter Semester: MGT 542, 589.
Spring Term: Focus Elective*.

* MGT 502, 503, 504 (1 credit each) offered each semester, or MGT 591 or a second area of focus course from MGT 522, $525,532,543,549,562,567$ or 599 ( 3 credits).


## BBA/MBA Joint Program

Dean: I. Douglas Moon<br>MBA Program Coordinator: D. Nichol Taylor

This program is designed to provide an opportunity for undergraduate students to enter into the MBA program during the junior year and thereby reduce by one or two years the usual pattern of a four-year full-time undergraduate degree and threeyear part-time MBA degree. The BBA (with Accounting Concentration)/MBA Joint Program is designed for students who
wish to take the CPA Exam in states that require 150 semester hours of university education.

Admission Requirements. Enrollment in the joint program is limited to those students who have demonstrated superior academic performance and capabilities. Suitability of a candidate for the BBA/MBA program will be based upon a review of:
A. Undergraduate GPA of 3.5 or better at the time of application.
B. Score on the Graduate Management Admission Test (GMAT), administered by the Educational Testing Service. (The GMAT should be taken during the junior year and all application materials should be submitted prior to senior year.)
C. Two letters of recommendation, at least one of which is from a SOM faculty member.
D. Essay (approximately one page) explaining personal career or other goals related to enrollment in the BBA/MBA program.

## BBA/MBA Course Waiver Policies

The following waiver policies are designed to provide a more flexible and diversified program of study for the BBA/MBA student. These policies are intended not to compromise the quality of the joint degree program, but instead to minimize possible overlaps that may exist between certain undergraduate and graduate courses, thereby enabling the student to enhance the educational experience by enrolling in other elective courses. No credit hours are given for waived MBA courses. BBA/MBA students may waive the following graduate courses by receiving a grade of B (3.0) or better in the corresponding undergraduate course(s): MGT 511 (BUS 211), MGT 512 (BUS 313), MGT 531 (BUS 330), MGT 561 (BUS 361), MGT 571 (BUS 371), MGT 581 (BUS 381).

## Requirements of the BBA/MBA Program

To be eligible for the Bachelor of Business Administration and Master of Business Administration degrees in the joint program, students must satisfy the following requirements:
A. Completion of specific course requirements in English, mathematics, economics, and business administration at the undergraduate and graduate levels (including ECN 201 and 202, MTH 118 and BUS 105/110), totaling 150 or more credits.
B. Completion of at least 45 credit hours in undergraduate business courses, including at least 33 credits in upperdivision (300 and 400 level) courses.
C. Achievement of minimum grade point averages of 2.0 in the overall undergraduate college work, 2.0 in undergraduate courses taken in the School of Management, 2.0 in the (undergraduate) concentration program, and 5.0 (B) in graduate courses taken in the School of Management.
D. Completion of at least 30 undergraduate credits after admission to the School of Management.
E. Completion of at least 27 credit hours of undergraduate business courses at the University of Michigan-Flint.
F. Completion of at least 60 credits in undergraduate courses
other than business, including the general education requirements.
G. Completion of at least 45 undergraduate credits while enrolled at the University of Michigan-Flint (in residence).
H. Registration as a BBA/MBA degree candidate at the University of Michigan-Flint for the last 30 credits (senior year enrollment).
I. Completion of COM/ENG 338.
J. Completion of a two-course, non-business focus from any one area, such as: economics, communications, computer science, foreign language, history, or international studies. Specific listings of approved courses in each topic area are posted in the SOM BBA Academic Program Office.
K. Completion of the following School of Management undergraduate core courses: BUS 181, 201, 202, 211, 250, 313, 330, 341, 361, 371, 381, and 385. (See item P below. Also a student who prematurely terminates the combined degree program and obtains only a BBA degree must take BUS 489.)
L. Completion of the additional requirements for an undergraduate concentration in general business, accounting, finance, marketing, operations management, or organizational behavior and human resources management.
M. Completion of at least 30 graduate credit hours.
N. Completion of MGT 501, 521, 541, 542, 551, 552, 585, 589. Students with a significant accounting background are strongly recommended to complete an MBA accounting elective (MGT 522, 525 or 567) in lieu of MGT 521; students with an undergraduate concentration in accounting are not permitted to enroll in MGT521.
O. Completion of two MBA focus electives.
P. Completion of any of the following courses for which the grade in the similar undergraduate course (indicated in parentheses) was not a B or better: MGT 511 (BUS 211), MGT 512 (BUS 313), MGT 531 (BUS 330), MGT 561 (BUS 361), MGT 571 (BUS 371), MGT 581 (BUS 381).

## CPA Exam Requirements

In conjunction with the requirements above, students in the BBA/MBA Joint Program who wish to take the CPA Exam in states that require 150 semester hours of university education should qualify to take the exam with the following:
A. Completion of a BBA (Accounting Concentration) including:

1. BUS 320, 321, 322, 323, 324 ( 1 credit), 421 and 424
2. Up to two (see below) of: BUS 422, 425, 467.
B. Up to two of the following recommended, so long as the similar undergraduate course (indicated in parentheses) has not been completed: MGT 522 (BUS 422), MGT 525 (BUS 425), MGT 567 (BUS 467).

A student considering the joint BBA/MBA program should meet with a SOM academic advisor as early as possible to outline the specific curriculum based on his/her educational background and goals.

## Courses in Management (MGT)

These courses are open only to students formally admitted to the MBA or the BBA/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. Not open to students who have completed MGT 543.

