Undergraduate Catalog 2013-2015

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University of Michigan-Dearborn



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This *Catalog* of UM-Dearborn is a fundamental source of information concerning academic opportunities, policies, regulations, and procedures. It is each student's responsibility to become familiar with the information contained herein.

Information in this *Undergraduate Catalog* is as of July 2013. Every care has been taken to insure its accuracy; however, the University cannot be responsible for errors and reserves the right to change programs, requirements and policies at any time after the publication of this *Catalog*. Current information is available through Unit and Departmental Offices.

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2013-2015 Academic Calendar **

FALL TERM 2013

Regular Registration Be	gins* Monday, April 22
Labor Day (Holiday)	Monday, September 2
Classes begin	Wednesday, September 4
Thanksgiving recess	
Thurs	day-Sunday, November 28- December 1
Classes resume	Monday, December 2
Classes end	Tuesday, December 10
Study Day	Wednesday, December 11
Examinations	Thursday-Friday, December 12-13
	Monday-Wednesday, December 16-18
Commencement	Saturday, December 14

FALL TERM 2014

Regular Registration Beg	ins*Monday, April 21
Labor Day (Holiday)	Monday, September 1
Classes begin	Wednesday, September 3
Thanksgiving recess	
	Thursday-Sunday, November 27-30
Classes resume	Monday, December 1
Classes end	Tuesday, December 9
Study Day	Wednesday, December 10
Examinations	Thursday-Friday, December 11-12
	. Monday-Wednesday, December 15-17
Commencement	Saturday, December 13

WINTER TERM 2014

Regular Registration Begins*	Monday, December 9
Classes begin	Monday, January 6
Martin Luther King, Jr. Birthday	
No Regular Classes	Monday, January 20
Spring recessSunda	y-Sunday, February 23-March 2
Classes resume	Monday, March 3
Dearborn Honors Convocation	Tuesday, March 25
Classes end	Friday, April 18
Study day	Saturday, April 19
Examinations	Monday-Saturday, April 21-26
Commencement	Sunday, April 27

WINTER TERM 2015

Regular Registration Begins*Classes begin	• •
Martin Luther King, Jr. Birthday	y, vandary 5
No Regular Classes	Monday, January 19
Spring recessSunday-Sunday	, February 22-March 1
Classes resume	Monday, March 2
Honors Scholars	Tuesday, March 31
Classes end	Friday, April 17
Study day	Saturday, April 18
Examinations Mond	ay-Friday, April 20-24
Commencement	Sunday, April 26

SUMMER TERM 2014

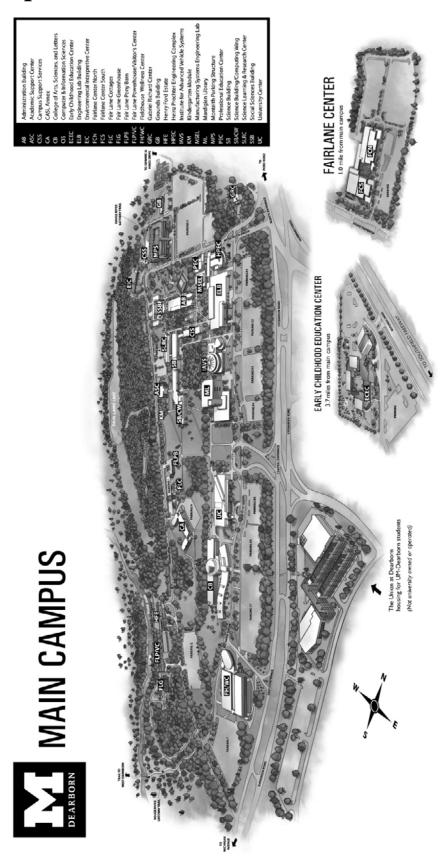
Regular Registration Begins*	Monday, April 21
Classes begin	Monday, May 5
Memorial Day (Holiday)	Monday, May 26
Classes end (7-week classes)	Monday, June 23
Study Day	Tuesday, June 24
Examinations (7-week classes)	. Wednesday-Friday, June 25-27
Summer Recess	Tuesday-Sunday, June 24-29
Classes resume (7-week and 14-	week classes) Monday, June 30
Independence Day (celebrated)	Friday, July 4
Classes end (7-week and 14-week	ek classes) Friday, August 15
Study Day	Saturday, August 16
Examinations	Monday-Friday, August 18-22

SUMMER TERM 2015

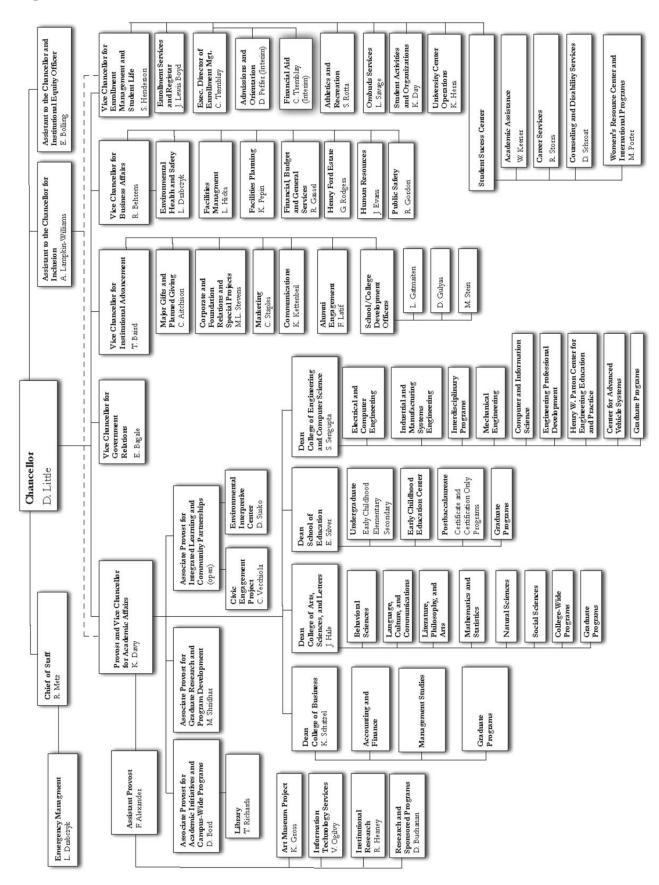
Regular Registration Begins*	Monday, April 20
Classes begin	Monday, May 4
Memorial Day (Holiday)	Monday, May 25
Classes end (7-week classes)	Monday, June 22
Study Day	Tuesday, June 23
Examinations (7-week classes)	Wednesday-Friday, June 24-26
Summer Recess	Tuesday-Sunday, June 23-June 28
Classes resume (7-week and 14-	week classes) Monday, June 29
Independence Day (celebrated).	Friday, July 3
Classes end (7-week and 14-week	ek classes)Friday, August 14
Study Day	Saturday, August 15
Examinations	Monday-Friday, August 17-21

^{*}Check umd.umich.edu/registration for early registration dates.
**Dates are subject to change at any time by the Board of Regents.

Campus Map



Organizational Chart



University of Michigan Dearborn

REGENTS OF THE UNIVERSITY

Mark Bernstein, Ann Arbor
Julia Donovan Darlow, Ann Arbor
Shauna Ryder Diggs, Grosse Pointe
Laurence B. Deitch, Bloomfield Hills
Denise Ilitch, Bingham Farms
Andrea Fischer Newman, Ann Arbor
Andrew C. Richner, Grosse Pointe Park
Katherine E. White, Ann Arbor
Mary Sue Coleman, ex officio

EXECUTIVE OFFICERS OF THE UNIVERSITY

Mary Sue Coleman, BS, PhD., President Daniel Little, AB, PhD., Chancellor, University of Michigan-Dearborn

Sally J. Churchill, JD, Vice President and Secretary of the University

Stephen R. Forrest, PhD., Vice President for Research E. Royster Harper, BS, MA, Vice President for Student Affairs Timothy Lynch, JD, Vice President and General Counsel Jerry A. May, BA, M.Ed., Vice President for Development Ruth J. Person, MA, PhD., Chancellor, University of Michigan-Flint

Ora Hirsch Pescovitz, MD, Executive Vice President for Medical Affairs

Martha E. Pollack, Ph.D., Provost and Executive Vice President for Academic Affairs

Lisa Rudgers, BA, Vice President for Global Communications and Strategic Initiatives

Timothy P. Slottow, BA, MBA, Executive Vice President and Chief Financial Officer

Cynthia H. Wilbanks, AB, Vice President for Government Relations

UNIVERSITY OF MICHIGAN-DEARBORN SENIOR OFFICERS

Daniel E. Little, PhD., Chancellor

Catherine A. Davy, PhD., Provost and Vice Chancellor for Academic Affairs

Mallory M. Simpson, MA, Vice Chancellor for Institutional Advancement

Kenneth Kettenbeil, BA, Vice Chancellor for Government Relations

Jeffrey L. Evans, MBA, Vice Chancellor for Business Affairs Stanley E. Henderson, MA, Vice Chancellor for Enrollment Management and Student Life Ray Metz, MLS, Chief of Staff

ACADEMIC DEANS

Raju Balakrishnan, PhD., College of Business Martin . Hershock, PhD., College of Arts, Sciences, and Letters Tony England (Interim), PhD., College of Engineering and Computer Science

Edward A. Silver, EdD, College of Education, Health, and Human Services

DIRECTORS

Katherine M. Allen, MBA, Director of Financial Aid and Scholarships

Drew B. Buchanan, PhD., Director of Research & Sponsored Programs

Shareia N. Carter, MLS, Director of Women's Resource Center Trista Wdziekonski, MA, Director of Graduate Studies

Kristine L. Day, MS, Interim Director of University Center Operations

Robert Goffeney, MBA, Director of Information Technology, Strategy and Operations

Richard F. Gordon, MPA, Director of Campus Safety

Roma M. Heaney, MA, Director of Institutional Research

Noel G. Hornbacher, MBA, Director of Financial Services and Budget

William Keener, MA, Director of Academic Support and Outreach Services and Director of the Tutoring Center

Janice L. Lewis-Boyd, BGS, Univeristy Registrar and Director of Enrollment Services

Elaine M. Logan, MILS, Director of the Mardigian Library Margaret M. Pattison, BS, Director of Alumni Relations

Deb K. Peffer, MA, Director of Admissions and Orientation

Kathleen M. Pepin, BS, Director of Facilities Planning Reetha Perananamgam, MA, Director of Student Engagement

Ann Y. Lampkin-Williams, PhD., Interim Director of Athletics and Recreation

David A. Schroat, PhD., Director of Counseling Support Services

Regina M. Storrs, MA, Director of Career Services

David J. Susko, PhD., Director of Environmental Interpretive Center

Ginny Zarras, BA, Director of Human Resources/Affirmative Action

Carol L. Glick, P.E., MS, Director of Facilities Management

CITIZENS ADVISORY COMMITTEE

Brian M. Connolly Stephen T. Economy Mark T. Gaffney Paul C. Hillegonds Rich Homberg Arthur M. Horwitz Hassan Jaber Gail Mee Patricia Mooradian Shirley Stancato

How to Use the Undergraduate Catalog

This Catalog is divided into five sections:

- General Information
- College of Arts, Sciences, and Letters
- College of Business
- College of Engineering and Computer Science
- College of Education, Health, and Human Services

This *Catalog* of the University of Michigan-Dearborn is a fundamental source of information concerning academic opportunities, policies, regulations, and procedures. It is each student's responsibility to become familiar with the information contained herein.

WHERE TO FIND INFORMATION

The General Information section of this *Catalog* is divided into seven main areas:

- Admissions
- Financial Aid
- · Registration and Records
- Policies and Procedures
- Special Programs
- Campus Services
- Student Rights and Responsibilities

The College of Arts, Sciences, and Letters, College of Business, College of Engineering and Computer Science, and College of Education, Health, and Human Services sections contain: specific regulations and procedures which may be unique to that academic unit; information regarding programs, degrees and courses offered; and a plan for electing courses to fulfill undergraduate degree requirements.

KEY TO COURSE LISTINGS

The heading for each course listing contains the following information

Discipline and Course Number

Courses are numbered in accordance with a University-wide numbering system: courses numbered 100 to 199 are introductory; courses 200 to 299 are intermediate; courses 300-499 are advanced (upper division).

Course Title

The bold face course title follows the course number.

Credit Hours

Credit hours at the University of Michigan-Dearborn are based on semester hours. The number of credit hours for each course is listed below the title.

Prerequisite

Prerequisites to the course normally appear below the title and credit hours, although they may sometimes be included in the course description. They should be completed before the course is elected.

Concurrent Courses

Courses listed in the prerequisite section with an asterisk (*) indicate those that may be taken concurrently with the course listed

FREQUENCY OF OFFERING

The following abbreviations are used to denote the frequency of offering: (F) fall term; (W) winter term; (S) summer term; (F, W) fall and winter terms; (YR) once a year; (AY) alternating years; (OC) offered occasionally



umd.umich.edu



<u>The University of</u> <u>Michigan-Dearborn</u>

The University of Michigan-Dearborn is one of the three campuses of the University of Michigan operating under the policies of the Board of Regents.

The campus, located on the former estate of automotive pioneer Henry Ford, was founded in 1959 as a senior-level institution offering junior, senior and graduate-level courses and degrees. In 1971, UM-Dearborn became a comprehensive university campus offering four-year degree programs in liberal arts and sciences and graduate programs at the master's degree level.

More than 9,000 highly selective students, representing a wide range of academic interests and diverse backgrounds, are currently enrolled at the UM-Dearborn.

As part of the University of Michigan, UM-Dearborn enjoys an association with a large multi-university and the advantages of moderate size. Through expanded evening course offerings, professional development programs and cooperative education programs, UM-Dearborn continues to respond to the educational needs of commuting students from the Detroit metropolitan community.

Mission and Values

UM-Dearborn is an interactive, student-centered institution committed to excellence in teaching and learning.