## 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 the great minds of our civilization. May include political theory, philosophy, futurism, economics, leadership and management. Successful completion of course requirements determined by short papers. Graded Pass/Fail.
511. Managerial Statistics. Two semesters of appropriate college mathematics. (3).

Survey of statistical techniques for business and economic decision making. Review of probability, estimation, and sampling techniques; testing of hypotheses; correlation and regression analysis, including multiple regression; analysis of variance; chi-square tests; time series forecasting. Computer packages for data analysis. Emphasis on application of techniques for business decision making.
512. Applied Quantitative Analysis. MGT 511. (3).

Formulation and solution of quantitative models for decision making. Linear programming, including simplex method, dual problem and sensitivity analysis, and transportation method; integer programming; dynamic programming; nonlinear optimization; network analysis - PERT, CPM; simulation techniques; queuing theory and Markov processes. Computer packages used throughout course.
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. BUS 323 or equivalent, or consent of instructor (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.
525. Advanced Financial Reporting. BUS 321 and 322 or equivalent, or consent of instructor (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.
531. Marketing Management. MGT 511. (3).

Introduction to marketing management. Marketing environment, markets, buyer behavior and characteristics, market segmentation and target marketing, product policies, promotion strategies, distribution and pricing decisions. Case studies in consumer, industrial, and international marketing.
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.
541. Organizational Behavior. (3).

Theories and research evidence of individual, interpersonal, small group, and organizational behavior for more effective management. Values, attitudes, motivation, and satisfaction; interpersonal relationships; small group behavior including leadership, conflict management, and team development; classical and contemporary theories of management including matrix management, organic versus mechanistic, structure as a function of process, and culture.
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.
543. Interpersonal and Communication Skills. (3).

Experiential focus on developing skills necessary for effective management. Self-presentation, interpersonal influence, counseling, feedback and performance appraisal, process observation, bargaining and negotiating. Not open to students who have completed MGT 501.
549. Contemporary Issues in Management. (3).

Applied research and discussion of recent developments and trends that affect organizational behavior and human resource management. Students complete projects, special reports, and presentations that provide in-depth and hands-on exploration of the selected topics.
551. Business Economics. MGT 511; principles of economics helpful. (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 Its Environment. (3).

External environment (social, political, legal) within which organizations operate, primarily from corporate manager's viewpoint, including attention to ethical considerations. Public issues management within the corporation, including environmental scanning, public policy analysis, and political action. Conducted primarily as a case discussion course.
555. Managerial Economics. MGT 551. (3).

Application of economic theory to issues faced by managers, including idenifying goals and constraints, recognizing the nature of profit, understanding and implementing incentives, understanding different types of markets, and recognizing the time value of money. Varieties of graphical and quantitative techniques are employed in studying these issues. Also listed as ECN 569. Not open to students with credit for ECN 469.
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. Corporate Finance. MGT 561. (3).

Emphasis on application of tools of financial decision-making to actual business problems within a case study and discussion format. Traditional topic areas such as working capital management, capital budgeting, capital structure and leverage, dividend policy, techniques, mergers and acquisitions, as well as an introduction to new developments in corporate financing.
567. Financial Statement Analysis. MGT 561 or equivalent. (3).

The course focuses 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 are employed. Emphasis on real world cases, research, and communication of results through written reports and presentations.
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 consent of instructor. (3).

Topics include 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, problemsolving methods, quality engineering (Taguchi methods), reengineering and quality function deployment also will be discussed with emphasis on applications.

## 581. Integrated 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).

This course is designed to help the student understand the relationship between business strategy and structure, within the global context; including how managerial actions impact global strategy. The course will further develop the participant's 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).

Development of a framework for strategy formulation and implementation. Identification of threats and opportunities; assessment of strengths and weaknesses; evaluation of alternatives. Study of the organization and its environment as viewed by its top management. Cases used to offer student experience in analyzing, synthesizing and presenting policies and action plans.
591. Applied Research Project. Third year of program; selection and agreement of advisor. (3).

Applied research project; in-depth study of a management problem. Student completes a project demonstrating command of the material, ability to relate it to a real problem, and an analysis and conclusions. Student encouraged to choose a jobrelated topic, the solution of which will benefit the student's employer and career. Student works independently with guidance of a faculty advisor of his or her choice.
599. Special Topics in Management. (3).

Specific topics to be announced in advanced of registration. Offered at irregular intervals.


Campus Wide Programs

## UNIVERSITY HONORS PROGRAM

## 264 Murchie Science Building (Biology Dept.)

326 French Hall (English Dept.)
Program Director: Dr. Maureen Thum
Principal Secretary: Mary L. Packer
Contact Information:
General Information: (810) 762 3360. Ask for Mary Packer.
Honors Director: (810) 7623467 email: mthum@umflint.edu
Program Council: Profs. Lois Alexander (MUS), Janet Barnfather (NUR), Richard Darnell (PTP), Harry D'Souza (MTH), Lauren Friesen (THE), Roy Hanashiro (HIS), Marty Kaufman (ERS), Judith Kollmann (ENG), Gary Pace (BIO).
Department Representatives: Profs. Ernest Emenyonu (AFA), Gary Pace (BIO), Virgil Cope (CHM), Steve Ralston, Dorothy Filak (COM), Larry Koch (CRJ), Mojtaba Vaziri (CSC/PHY/EGR), Martin Kaufman, Randall Repic (ERS), Mark Perry (ECN), Susan Woestehoff, Eric Worch (EDU), Judith Kollmann (ENG), Imane Hakam (FRN), Roy Hanashiro (HIS), Harry D'Souza (MTH), Lois Alexander (MUS/ART), Janet Barnfather (NUR), Richard Gull (PHL), Richard Darnell (PTP), Peggy Kahn (POL), Susan GanoPhillips (PSY), Albert Price (PUB), Betty Velthouse (SOM), 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, social sciences and area options). 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.

Area Options. One of the two required area options must be in a foreign language.

## Requirements.

A. HON $155,156,251,252$.
B. Completion of the foreign language area option 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).
2. 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).
3. 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 OffCampus 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 the proposal.
- 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 OffCampus 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 OffCampus 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.

A. 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.

Area Options. One of the two required area options must be in a foreign language, as stated in the University Honors Scholar Program.

## Requirements.

A. Completion of requirements for a BA, BS, BME or BBA.
B. Completion 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) $h / w c 2$.

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 $A B C>N$.
156. Great Books II. HON 155 or consent of Honors Director. (5)h/wc2.

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 $A B C>N$.
251. Great Ideas I. HON 156. (3)h or s/vil.

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 hor s credit applies. Graded $A B C>N$.
252. Great Ideas II. HON 251. (3)h or s/vil.

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 hor $s$ credit applies. Graded $A B C .>N$.
292. Directed Reading. Consent of Honors Program Director. (1-3)h or $s$.

May be reelected to a total of six credits.
355. Great Books. Acceptance into the Junior/Senior Honors Program. (3-5) h/wc2.

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.
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.
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.
498. (390). 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 $A B C>N$.

## International and Global Studies

238 Theatre
(810) 762-3230

Website: http://www.flint.umich.edu/departments/internatl
Director: Dr. Lauren Friesen (THE)
Associate Director: Dr. Seyed Mehdian (SOM)
Core Faculty: Song Ci (CSESP), John Ellis (HIS), Ernest Emenyonu (AFA), Lauren Friesen (THE), Guluma Gemeda (AFA), Matthew Hilton-Watson (FOR), Jeff Kupperman (EDU), Seyed Mehdian (SOM), Kristine Mulhorn (HCR), Beverly Smith (ANT), Sapna Vyas (EDU), Mary Wagner (MUS)

Program Faculty: Madhu Angur (SOM), Philippe Byosiere(SOM), John Ellis (HIS), Iman Hakam (FOR), Roy Hanashiro (HIS), Richard Hill-Rowley (ERS), Peggy Kahn (POL), Martin Kaufman (ERS), Jeff Kupperman (EDU), Jamile Lawand (FOR), Weiqi Li (SOM), Denise Luethge(SOM),Theodosia Robertson (HIS), Judy Rosenthal (ANT), Suzanne Selig (HCR), Ronald Silverman (PSY), Beverly Smith (ANT), Eugene Studier (BIO), Maureen Tippen (NUR), Marsha Watkins (ART), David Wigston (BIO)
Faculty Advisors: Students should contact the Program Director, Dr. Lauren Friesen (THE), 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 cosponsoring 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.
2. 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.
3. 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) $s / c s l$.

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 $A B C D D->N$. Also listed as ANT 100.
112. World History to 1500. (3)s/wcl.

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/wcl.

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/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 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) $s / c s 2$.

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/cs2.

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.
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, 203; BIO 111; 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. (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 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/cs2.

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/cs2.

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 $A B C D>N$.
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 $A B C D>N$.
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 $A B C D>N$.
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 415. Also listed as ANT 515.
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 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.
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.


Campus Directory

## ORGANIZATION OF THE UNIVERSITY

## Regents <br> University of Michigan

David A. Brandon, 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 <br> University of Michigan

Mary Sue Coleman, B.A., Ph.D
President of the University
Paul N. Courant, Ph.D.
Provost and Executive Vice President for Academic Affairs
E. Royster Harper, B.S., M.A.

Vice President for Student Affairs
Robert P. Kelch, M.D., Ph.B.
Executive Vice President for Medical Affairs
Marvin Krislov, M.A., J.D.
Vice President and General Counsel
Daniel E. Little, B.S., Ph.D.
Chancellor, the University of Michigan-Dearborn
Jerry A. May, B.A., M.Ed.
Vice President for Development
Juan E. Mestas, M.A., Ph.D.
Chancellor, the University of Michigan-Flint
Lisa M. Rudgers, B.A.
Vice President for Communications
Timothy P. Slottow, B.A., M.B.A.
Associate Vice President for Finance and Interim Chief
Financial Officer
Fawwaz T. Ulaby, M.S., Ph.D.
Vice President for Research
Cynthia H. Wilbanks, B.A.
Vice President for Government Relations

## Citizens Advisory Committee University of Michigan-Flint

Reverend Thulisiwe Beresford
Rudolph V. Collins
State Senator Bob Emerson
Judge Judith Fullerton
Lee Gonzales
Tim Herman
Paul Keep
Furhat Raja Mansour, D.O.
Ghassan Saab
Kathryn Sharbaugh
Ernestine Smith
Maureen Smyth
Thomas Taylor
David Zick

## Executive Officers

University of Michigan-Flint

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Renate McLaughlin, 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.
Interim Vice Chancellor for Student Services and Enrollment Management

## Academic Deans

University of Michigan-Flint

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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
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
Keith A. Moreland, Ph.D.
Associate 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 Emeritus of Linguistics; Queen's College, B.A.; University of Pennsylvania, M.A.; University of Minnesota, Ph.D.