We offer undergraduate, graduate, and professional education to a diverse and talented student body. Our programs are responsive to the challenging needs of society; relevant to the goals of our students and community partners; rich in opportunities for independent and collaborative study, research, and practical application; and reflective of the traditions of excellence, innovation, and leadership that distinguish the University of Michigan.

We accomplish this mission by:

- Providing a strong foundation in the liberal arts and sciences;
- Providing the knowledge and skills essential for career and personal success;
- Integrating teaching, research, and service in ways that enhance the learning experience;
- Promoting internships and cooperative education;
- Providing a dynamic environment where innovation, openness, and creativity are fostered;
- Using advanced technologies to meet changing educational needs and establish links with the global community; and
- Forging partnerships with business, industry, educational institutions, and government agencies.

We strive to be the institution of choice in southeastern Michigan for individuals and organizations that value accessibility, flexibility, affordability, diversity, and preeminence in education.

Goals for the Undergraduate Experience

Undergraduate education at the University of Michigan-Dearborn is based on the belief that the benefits of academic work are enhanced when classroom and intellectual rigor interact with community engagement and experiential learning. The University of Michigan-Dearborn is uniquely situated to address the complex challenges facing the metropolitan region by offering students rigorous academic offerings as well as the opportunity to apply that knowledge in real-world situations. Our goal is to graduate students who are able to apply theoretical and discipline-specific knowledge to discover creative solutions to problems and to successfully communicate those ideas both individually and as a part of a collaborative effort

Undergraduate programs at UM-Dearborn provide students with the opportunity to develop particular skills and abilities; to think critically and creatively to solve problems; to cultivate an appreciation of aesthetic and ethical values; and to acquire both breadth of knowledge and the depth of understanding gained through the study of one or more academic disciplines. The UM-Dearborn faculty has a common commitment across units to provide students with foundational knowledge through content-specific courses, extra-curricular activities, and community-oriented experiences. Each of these goals corresponds to Association of American Colleges and Universities (AAC&U).

The goals for undergraduate student learning and experiences at UM-Dearborn are:

- Core Knowledge
- Critical and Creative
 Thinking
- Communication
- Collaboration
- Cultural Understanding
- Citizenship

GOALS

1. Core Knowledge

Undergraduate student learning goal #1, "Core Knowledge," acknowledges that, each discipline at the University of Michigan-Dearborn, requires students to gain knowledge of and experience with their chosen academic discipline. Although the content-area goals within each discipline will likely be unique, all degree programs share fundamental educational values that include:

- acquiring rigorous, discipline-specific inquiry skills.
- learning to apply theories to and construct models for addressing real-world problems.
- discussing and producing intellectual work using discipline-specific conventions for writing, research and communicating.

2. Critical and Creative Thinking

Undergraduate student learning goal #2, "Critical and Creative Thinking," acknowledges the students' need to gain experience in problem solving, and to engage in analysis, synthesis and evaluation in creative ways using an ethical framework. Development of such habits of mind will be demonstrated by:

 the ability to seek information and use inquiry to systematically explore situations, collect and analyze evidence, and make informed evaluations.

- the synthesis of knowledge within and across courses and programs and the integration of theory and practice.
- the ability to use qualitative and quantitative reasoning to develop a clear understanding of the problem being studied.
- the generation of creative solutions to problems through original, imaginative, innovative, or artistic effort.
- the ability to use ethical reasoning to generate meaningful solutions to problems.

3. Communication

Undergraduate student learning goal #3, "Communication," recognizes that there are a wide variety of modes of communication, including written and oral communication that are continually being shaped and expanded through rapid changes in technology. Student mastery of these myriad ways of communicating ideas and intellectual products will be demonstrated through the development of:

- the ability to communicate clearly and effectively to an identified audience both in writing and orally.
- the creation of communication that demonstrates content knowledge, deep reflection, creativity and critical thinking.
- the appropriate use of technology in maximizing the clarity, impact and accessibility of student ideas.

4. Collaboration

Undergraduate student learning goal #4, "Collaboration," acknowledges that collaborating with peers, faculty and community members is an important part of the learning process in all disciplines. This element in the University's educational plan for students will be promoted by providing students the opportunity to:

- work actively and effectively as part of a team to answer questions and solve problems.
- develop the ability to critically and effectively evaluate the collaborative products and processes.
- grapple effectively with differences and diversity and resolve conflict that occurs in collaborative efforts.

5. Cultural Understanding

Undergraduate student learning goal #5 "Cultural Understanding," acknowledges that appreciating global and cultural diversity within historical, artistic, and societal contexts is critical to individual and societal success in both professional and personal areas of life. Student achievement in this realm will be gained through:

- reflecting on experiences with diversity to demonstrate knowledge and sensitivity.
- demonstrating awareness of how diversity emerges within and across cultures.
- developing the ability to collaborate in a global setting through awareness of language and cultural differences.

6. <u>Citizenship</u>

Undergraduate student learning goal #6, "Citizenship," recognizes that engagement occurs in many ways for students, and manifests itself in different ways for each academic program and discipline. Active meaningful student involvement in course, community and societal affairs will also encourage student lifelong learning by providing the opportunity to use their skills, abilities and

knowledge in a variety of roles and environments. Acquisition of these skills will be promoted through:

- engagement in case-study, scenario analyses and problem solving activities.
- participation in curricular and co-curricular work integral to the metropolitan mission of UM-D.
- exposure to the diversity, strengths and challenges of the metropolitan community.
- experience in engaging in activities that emphasize the habits of lifelong learning.

GENERAL EDUCATION REQUIREMENT AND THE GOALS FOR UNDERGRADUATE LEARNING

One component of the undergraduate experience is the required coursework (called "distribution requirements" or "general education requirements") taken by students in preparation for more focused and sustained work in their fields of choice. General education courses incorporate the six goals for undergraduate learning while focusing on building skills in written communication, critical thinking, quantitative reasoning and problem solving so as to prepare students for later coursework in their core disciplines. Each academic unit has developed the most appropriate mix of general education requirements and options for its own students.

Written Communication. Because writing plays a role in both the construction and transmission of knowledge, learning to write effectively about ideas is fundamental to undergraduate student learning. At the introductory level, students who complete general education requirements are expected to be able to use writing as a means of critical inquiry and as a way of engaging significantly with the kinds of texts typical of college-level courses. Students are also expected to be able to construct a structured and focused argument, to revise and edit their work in the light of particular audience demands, to draw on the insights of others and incorporate the results of research into their own writing, and to apply appropriate conventions of genre and voice. Introductory writing objectives include using basic computer-mediated expression as a form of communication.

Critical Thinking. General education courses help students to see relationships, similarities and differences among ideas, objects and phenomena; to identify central issues and assumptions in an argument; to make inferences from data; to deduce conclusions from information or data provided; to determine whether conclusions are warranted on the basis of the arguments and data given; and to recognize faulty reasoning and applying ethical standards. In addition, general education courses prepare students to determine the various implications that follow from accepting particular arguments and data, and to assess arguments in light of their own beliefs and values. Finally, these courses provide guided practice in strategies for accessing information effectively, and for analyzing, synthesizing, and applying it in new situations.

Quantitative Reasoning and Problem-Solving. Together with logical and critical reasoning skills, the ability to work with algebraic, geometric, logical and/or statistical concepts is essential for the study, advancement, and application of many fields of knowledge. General education coursework in quantitative disciplines help students to develop the ability to think logically using symbolic expression as well as deductive and inductive reasoning. Courses meeting this requirement also provide a disciplined introduction to build student skills in manipulating and presenting quantitative information.

The Campus

The UM-Dearborn campus was established in 1956 through a gift from the Ford Motor Company. The gift included approximately 196 acres of land, the Henry Ford Estate, and funds for the construction of four buildings totaling 226,770 gross square feet. The campus has grown considerably over the past 57 years and now includes the following facilities:

8	Function Offices
Academic Support Center	
	Offices, support services
	Offices, classrooms
Computer & Information Science	Offices, classrooms
Building	Offices, classrooms and Labs
Environmental Interpretive Center	
Fairlane Center North and South	Offices, classrooms and food service
Fair Lane Cottages	
Fair Lane Greenhouse	
Fair Lane Pony Barn	
Fair Lane Powerhouse /	
Visitor's Center	
Fieldhouse/Ice Arena /	Ice rink, recreation
Wellness Center	
Gabriel Richard Center	
Grounds Building	Vehicle storage, offices
	Offices, Labs
Complex	
Henry Ford Estate	National historic landmark
Institute for Advanced Vehicle	Offices, Labs
Systems	
Manufacturing Systems	Labs, offices
Engineering Laboratory	
Mardigian Library	Library, offices, classrooms, Alfred Berkowitz Gallery
Monteith Parking Structure	Parking, storage
	Offices, classrooms and computer Labs
Recreational & Organization Center	•
Science Building /	Classrooms, Labs, offices
Computer Wing	
Science Learning and Research Center	Classrooms, Labs, offices
	Classrooms, Labs, offices
	Offices food service, copy

The Mardigian Library offers a student-centered environment that fosters learning by providing access to authoritative sources of knowledge and information and by helping students learn critical information literacy skills and concepts. It gives faculty and students access to sources and knowledge via modern information technology, and our librarians teach students how to find their way in the ever-expanding universe of information and knowledge. The four-story Mardigian Library houses a 340,000-volume collection and provides web-based access to a multitude of research resources, including an online journal collection of

center, bookstore

18,000 titles, 200 online research databases and over 9,000 online books and approximately 1,200 student study stations. The facility also contains computer, audiovisual, and education laboratories, and a television studio. Librarians are accessible, either online or in person, to help students with their research needs.

The Alfred Berkowitz Gallery, located on the third floor of the Library, features changing exhibitions throughout the academic year. The gallery functions as a program laboratory, extending and supplementing other University programs, and as a showcase for exhibitions with broad public appeal.

Spaces for recreational, intramural, and varsity athletics, as well as health and physical education classes, are provided in the Fieldhouse/Ice Arena and attached Wellness Center.

The Administration Building, the University Center, and the Campus Support Services building currently house support services for the campus.

The Professional Education Center houses professional and continuing education programs.

Capsule History of the University of Michigan-Dearborn

The first movement toward what was to become The University of Michigan-Dearborn began with some studies in the middle 1950's of manpower supply conducted by Archie Pearson, director of training for Ford Motor Company. Convinced that serious shortages were looming for the Company in qualified, college-trained engineers and junior administrators, he made discreet inquiries of educational institutions in the Detroit area concerning their willingness to adjust their programs to meet these needs.

Pearson was particularly interested in a program with a cooperative education component that would provide several periods of full-time work experience, alternating with regular terms of professional academic study. However, his inquiries and those of his associates did not strike the responsive chord they were looking for until they were put in touch with members of the top administration at the University of Michigan. Thus in late 1955 began the negotiations between Pearson, his associates, and University of Michigan officials that led to the establishment of the Dearborn Center of the University of Michigan. During 1956, the details of the proposed campus were worked out by a Special Committee involving top administrators at both Ford Motor Company and the University of Michigan. The announcement on December 17, 1956 of a gift of land and capital development money from the Company to the University made it obvious that the focus of the agreement between the two was the building of an upper-division and master's level campus of the University which would adopt the cooperative work-study requirement as a part of its regular degree program in engineering and business administration. The University was to provide the regular professional and liberal arts courses necessary to a University of Michigan bachelor's or master's degree, with the co-op work assignments forming an integral addition to the regular academic requirements. UM-Dearborn opened as the Dearborn Center of the University of Michigan on September 28, 1959.

The upper-division cooperative education program was the first important educational emphasis of what is now UM-Dearborn. Cooperative education is still a vital part of the professional programs, and not only has it expanded to include liberal arts students, but other kinds of off-campus experience for credit have been added as well. There are now regular program-related internships in political science, economics, social work, humanities, health sciences and public administration. Nevertheless, it became apparent in the early days that the campus could not afford to be limited to a single focus, and over the years it has gone through several stages of modifying its original purposes and structure.

From its inception in 1956 to about 1962, the cooperative education program was confidently set forth as a sufficient raison d'etre for the campus, in spite of growing evidence that this admittedly fine and educationally sound opportunity was not drawing a sufficient number of students for economical use of the facilities. In February 1962, William Stirton, the University of Michigan Vice President who was the first chief executive of the UM-Dearborn, announced that cooperative education was being extended to the liberal arts areas on an optional basis, beginning in the fall term, 1962. In reality, however, very few liberal arts co-op work assignments were actually made before 1973, when the present liberal arts co-op program was officially established. Although this early attempt to extend the co-op program to liberal arts was an apparently small episode in the history of the campus, it constituted the last major attempt to build the campus solely on the basis of the co-op programs and the upper-division/graduate structure. Moreover, it came at about the same time as the change in the name of the institution from "Center" to "Campus" (to make its objectives seem less limited). Both events marked the beginning of a period in the middle sixties characterized by growing uncertainty about the future of the institution. This period ended in 1969 with the recommendations of the Ross Committee (also referred to as the Balzhiser Committee, and officially called the Dearborn Campus Planning Study Committee), which radically changed the direction of the campus.

The 1969 report of the Dearborn Campus Planning Study Committee, appointed by University Vice President for State Relations and Planning Arthur Ross to consider the future of the campus, recommended the addition of the first two years to become a full four-year institution and the expansion of non-coop programs; it recommended other changes as well, most of which were implemented in 1971 to give the campus its present structure. It became at that time a four-year undergraduate institution (newly designated "The University of Michigan-Dearborn") with a continued commitment to some master's level graduate programs, having a Chancellor as its chief executive officer; two years later, the old divisions became schools and colleges, and the Division of Education ("Urban Education" for the first few years) was created, with each of the major academic units headed by a dean. The first Chancellor of the UM-Dearborn, Dr. Leonard E. Goodall, was appointed in July, 1971.