Bernice F. Blamer (1959-1988), Assistant Professor Emeritus of Education; University of Michigan, A.M.

Harry H. Blecker (1957-1989), Professor Emeritus of Chemistry; Rutgers University, Ph.D.
C. Paul Bradley (1956-1983), Professor Emeritus of Political Science; Columbia University, Ph.D.

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Mary E. Cox (1966), Professor Emeritus of Physics and Engineering; Albion College, A.B.; University of Michigan, A.M; University of California, Los Angeles, Ph.D.

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Theophilus S. Lynch (1966-1993), Professor Emeritus of Spanish \& Comparative Literature; University of Pennsylvania, Ph.D.

Wilfred G. Marston, (1970-2000), Professor Emeritus of Sociology; Seattle Pacific College, B.A.; University of Washington-Seattle, M.A., Ph.D.

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Charlie Nelms (1994-1998), Chancellor Emeritus; Indiana University, Ed.D.

Vincent O'Keeffe (1975-1994), Associate Professor Emeritus of Music; Columbia University, Ed.D.

Maxine H. Perine (1964-1986), Assistant Professor Emeritus of Education; Columbia University, Ed.D.

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Consuela M. Provost, (1972-1999), Professor Emeritus 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.

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Lois M. Rosen (1984-2003), Professor 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.

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Edward E. Sullivan (1966-1998), Professor Emeritus of Education; University of Michigan, Ph.D.

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Charles T. Weber (1977-1994), Associate Professor Emeritus of Economics; Ph.D.

Zelma H. Weisfeld (1960-1989), Professor Emeritus 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.

Dorothea E. Wyatt (1956-1975), Professor Emeritus of History; Stanford University, Ph.D.

## Professors, Associate Professors, Assistant Professors \& Instructors

As of March 1, 2005. Date in parentheses indicates year of initial appointment.

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Agho, Augustine (2001), Dean \& Professor of Health Professions \& Studies; Alaska Pacific University, B.A., Governors State University, M.H.A., University of Iowa, Ph.D.

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Vaziri, Mojtaba (1990), Associate 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.A., University of Michigan, M.B.A., Kent State University, M.A., M.M., A.B.D., Ph.D.

Wall, Harriet M. (1972), Professor of Psychology; Purdue University, B.S.; San Diego State College, M.S.; University of Rochester, Ph.D.

Ware, Robert (2003), Assistant Professor in Business Law; Harvard University, A.B.; M.I.T., S.M.; University of South Carolina, Ph.D.; University of Florida, J.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.

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.

Willoughby-Herard, Tiffany J. (2003), Assistant Professor in Africana Studies; Cornell University, B.A.; University of California, M.A., 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.

Woestehoff, Sue A. (1969), Professor of Education; University of Minnesota, B.S., M.A., Ph.D.

Wong, Victor K. (1968), Professor of Computer Science, Engineering Science \& Physics; University of CaliforniaBerkley, B.S., Ph.D.

Worch, Eric (1998), Associate Professor in Education; Indiana University, B.A., M.A.T., M.A., 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 March 1, 2005.
Curatti, Patricia R. (1999), Clinical Assistant Professor of Physical Therapy; Ohio State University, B.S., M.S.

Huls, Tara A. (2002), Clinical Assistant Professor in Education \& Director of the Early Childhood Development Center; South Dakota State University, B.S.; University of Nebraska, M.S.; University of South Florida, Ph.D.

Kincaid, Cynthia B. (1980), Clinical Associate Professor of Physical Therapy \& Associate Director for Clinical Education; University of Michigan, B.S.; Indiana University, M.S.

Knaack, Brenda M. (1994), Clinical Assistant Professor of Nursing; University of Michigan-Flint, B.S.N., Emory University, M.S.N
Lebeck, Lynn L., (2002), Director, Academic Programs \& Clinical Assistant Professor in Health Sciences \& Administration; University of Detroit Mercy , M.S.; Madonna University, B.S.

Rodda, Becky J. (1996), Clinical Assistant Professor of Physical Therapy; Texas Woman's University, B.S.; Washington University, M.H.S.

Rossman, Carol L. (1996), Clinical Assistant Professor in Nursing; Michigan State University, B.S.N.

Tippen, Maureen (1994), Clinical Assistant Professor in Nursing; Northern Michigan, B.S.N.; Pace University, M.S.

## Librarians

As of March 1, 2005.
Anderson, Vera K. (1997), Associate Librarian; University of Michigan-Flint, B.A.; University of Michigan, M.I.L.S.

Burns, Grant F. (1973), Librarian; University of Michigan, A.M.L.S., A.M.; Michigan State University, B.A.