After that watershed change in 1971, UM-Dearborn grew rapidly from just under 1,000 students to over 6,000 in 1979. During this period there was a scramble just to supply the courses and facilities needed to accommodate the soaring student population. New faculties were added at the rate of 10 to 20 per year, and the face of the campus changed as a new set of buildings (the former University Mall now remodeled as the University Center, the Fieldhouse, and the Library) was planned and constructed to the south of the original four buildings. By April 1981, when the new library building was dedicated, the population center of the campus had shifted to this newly developed area. Ironically, however, these years of expansion also ushered in a period of severe retrenchment, when the debt burden of the new structures coincided with a recession and cuts

in state aid to the campus. Dr. William Jenkins, appointed as UM-Dearborn's second Chancellor in 1980, took the helm at the beginning of what may be called the institution's "Years of Consolidation."

The early 1980's at UM-Dearborn were, as in the state of Michigan as a whole, a period of severe financial crisis. From 1979 through 1982, over a million dollars of funds allocated to UM-Dearborn by the state had to be recalled. During that same time, faculty and staff salaries were cut and student tuition rose 44 percent in three years. Nevertheless, student enrollment, after a slight drop from 1982 to 1984, resumed its steady rise that has continued to the present. A new surge in capital fund-raising was instigated as a result of the campus's fiscal problems, and it bore early fruit in 1984 when Ford Motor Company announced the biggest capital gift to UM-Dearborn since its founding: \$800,000 to build a computer-aided engineering facility, now known as the Manufacturing Systems Engineering Laboratory (completed in 1988). By the end of the decade, capital funding from the state (delayed during the recession) resulted in one major new building (the Social Sciences Building, formerly the School of Management Building), an addition to the Science Building (Computer Wing), and extensive renovations to one of the original campus buildings to provide much-needed additional office space for both faculty and administrators.

Several developments in campus organization, administrative personnel, and academic offerings have highlighted what might be called the "Years of Redirection," from about the time of the inauguration of Chancellor Blenda Wilson (1988) to the present. At the center of this "redirection" has been a program of strategic planning, initiated in the summer of 1990 and reinforced by planning retreats for the whole campus in the fall terms of 1990, 1991 and 1992. A new campus mission statement arose out of the first retreat which rearticulates UM-Dearborn's commitment to providing an experience of academic excellence for a diverse body of students from the metropolitan Detroit area, encouraging full community attention to the traditions of free intellectual inquiry, critical thinking and ethical behavior through interactive teaching, research, creative and applied scholarship, and service. From the second retreat emerged the principal points of a set of learning goals for undergraduate students.

In consonance with these statements of institutional purpose, organizational changes were made to strengthen the funding base for the campus, to consolidate and streamline academic programs, and to coordinate and strengthen student services under a new vice chancellor for student affairs. In July 1991, Dr. Robert Simpson took office as provost and vice chancellor for academic affairs, succeeding Dr. Eugene Arden. Provost Simpson energetically promoted the identification and implementation of those measures of academic improvement that are most appropriate to the newly stated purposes of the campus. Under his leadership, a new statement of UM-Dearborn's Goals for the Undergraduate Experience was completed in 1993; a new fiber optic cable was laid for a campus computer network, with the Director of the Mardigian Library being given oversight of Information Technology Services; and, after a self-study (1991-93) using the campus's strategic plan as the focus, UM-Dearborn was officially reaccredited by the North Central Association in March 1994.

After Chancellor Wilson resigned in the summer of 1992, Dr. James C. Renick was appointed as the fourth chancellor of UM-Dearborn in January 1993. As one of his first responsibilities, he solidified the capital campaign and established a goal of \$24

million over four years (1992-1997). Chancellor Renick emphasized the importance of making UM-Dearborn a fully "interactive campus" with the southeastern Michigan community it serves.

Several other important developments took place in 1993 and early 1994: 1) a new set of Campus Bylaws was instituted which provided for a Faculty Senate for the first time in the campus's history; 2) approval by the State Legislature of capital outlay for a new building to house faculty offices, general purpose classrooms, and a 350-seat multi-purpose auditorium; 3) institution of a new Engineering Management degree in 1993, administered jointly by the Schools of Engineering and Management; 4) implementation of a new, second-generation automated library system (WIIZARD) which substantially increases faculty and student access to local, regional and national bibliographic databases.

The University purchased the facility now known as Fairlane Center North and South from Ford Motor Company. In January 2004, the Schools of Education and Management completed their move into Fairlane Center South. CEHHS and COB courses were offered in this new location starting Winter 2004. The Computer and Information Science Department will occupy the space vacated by CEHHS and the Department of Social Sciences together with other administrative offices will move into the former School of Management building, now called the Social Sciences Building.

Under Chancellor Little, the strategic planning effort initiated by Renick was continued. The campus community reaffirmed its intention to pursue doctoral programming, to explore the possibility of on-campus housing, to review undergraduate programs and to focus attention on diversity. The most recent self-study for continuing accreditation by the Higher Learning Commission (formerly the North Central Association) focused on each of these areas and provided summaries of the current status of each of these ongoing efforts. UM-Dearborn was accredited for ten years in 2004 and was authorized to offer doctoral programming.

In 2009, UM-Dearborn welcomed its fourth Provost and Vice Chancellor for Academic Affairs, Dr. Catherine A. Davy. Two new buildings, the Science Learning and Research Center (just west of the Science Building) and the Institute for Advanced Vehicle Studies will be operational.

Source of information up to 1984: A Gift Renewed, written by Professor Elton D. Higgs.

Accreditation

The University of Michigan-Dearborn is fully accredited by The Higher Learning Commission and a member of the North Central Association of Colleges and Schools. Accreditation has also been awarded to various UM-Dearborn engineering programs by the Accreditation Board of Engineering and Technology, Inc. AACSB, the Association to Advance Collegiate Schools of Business has accredited programs in the College of Business. The College of Education, Health, and Human Services is a member of the American Association of Colleges for Teacher Education, the Michigan Association of Colleges for Teacher Education, and the Teacher Education Council of State Colleges and Universities. In 2001 its certification programs were approved through the periodic review of the Michigan Department of Education.

For information regarding the accreditation status of the University, either of the following may be contacted:

The Higher Learning Commission
North Central Association of Colleges and Schools
230 South LaSalle Street, Suite 7-500
Chicago, IL 60604-1413
(800) 621-7440
ncahigherlearningcommission.org
or
University of Michigan-Dearborn
Office of the Provost
1080 Administration Building
Dearborn, MI 48128-2406
(313) 593-5030

Some degree programs are certified by professional organizations.

Admissions

Office of Admissions and Orientation 4901 Evergreen Road 1145 University Center Dearborn MI 48128 313-593-5100 313-436-9167 [FAX] admissions@umd.umich.edu umd.umich.edu/futurestudents

Campus Visits/Tours

Visiting campus is the best way to explore what we offer you! The Office of Admissions and Orientation offers multiple visit options. Choose the one that best fits your schedule by visiting our website at umd.umich.edu/visit.

Campus Visits

- **Go Blue Friday**: A special campus visit for high school students which includes a presentation and campus tour.
- **Transfer Nights**: Designed especially for students interested in transferring.
- Daily Campus Tours: 45 minute walking tours are given by current students at various times throughout the week. Call 313-593-5100 to make a reservation.
- Individual Appointments: If you prefer a one-on-one meeting with an admissions counselor, appointments are available Monday through Friday. Walk-in counseling is available on select Saturdays.
- Group Visits: Group visits (10 or more students in 8th grade or above) can be arranged to include an Admissions informational session and a 45 minute walking tour led by current students. Other campus offices are available to provide information by request. Please request a group visit at least two weeks in advance. A request form is available online at umd umich.edu/visit.