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 March 1, 2005.
Aanerud, Amrian (2003), B.S., M.S., Lecturer in Computer Science, Engineering Science \& Physics

Abbenante, Mark (2004), M.A., Lecturer in Psychology
Akers-Jordon, Cathy (1998), B.A., M.L.S., Lecturer in English
Alvey, Jennifer E., B.A. (2003), Lecturer in Sociology, Anthropology \& Women's Gender Studies

Anderson, James E. (1988), A.B., M.A., Lecturer in English
Appolini, Karen (2005), B.S., M.S., Lecturer in Health Sciences \& Administration

Arellano, Ralph, Jr. (1992), B.A., Lecturer in Education
Ausin, Adolfo (2004), B.A., M.A., Ph.D., Lecturer in English \& Foreign Language

Bakken, James D. (2001), B. Arch., Lecturer of Art
Barber, Kimberly R. (2004), B.S., M.S., Ph.D., Lecturer in Health Sciences \& Administration

Batzer, Frederick R. (2004), B.S., Ph.D., Lecturer in Chemistry
Bauer, Jill Marie (1997), Lecturer of English
Benish, John G. (1999), B.S., Lecturer in Mathematics
Bentley, Courtney (2004), M.A., B.A., Lecturer in Nursing
Bingham, Steven H. (2002), M.A. B.A, Lecturer of Education
Blake, Joy (2004), M.B.A., B.S., Lecturer in Accounting
Bluhm, Minnie V. (1999), A.B., M.P.H., Ph.D., Lecturer in Health Sciences \& Administration

Borton, Danny (1996), B.S., M.P., Lecturer in Health Sciences \& Administration

Brown, Cherie D. (1997), B.S., M.A., Lecturer of Computer Science, Engineering Science \& Physics

Browning Jr., Gerald L. (2001), B.A, M.A., Lecturer in English
Bush, Peter J. (2003), M.B.A., M.S., B.B.A., Lecturer in Management Information Systems

Campbell, Bettina (2004), M.S.W., C.S.W., Lecturer in Social Work

Campbell, Carolyn (1988), B.A., M.A., Ph.D., Lecturer in Education \& Sociology/Anthropology \& Criminal Justice

Cardani, Mary Ann (1984), B.S., M.S., Lecturer in Biology
Carlson, Maureen A. (2001), B.M., Lecturer of Music
Carnahan, Gary M. (2000), B.A., Lecturer in Education

Carr, Katherine L. (2004), B.A., B.F.A., Lecturer in Theatre \& Dance

Cavallini, Enrico Francesco (1998), B.M., M.A., Lecturer in Music

Chandran, Ram (2003), B.E., Ph.D., Lecturer in Computer Science, Engineering Science \& Physics

Chubb, RuthAnn (2004), A.A., B.A., M.A., Lecturer in Education
Clark, David B. (1999), B.A., J.D., Lecturer of History
Coffield, Daniel J (2000), M.B.A., C..M.C..P., F.H.F.M.A, Lecturer in Health Sciences \& Administration

Coffin, Christopher (2004), B.S., Lecturer in Chemistry
Coffin, Pamela J. (1972), B.S., M.S., Lecturer in Chemistry
Colarossi, Susan L. (1999), B.S., R.,D., C.D.E., Lecturer in Nursing

Colish, Julie (1983), B.A., M.A., Lecturer in English
Cousino-Marshke, Renee A. (2005), B.A., M.S.W., Lecturer in Social Work

Coviak, James (2001), B.M.E., Lecturer of Music
Crane, Richard A. (2004), B.M., M.M., Lecturer in Music
Creech, Constance J. (1989), B.S.N., M.S.N., Lecturer in Nursing
Croom, Leander T. (2003), B.A., Lecturer in Education
Cruz, Carlos (2005), M.F.A., Lecturer in Art
Cull, Jeanine (2005), B.A., M.A., Lecturer in Theatre \& Dance
Currie, Traci E. (2004), B.A., M.F.A., Ph.D., Lecturer in Communications

Daassa, Mohamed A. (1999), A.B.D., Ph.D., Lecturer of Foreign Language \& History

Dagley, David, (2001), B.S., Lecturer of Education
Dahnke, Laura J. (2002), Lecturer of Nursing
Dale, Jill W. (2002), B.S., Lecturer of Education
Darragh, Scott B. (2004), B.A., M.A., Ph.D., Lecturer in Economics

Decamp, Lindsay (2003), B.A., Lecturer of Theatre \& Dance
Dedenbach, Marc T. (2003), B.S., M.A., J.D., Lecturer in Health Sciences \& Administration

DeFrance, William L. (2003), B.E., M.E., Ed.D., Lecturer in Economics

DeGroot, Frederick A. (2000), B.S., M.S., Lecturer of Earth \& Resource Science

Diblassio, Brian W. 2000), B.M., M.M., Lecturer of Music

Douglas, Daryl L. (2004), B.A., B.S., M.A., Psy.D., Lecturer in Psychology

Dunham, Kathleen, M. (2002), B.A., M.S., Lecturer of Education
Durham, James, M.A. (2002), Lecturer of Philosophy
Ehrlich, Mary J. (2003), B.A., M.A., Lecturer in Education
Emenyonu, Patricia (2003), B.A., M.A., Ed.S., Ph.D., Lecturer in English

Ennis, F. Michael (1996), B.S., M.S., Ph.D., Lecturer in Social Work

Essenmacher, Eugene R. (2003), B.S., M.A., Lecturer in Education

Farris, Mary (2005), B.F.A., Lecturer in Theatre \& Dance
Ferguson, Mark H. (2004), B.S, M.S., Lecturer in Earth \& Resource Science

Filak, Dorothy M. (1985), B.A., M.A., Lecturer in Communications

Filos, Deborah L. (1985), B.S.N., Lecturer in Nursing
Fleck, Leonard M. (2002), A.B., Ph..D., Lecturer in Health Sciences \& Administration

Flint, Leroy E. (1996), B.S., Lecturer of Computer Science, Engineering Science \& Physics

Fortner, Michele R. (2000), B.S., Lecturer \& Director in Health Sciences \& Administration

Furrow, Hannah B. (1999), B.S., M.A., Lecturer in English
Galerneau, Quentin J. (1983), B.A., M.A., Lecturer in Computer Science

Gebler, Michael (1988), B.S., M.S., Ph.D., Lecturer in Chemistry
Gerics, Daniel (2003), B.A., M.A., Lecturer in Education \& Theatre \& Dance

Giguere, Raymond E. (1999), B.S., M.A., Lecturer of Mathematics

Gilbert, James R. (1998), B.F.A., M.F.A., Lecturer in Art
Gouin, Nancy S. (1987), B.S., M.P.H., Lecturer of Health Sciences \& Administration

Grafe, Alan G. (1989), B.S., M.S., Ph.D., Lecturer in Computer Science, Engineering Science \& Physics

Habeck, Dania E. (2002), B.S., M.A,, M.P.T., Lecturer in Biology
Hack, Tricia L. (2004), B.S., M.A., Lecturer in Marketing
Harder, H. Kirk (1995), B.A., M.A., Lecturer of Foreign Language

Harrison, Brenda L. (2003), B.A., M.A., Lecturer in Management

Hatter, Raquel T. (2004), B.S., M.S., Lecturer in Psychology
Havrilcsak, Gregory M. (2000), A.B., M.A., Lecturer of History
Hellmann, Joan S. (1976), B.S., A.M., Lecturer in Mathematics
Herzog, Douglas P. (2005), B.S., M.S, Lecturer in Chemistry
Hicks, Linda M. (1982), B.A., M.S., Lecturer in Computer Science

Hill, John D. (2003), M.M., Lecturer in Music
Hirshman, Amy J. (2004), B.A., M.A., Ph.D., Lecturer in Anthropology

Holcomb, Glen L. (2004), B.M, M.M, M.A., Lecturer in Music
Hudson, Bonnie L. (1993), B.A., M.S.N., Lecturer of Nursing
Ionina-Prasov, Marina A. (1991), B.S., M.S., Lecturer of Chemistry

Israel, Shirley (2004), B.A., M.A., Lecturer in Foreign Language
Jaffurs, Sheri E. (2004), B.M., M.M, Lecturer in Music
Jiang, Jie (2005), B.S, M.S., Lecturer in Management
Johnston, Charles C. (2004), A.B., M.D., Lecturer in Biology
Kalmar, Pamela J. (1999), B.S., B.B.A., M.A., Lecturer of Computer Science, Engineering Science \& Physics

Keilman, Linda J. (2005), A.D., B.S., A.D.N., M.S.N., Lecturer in Nursing

Kelly, Nanette (1998), B.S., M.S., Lecturer in Biology
Kimsey, Walter K. (2005), B.M., Lecturer in Music
King, Jeanne (2002), A.B.A., Lecturer of Education
Kirkby, Margaret P. ((2003), B.S., M.S., Lecturer in Nursing
Knight, Suzanne (2004), B.S., M.E., Lecturer in English
Knoll, Theresa R. (2004), B.A., M.A., Lecturer in Foreign Language

Kraft, Rory E. (2003), B.A., M.A., Lecturer in Health Sciences \& Administration

LaGattuta, Margaret E. (2005), B.A., M.F.A., Lecturer of English
LaHaie, Kayla S. (2003), B.B.A., M.B.A., Lecturer in Computer Science, Engineering Science \& Physics

Lambaria, Michele E. (2004), B.S., M.P.T., Lecturer in Biology
Larsen Jr., Dave M. (1997), B.A., M.A., Lecturer in English
Laverty, William W. (2002), M.A., Lecturer of Political Science
Law, Dorothea M. (1979), B.A., A.M., Lecturer in English
Lea, Suzanne R. (2003), B.A., M.A., Lecturer in Sociology, Anthropology \& Criminal Justice

Leshchinskaya, Ida M. (1997), Lecturer in Music
Lezovich, Christopher (1999), B.B.A., J.D., Lecturer of Management

Lillevik, Waheeda (2004), B.Com., B.A., Ph.D., Lecturer in Management

Linker Jr., John S. (2002), B.A., Lecturer of Earth \& Resource Science

Litchfield, Joel A. (2000), B.S., M.B.A., Ph.D., Lecturer in Management

Lorch, Janet L. (2000), A.A., Lecturer of Art
Lorenz, Alice L. (2001), B.S., M.S.N., Lecturer \& Assistant Director of Nursing

Luster-Turner, Rose M. (2001), B.S.N., Lecturer of Nursing
Malinowski, Elizabeth A. (1984), B.S., M.S., Lecturer in Biology
Matthews, Gerald E. (1999), Ed.S., Ph.D., Lecturer of Africana Studies

Mayrberger, Sheri L (1999), B.S., Lecturer in Biology
McCombs, Laverne A. (1998), B.A., M.S.W., Lecturer in Social Work

McGaugh, Jack D. (1985), B.A., M.S., M.B.A., Ph.D., Lecturer in Management

McGill, Anthony D. (1992), B.S., M.A., Ph.D., Lecturer in Communications

McGraw, Rodney B. (2003), B.B.A., M.B.A., Ed.D,, Lecturer in Organizational Behavior

McKay, Tamara L (2005), B.A., B.S., M.A., Lecturer in Psychology

Miller, Sandra G. (2002), B.S.N., Lecturer of Nursing
Miller, Tamara L. (2003), B.A., Lecturer in Education
Mojica, Yolanda (1998), M.A., Ph.D., Lecturer of Education
Moliassa, John A. (2001), B.A., M.A., Lecturer of Mathematics
Morolla, Marcantonio (1995), B.A., M.P.A., Lecturer in Public Administration