Degrees Offered

The following undergraduate majors and other fields of concentration offered at UM-Dearborn are shown with the degree designations to which they normally lead:

Key

Bachelor of Arts	AB
Bachelor of Business Administration	BBA
Bachelor of General Studies	BGS
Bachelor of Science	BS
Bachelor of Science in Engineering	BSE

Accounting.	BBA
African & African American Studies	AB
American Studies	AB
Anthropology	AB
Art History	
Behavioral Sciences	AB
Biochemistry	BS
Bioengineering	
Biological Sciences.	
Chemistry	
A.C.S. Certified	
Instructional	
Children & Families	BGS
Communication	
Computer and Information Science	BS
Computer Science	
Information Systems	
Computer Engineering	BSF
CIS Mathematics (Dual Degree only)	
Criminal Justice Studies	
Digital Forensics	
Digital Marketing	
Early Childhood	
Elementary Certification	АВ, ВЗ
Earth Science	DC
Economics	
Electrical Engineering (Contifue	
Elementary Certification	ation Only)
Engineering Mathematics (Dual Degree only)	
English	
Environmental Science	
Environmental Studies	
Finance	
French Studies	AB
French Studies	AB BBA
French Studies	AB BBA BGS
French Studies	AB BBA BGS
French Studies General Business General Studies Health Policy Studies Hispanic Studies	ABBBABGSAB
French Studies General Business General Studies Health Policy Studies Hispanic Studies History	ABBBABGSABAB
French Studies General Business General Studies Health Policy Studies Hispanic Studies History Human Resource Management	ABBBABGSABABAB
French Studies General Business General Studies Health Policy Studies Hispanic Studies History Human Resource Management Humanities	ABBBAABABABAB
French Studies General Business General Studies Health Policy Studies Hispanic Studies History Human Resource Management Humanities Industrial and Systems Engineering	ABBBAABABABABBBABBA
French Studies General Business General Studies Health Policy Studies Hispanic Studies History Human Resource Management Humanities Industrial and Systems Engineering Information Technology Management	ABBBABGSABABBBABBABBABSEBBA
French Studies General Business General Studies Health Policy Studies Hispanic Studies History Human Resource Management Humanities Industrial and Systems Engineering. Information Technology Management Integrated Science	AB BBA BGS AB AB AB BBA BBA BSE BBA BS
French Studies General Business General Studies Health Policy Studies Hispanic Studies History Human Resource Management Humanities Industrial and Systems Engineering. Information Technology Management Integrated Science. International Studies	AB BBA AB AB BBA AB BBA AB BSE BBA AB AB
French Studies General Business General Studies Health Policy Studies Hispanic Studies History Human Resource Management Humanities Industrial and Systems Engineering. Information Technology Management Integrated Science. International Studies Journalism and Screen Studies	ABBBABGSABABBBABBABSEBBABSBSBSAB
French Studies General Business General Studies Health Policy Studies Hispanic Studies History Human Resource Management Humanities Industrial and Systems Engineering. Information Technology Management Integrated Science. International Studies Journalism and Screen Studies Language Arts	ABBBABGSABABBBABBABSEBBABSBSBSAB
French Studies General Business General Studies Health Policy Studies Hispanic Studies History Human Resource Management Humanities Industrial and Systems Engineering. Information Technology Management Integrated Science. International Studies Journalism and Screen Studies Language Arts Elementary Certification	ABBBABBABBABBABBABBABBABSEBBABS
French Studies General Business General Studies Health Policy Studies Hispanic Studies History Human Resource Management Humanities Industrial and Systems Engineering. Information Technology Management Integrated Science. International Studies Journalism and Screen Studies Language Arts Elementary Certification Liberal Studies	ABBBAABABBBABSEBSAABBSAABBSAAB
French Studies General Business General Studies Health Policy Studies Hispanic Studies History Human Resource Management Humanities Industrial and Systems Engineering. Information Technology Management Integrated Science. International Studies Journalism and Screen Studies Language Arts Elementary Certification Liberal Studies Management	ABBBAABABBBABSEBSAABABABABABAB
French Studies General Business General Studies Health Policy Studies Hispanic Studies History Human Resource Management Humanities Industrial and Systems Engineering. Information Technology Management Integrated Science. International Studies Journalism and Screen Studies Language Arts Elementary Certification Liberal Studies Management Manufacturing Engineering	AB BBA AB BS AB BBA AB BS AB BBA AB BS BBA AB BS BBA BS BBB BBB
French Studies General Business General Studies Health Policy Studies Hispanic Studies History Human Resource Management Humanities Industrial and Systems Engineering. Information Technology Management Integrated Science. International Studies Journalism and Screen Studies Language Arts Elementary Certification Liberal Studies Management Manufacturing Engineering Marketing	AB BBA AB BSA AB BSA AB BSA BSA BSA BSA
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French Studies General Business General Studies Health Policy Studies Hispanic Studies History Human Resource Management Humanities Industrial and Systems Engineering. Information Technology Management Integrated Science. International Studies Journalism and Screen Studies Language Arts Elementary Certification Liberal Studies. Management Manufacturing Engineering Marketing Mathematics Mathematics Studies Elementary Certification	AB BBA AB BSA AB, BS BBA AB, BS
French Studies General Business General Studies Health Policy Studies Hispanic Studies History Human Resource Management Humanities Industrial and Systems Engineering. Information Technology Management Integrated Science. International Studies Journalism and Screen Studies Language Arts Elementary Certification Liberal Studies. Management Manufacturing Engineering Marketing Mathematics Mathematics Studies Elementary Certification Mechanical Engineering	AB BBA AB BSA AB, BSE BBA BSE BBB BBB BBB BBB BBB BBB BBB BBB BBB
French Studies General Business General Studies Health Policy Studies Hispanic Studies History Human Resource Management Humanities Industrial and Systems Engineering. Information Technology Management Integrated Science. International Studies Journalism and Screen Studies Language Arts Elementary Certification Liberal Studies. Management Manufacturing Engineering Marketing Mathematics Mathematics Studies Elementary Certification Mechanical Engineering Microbiology	AB BBA AB BSA AB, BSE BBA AB, BSE BBA BSE BSE BSE BSE BSE
French Studies General Business General Studies Health Policy Studies Hispanic Studies History Human Resource Management Humanities Industrial and Systems Engineering. Information Technology Management Integrated Science. International Studies Journalism and Screen Studies Language Arts Elementary Certification Liberal Studies. Management Manufacturing Engineering Marketing Mathematics Mathematics Studies Elementary Certification Mechanical Engineering Microbiology Philosophy	AB BBA AB BSA BBA AB, BSE BBA AB, BS BBA BSE BBA AB, BS BBA AB
French Studies General Business General Studies Health Policy Studies Hispanic Studies History Human Resource Management Humanities Industrial and Systems Engineering. Information Technology Management Integrated Science. International Studies Journalism and Screen Studies Language Arts Elementary Certification Liberal Studies. Management Manufacturing Engineering Marketing Mathematics Mathematics Studies Elementary Certification Mechanical Engineering Microbiology Philosophy Physics.	AB BBA AB BSE BBA BBBA B
French Studies General Business General Studies Health Policy Studies Hispanic Studies History Human Resource Management Humanities Industrial and Systems Engineering. Information Technology Management Integrated Science. International Studies Journalism and Screen Studies Language Arts Elementary Certification Liberal Studies. Management Manufacturing Engineering Marketing Mathematics Mathematics Studies Elementary Certification Mechanical Engineering Microbiology Philosophy Physics. Political Science	AB BBA AB BSE BBA AB BSE BSE BS AB BSE AB BS
French Studies General Business General Studies Health Policy Studies Hispanic Studies History Human Resource Management Humanities Industrial and Systems Engineering. Information Technology Management Integrated Science. International Studies Journalism and Screen Studies Language Arts Elementary Certification Liberal Studies. Management Manufacturing Engineering Marketing Mathematics Mathematics Studies Elementary Certification Mechanical Engineering Microbiology Philosophy Physics Political Science Psychology	AB BBA AB BSE BBA AB BBA
French Studies General Business General Studies Health Policy Studies Hispanic Studies History Human Resource Management Humanities Industrial and Systems Engineering. Information Technology Management Integrated Science. International Studies Journalism and Screen Studies Language Arts Elementary Certification Liberal Studies. Management Manufacturing Engineering Marketing Mathematics Mathematics Studies Elementary Certification Mechanical Engineering Microbiology Philosophy Physics Political Science Psychology Reading.	AB BBA AB BSE BBA AB BBA
French Studies General Business General Studies Health Policy Studies Hispanic Studies History Human Resource Management Humanities Industrial and Systems Engineering. Information Technology Management Integrated Science. International Studies Journalism and Screen Studies Language Arts Elementary Certification Liberal Studies. Management Manufacturing Engineering Marketing Mathematics Mathematics Studies Elementary Certification Mechanical Engineering Microbiology Philosophy Physics Political Science Psychology	AB BBA AB BSE BBA AB BBA
French Studies General Business General Studies Health Policy Studies Hispanic Studies History Human Resource Management Humanities Industrial and Systems Engineering. Information Technology Management Integrated Science. International Studies Journalism and Screen Studies Language Arts Elementary Certification Liberal Studies. Management Manufacturing Engineering Marketing Mathematics Mathematics Studies Elementary Certification Mechanical Engineering Microbiology Philosophy Physics Political Science Psychology Reading.	AB BBA AB BSE BBA AB BSE BBA AB BSE AB AB AB AB AB AB AB