Moss, George W. (2001), M.A., Lecturer of Africana Studies
Munroe, Derwin S. (1999), B.A., M.P., Ph.D., Lecturer in Political Science

Murdock, James R. (2003), A.B., M.A., Lecturer of Management
Nas, Paula L. (1995), B.A., M.A., J.D., Lecturer of Economics
Nofsinger, David A. (2004), B.A., M.F.A., Lecturer in Theatre \& Dance

Nordstrom, Harriet L. (1998), B.A., M.A., Lecturer of Psychology

Nottingham, Marsha (2005), B.S., M.S., Lecturer in Computer Science, Engineering Science \& Physics

O’Connor, Catherine A. (1997), B.A., M.A., Ph.D., Lecturer in English

O'Donnell, Patrick M. (2003), B.A., M.S., Ed.S., Ph.D., Lecturer in MPA Program

Packer, James D. (1991), B.S., M.A., Lecturer of Mathematics
Panoff, Christine A. (1981), A.B., M.A., Lecturer in Mathematics
Pape, Walter F. (2003), B.A., Lecturer in Physics
Parsons, Alta B. (2005), B.A., M.A., Lecturer in Foreign Language

Paymal, Elisabeth (2005), B.F.A., M.S., Lecturer in Art
Perry, Antuan M. (2003), B.S., M.A., Ph.D., Lecturer in Management

Phillips, James C. (1997), B.S., M.A.T., Lecturer of Mathematics Phillips, Spencer V. (2003), B.M., Lecturer in Music

Philpott, Douglas M. (1999), B.B.A., J.D., Lecturer in Management

Polenberg-Ramsay, Marcia L. (2002), B.A., Lecturer of Art
Price, Jeffrey Michael (2002), B.M., Lecturer of Music
Prost, Kenneth L. (1991), B.S., Lecturer in Mathematics
Reilly, Molly (2003), B.F.A., M.F.A., Lecturer in Art
Rendleman, Danny L. (1974), B.G.S., M.F.A., Lecturer in English

Richards, Sharon M., (1994), B.S.N., M.S.N., Lecturer in Nursing

Roberson, Kimberly S. (2003), B.A., M.A., M.P.A., Ph.D., Lecturer in Social Work

Royston, Pamela J. (1997), B.B.A., M.S.A., Lecturer of Management

Rutherford, Ira (2002), B.A., Lecturer of Education
Rykus, Karen (2004), M.A., Lecturer of Education
Rzyhak, John P. (2002), B.S., M.S., Lecturer in Health Sciences \& Administration

Scheper, Jeanne A. (2005), B.A., M.A., Lecturer in Africana Studies

Scrimger, Marlos J. (1991), B.G.S., B.S. M.S., Lecturer of Earth \& Resource Sciences

Sippert, Karin (1992), B.A., Lecturer in Mathematics
Slater, Jill (2005), B.S., B.A., Lecturer in Biology
Smith, Deborah A. (2004), B.S., Ph.D., Lecturer in Nursing

Smorch, Leonard D. (2004), B.A., M.B.A., Lecturer in MPA Program

Sodeman, Timothy D. (2000), B.A., M.A., Lecturer of Education
Southard, R. Gabriel (2002), B.M., M.M., D.M.A., Lecturer of Music

Southard, Sarah H. (2003), B.M., M.M., Lecturer in Music
Spurlock, Charles (2005), B.A., M.A., Lecturer in Sociology, Anthropology \& Criminal Justice

Stevens, Holly A. (2003), B.A., Lecturer of Art
Stewart, Marsha A. (2002), B.S., Lecturer of Education
Stratton, Matthew G. (2004), M.A., Ph.D., Lecturer in English
Sturtevant, Mark A. (2004), B.S, M.S., Ph.D., Lecturer of Biology
Szuch, Ernest J. (1974), B.A., M.S., Lecturer in Biology
Tabaka, Kathleen E. (2004), B.S, M.S.A, Lecturer in Education
Tai, Lone-Wen (2004), B.S., M.S., Ph.D., Lecturer in Computer Science, Engineering Science \& Physics

Talerico, Janet E. (1998), B.A., M.P.A., Lecturer in Sociology
Tambling, Connie S. (2000), B.A., M.A., Lecturer in Foreign Language \& Education

Theile, Joan E (2003), B.A., Lecturer in Education
Thomas, Max M. (1992), M.A., Ph.D., Lecturer in Philosophy \& Nursing

Thornburg, John E. (1993), B.S., M.S., Ph.D., D.O, Lecturer in Nursing

Thum, Maureen (1980), B.A., M.A., Ph.D., Lecturer in English
Toebosch, Annemarie (2003), M.A., Ph.D., Lecturer in English
Torres, Edgar (2001), B.S., M.S., M.P.T., DSc., Lecturer of Physical Therapy

Unuvar, Mustafa U. (2002), B.S.M.E., Ph.D., Lecturer of Computer Science, Engineering Science \& Physics

Valacak, Mark J. (1992), B.S., M.P.H., Lecturer in Health Sciences \& Administration

Viele, Dennis P. (1993), B.S., M.S., Lecturer in Biology
Wacker, Tracy L. (1990), B.S., M.S., Lecturer in Biology
Wade, Cynthia A. (2001), B.S., M.A.C.T., Lecturer in Education
Wagonlander, Charles F. (2002), B.A., Lecturer of Art
Wandmacher, Stevens F. (1995), B.G.S., M.A., Ph.D., Lecturer in Philosophy