Secondary Certification	.(Certification Only)
Social Studies	AB, BS
Elementary or Secondary Certification	
Sociology	AB
Software Engineering	BS
Special Education	
Supply Chain Management	
Urban and Regional Studies	
Women's and Gender Studies	AB

Pre-Admission Counseling

Admissions counselors are willing to explain the educational opportunities available at UM-Dearborn to prospective students. It is urged that, whenever possible, persons interested in enrollment arrange a one-on-one appointment. This includes students in college or high school or anyone wishing to return to school.

Degree-Seeking Student

A student who has been admitted as a freshman or transfer into a regular degree program in an academic unit is called a degree-seeking student. After enrolling, a student may change from one degree program to another by following established procedures, as long as he/she is accepted by the new unit.

Freshman Student Admission

ADMISSION PROCEDURES

UM-Dearborn welcomes applications from prospective freshmen. The admission of all students is on a selective basis; admissions officials consider many factors in reaching individual decisions for admission.

Sources of information used in evaluating a candidate's qualifications include the secondary school record (GPA, rigor of curriculum and trend of grades), comments of the secondary school counselor or principal, scores achieved on either the Scholastic Aptitude Test (SAT) or the American College Test (ACT), and any evidence of special abilities.

Freshmen are expected to present a final official high school transcript as proof of graduating from an accredited high school or preparatory school. The requirement of high school graduation may be waived for adults, provided there is evidence that they are likely to be successful at the University. This evidence will in most cases take the form of the General Educational Development (GED) test results. The minimum GED test score for admission consideration is 600.

Information provided on the Application for Undergraduate Admission and Scholarships must be accurate and complete. Falsification or omission of information or credentials may result in the revocation of admission.

APPLICATION DEADLINE

It is recommended that students apply for admission online and are eligible to do so as soon as they complete their junior year in high school.

The application deadline for preferred scholarship consideration is December 15 of the student's senior year in high school. The official application deadline date for any semester is the first day of class of that semester.

The application fee is \$30. If you apply online (umd.umich.edu/apply), the application fee is waived and you can check your application status online. Paper applications may also be obtained in the Office of Admissions and Orientation or printed from the website. If you submit a paper application, you must include payment (check or money order) for the \$30 non-refundable application fee.

Official high school transcripts are needed at the time of application for freshman admission. Students seeking admission to UM-Dearborn that took coursework from other institutions of higher learning must also submit official transcripts from all previous institutions. Official corrections made to transcripts by previous schools, whether high schools, colleges, or universities, must be submitted to the University no later than six months after the first day of classes. Students whose official transcripts are not received will have a hold placed on their student account which prevents course registration for future semesters.

The Admissions counseling staff welcomes the opportunity to meet prospective students. Appointments should be arranged in advance by calling the Office of Admissions and Orientation at 313-593-5100.

ADMISSION REQUIREMENTS

Students interested in enrolling at UM-Dearborn should have completed the Michigan Merit Curriculum as established by the State of Michigan (or equivalent coursework if outside of Michigan). Students graduating from a high school outside of Michigan should pay close attention to the requirements listed below.

A strong high school background in basic academic subjects is important in a student's preparation for college study. The following college preparatory high school curriculum should be followed:

College Preparatory English: Minimum four years required.

Mathematics: Minimum four years required (at least two years must be in college preparatory mathematics).

Biological and Physical Sciences: Minimum three years required with four years recommended.

History and Social Sciences: Minimum three years required.

Foreign Language: Minimum two years strongly recommended.

Computer Science: At least one semester is required; one year recommended.

Electives: Additional work in any subjects offered for high school credit to bring the total for the four high school years to the equivalent of at least 15 units.

SPECIAL RECOMMENDATIONS

Students who intend to pursue their college work in **business** administration, computer science, engineering, or physical and natural sciences are encouraged to include the following subjects in their high school preparation:

Mathematics: Coursework should include two years of algebra, one year of geometry and at least one semester of trigonometry.

Biological and Physical Sciences: Coursework should include one year of chemistry and at least one year of physics or biological science.

Applicants intending to pursue a college program in science or engineering who have not completed the recommended mathematics and chemistry units may still be admitted if they satisfy the general admission requirements. However, they will be expected to establish proficiency in these areas during their freshman year.

TEST REQUIREMENTS

UM-Dearborn requires all prospective freshmen to submit scores from at least one standardized test: the Scholastic Aptitude Test (SAT) or the American College Test (ACT). The student should make certain that the test results are forwarded to the UM-Dearborn Office of Admissions and Orientation (SAT code #1861; ACT code #2074).