Ware, Margaret L. (1995), B.S., M.S., Lecturer of Biology
Wielinski, Beth E. (2001), Lecturer of Theatre \& Dance

Wistrand, Carolyn (2000), B.A., M.A., Lecturer of Africana Studies

Wolosuk, Wanda N. (1996), B.A., M.S.W., Lecturer in Social Work

Worth, Janice M. (1996), B.A., M.S.W., M.F.A., Lecturer in English

Wright, Joseph N. (2003), B.M, Lecturer in Music
Wright, Ronald O. (2002), M.A., Lecturer of Education
Xiang, Ming (2004), B.A., M.A., Lecturer in English
Yancho, Mari (2003), B.M., M.M., Lecturer in Music \& Art
Yang, Li-Hsuan (2003), B.S., Lecturer in Computer Science, Engineering Science \& Physics

Yarber, Kim D. (2004), M.Div., Lecturer of African American Studies

Yegin, Korkut (2004), B.S., M.S., Ph.D., Lecturer in Computer Science, Engineering Science \& Physics

Young, Christopher R. (2001), M.A., Lecturer of Art
Zeigler, Carmen S. (2003), M.A., B.S., Lecturer in Education
Zito, Bethany A. (2001), B.A., Lecturer of Education

## Supplemental Faculty

As of March 1, 2005.
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

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

Bur, Kevin P. (1994), M.S., D.O., Adjunct Instructor in Health Sciences \& Administration

Chaney, Carol A. (1984), B.A., Adjunct Lecturer in Music
Chung, Yong S. (1999), M.D., Adjunct Instructor in Health Sciences \& Administration

Clolinger, Chris A. (1999), B.S., Adjunct Instructor 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 \& 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

Fryzel, Shawn A. (1996), B.S., M.S., Adjunct Instructor in Health Sciences \& Administration

Gale-Cuevas, Elizabeth (2004), B.S.N., M.S.N., Adjunct Clinical Lecturer \& Lecturer in Nursing

Gandhi, Jayshri M. (1997), M.B.A., Adjunct Lecturer of Computer Science, Engineering Science \& Physics

Goldie, Lauren B. (2005), B.S., Adjunct Clinical Lecturer in Nursing

Greenlee, Susan S. (2005), B.A., B.S., M.S., Adjunct Clinical Lecturer in Nursing

Guzelaydin, Suzanne K. (2001), R.N., B.S.N., M.S.N, Adjunct Clinical Lecturer \& Lecturer in Nursing

Hart, Monica L. (2003), B.A., M.F.A., Adjunct Lecturer in Theatre \& Dance

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 \& 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

Howard, Jacqueline M. (1989), B.A., M.S.W., Clinical Instructor Lecturer in Social Work

Jones, Mary Lou (1993), B.A., M.S., Adjunct Instructor in Health Sciences \& Administration

Kassel, Michael B. (1990), B.A., M.L.S., Ph.D., Adjunct Lecturer in History

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

Michelini, Claire A. (2004), R.N., B.S.N., M.S., Adjunct Clinical Lecturer in Nursing

Milow, Almeta (2004), B.S.N., Adjunct Lecturer of Nursing
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., 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

Sarsfield, Deborah, A. (2004), B.S.N., M.S.N., Adjunct Clinical Lecturer \& Lecturer of Nursing

Selley, Karen W. (1994), B.S.N., M.S., Adjunct Instructor in Health Sciences \& Administration

Simmons, Janice M. (2004), R.N., B.S.N., M.S.N., Adjunct Clinical Associate Professor in Nursing

Smith, Sandra K. (1995), B.S.N., M.S.N., Adjunct Lecturer in Nursing

Stevens, Theresa M. (1997), B.A., Adjunct Lecturer in Nursing
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## For More Information

## The University of Michigan-Flint <br> Flint, Michigan 48502-2186 <br> (810) 762-3000

The University of Michigan-Flint welcomes inquiries in person, by telephone, or by mail.

## Visits

Visitors are welcome on campus at any time during normal business hours. Those interested in admission should call the Office of Admissions and Recruitment for an appointment.

## Hours

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.

## Admissions and Recruitment

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Office of Financial Aid (810) 762-3444

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## Gifts and Bequests

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## Academic Information

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(810) 762-3234

School of Education and Human Services (810) 766-6878

School of Health Professions and Studies (810) 237-6503

School of Management
(810) 762-3160

Graduate and Special Programs
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Honors Program
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## Other Numbers

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Alumni Activities
University Relations
(810) 762-3351

Recreational
Services
(810) 762-3441
(810) 762-3028


## FLINT AREA FREEWAYS




[^0]:    Area Options (select two; 9 credits each except for Foreign Language)
    A. Analytic Reasoning (two categories)
    B. Cultural Studies (two categories)
    C. Foreign Language (ARB/FRN/GER/ITL/JPN/RUS/SPN 112, LAT 105, or by examination)
    D. Values Inquiry (both categories)
    E. The Foundations of Western Civilization (both categories)

[^1]:    A. Core courses ( 16 credits). CHM 160, 161, 162, 163 or 165 , 330, 331, 332, 333.

[^2]:    516 William R. Murchie Science Building (810) 762-3355

    Web Page: www.flint.umich.edu/ers