The results of standardized achievement tests in specific subject areas are not required as part of the application process. However, all new freshmen enrolling at UM-Dearborn, must take the UM-Dearborn English Composition Examination and the Mathematics Placement Examination. These exams are for diagnostic and placement purposes. Placement exams are normally administered prior to each registration period.

ADVANCED PLACEMENT (AP)

A prospective student who has exhibited outstanding scholarship in a particular subject area and has participated in the College Board's Advanced Placement Program (AP) may be considered for advanced college placement and credit. Such applicants should arrange to have their Advanced Placement Examination reports sent (use our college code of 1861) to the Office of Admissions and Orientation, where they will be reviewed in accordance with the regulations of the various academic departments. Advanced Placement credit will not be granted when the AP Exam is taken after the student's official date of high school graduation. For information on the college credit AP practices, visit umd.umich.edu/advancedplacement.

INTERNATIONAL BACCALAUREATE

UM-Dearborn grants credit to students based on their IB scores. Students who participated in the IB program in high school should request that their scores be provided to the University for evaluation. Scores of 4 and above are considered for credit.

ENROLLMENT DEPOSIT

In order to guarantee a space in the respective semester, a \$50 enrollment deposit should accompany the student's affirmative reply on the Admissions Acceptance Form, which is sent to the student at the time of admission. The applicant may confirm at any time. For the fall semester, the deadline for deposit is May 1. Upon registration, this deposit will be applied to tuition/fees for that semester. The \$50 enrollment deposit is not refundable after May 1 for fall semester admitted students regardless of when the deposit is submitted.

For the winter semester, the deadline for deposit is December 1. For the summer semester, the deadline for deposit is April 1. The deposit is not refundable after the deadline dates.

Online payment of the deposit can be submitted at umd.umich.edu/deposit.

BRIDGE PROGRAM

Students denied admission to the University may choose to enroll in the Bridge Program, a partnership with Henry Ford Community College. Students can enroll at HFCC for the first one to two years of college to plan a degree program, earn college credit, and develop the skills and knowledge necessary to succeed in academics. For more information, visit umd.umich.edu/bridge.

Transfer Student Admission

ADMISSION REQUIREMENTS

The requirements for admission to UM-Dearborn depend upon the particular program of study to be followed. Admission is based on preparation, ability, and probability of success. All applicants should be in good standing and eligible to return to their previous institution.

Each of the four academic colleges of the University has its own admission criteria:

CASL 2.50 COB (BBA) 2.70* CECS 2.75** CEHHS 2.75

*Students must also have a 2.70 in the eight specific courses (COMP 105, 280; ECON 201, 202; MATH 113 or 115; BA 100; ACC 298, 299) required for BBA admission.

**Students must also have a 2.75 recalculated math, science, and engineering GPA.

Information provided on the Application for Undergraduate Admission and Scholarships must be accurate and complete. Falsification or omission of information or credentials may result in the revocation of admission.

ADMISSION PROCEDURE

Prospective transfer students are required to submit an application for admission and an official transcript from each college or university previously attended. Failure to list all schools attended on the application may result in revocation of admission. To be considered, official transcripts must come directly from the previous college/university to UM-Dearborn's Office of Admissions and Orientation or must be received in a sealed envelope with the issuing college/university's stamp/signature over the seal.

The prospective student is responsible for contacting each previous school attended to request that official transcripts be sent. While all transcripts are required for admission, only courses taken at an accredited college or university will be considered for transfer to the University of Michigan-Dearborn. UM-Dearborn uses the Transfer Credit Practices published by the American Association for Collegiate Registrars and Admission Officers (AACRAO) as a guideline to determine transferability of courses based on accreditation status and other criteria. A list of accredited U.S. and Canadian colleges and universities can be obtained from infoplease.com/edu/colleges/index.html or from the American Council on Education at acenet.edu/nationalguide/.

The application fee is \$30. If you apply online (umd.umich/apply), the application fee is waived and you can check your application status online. Paper applications may be obtained in the Office of Admissions and Orientation or printed from the website. If you submit a paper application, you must

include payment (check or money order) for the \$30 non-refundable application fee.

When the application and official transcripts have been received, they will be evaluated and the student will be notified regarding admission status.

Admission granted while the student is enrolled at another institution is conditional and will become final only when the student meets the conditions set forth in the conditional admission letter and upon receipt by the Office of Admissions and Orientation of the final official transcript from the student's former institution(s). It is the student's responsibility to see that the final transcript is provided to the Office of Admissions and Orientation following the completion of all courses. Students will not be allowed to register for subsequent terms until the final transcript has been received.

Official corrections made to transcripts by previous schools, whether high schools, colleges, or universities, must be submitted to the Office of Admissions and Orientation within six months of the first day of classes of the term of admission.

TEST REQUIREMENTS

All new transfer students enrolling at UM-Dearborn must take the UM-Dearborn English Composition Examination; the Mathematics Placement Examination must be taken by all new students who plan to take Pre-Calculus or Calculus 1. These exams are for diagnostic and placement purposes. Placement exams are normally administered prior to each registration period.

TRANSFER OF CREDITS

Students transferring to UM-Dearborn from other two- or four-year institutions can use one or more of these resources below to ensure maximum number of transfer credits.

Course Transfer System

The Course Transfer System (CTS) (umd.umich.edu/cts) at the University of Michigan-Dearborn is a valuable resource. While it is not an official credit evaluation, the CTS can serve you in determining the transferability of courses from an accredited Michigan community college or four-year school. The information is always current and reflects courses that potentially transfer to UM-Dearborn, but does not necessarily indicate if or how these courses will be used toward your particular degree program.

Equivalency Tables

Our Equivalency Tables outline how courses by each subject area transfer to the University.

Curriculum Guides

Our Curriculum Guides outline courses that can be applied to specific majors.

TRANSFER HUBS

Students transferring to UM-Dearborn from a community college located in the metropolitan southeastern Michigan area should check out the customized websites for each of the community colleges. These sites can be accessed at umd.umich.edu/hubs.

TRANSFER EQUIVALENCY WORKSHEET

Shortly after admission, a transfer student will receive a Transfer Equivalency Worksheet. This worksheet reflects only the overall hours potentially transferable to UM-Dearborn, but does not necessarily reflect the hours that will be used toward a degree

program. An academic advisor will inform the student as to which hours actually fulfill program requirements. The number of hours that apply to a particular program will determine the number of additional UM-Dearborn hours necessary for degree completion.

MAXIMUM TRANSFERABLE CREDITS

Previously Attended Institutions	Maximum Transferable Credit
2Y (only)	62
4Y (only)	75
2Y & 4Y	75 (62 from 2Y, 75 total)
UM (only)	90
2Y & UM	90 (62 from 2Y, 90 total)
4Y & UM	90 (62 from 2Y, 90 total)
2Y, 4Y & UM	90 (62 from 2Y, 75 from 2Y+4Y, 90 total)

2Y = 2 year institution

4Y = 4 year institution

UM = University of Michigan-Ann Arbor, Flint, or Dearborn

Admission to the Honors Program

The Honors Program at UM-Dearborn is designed for qualified, highly-motivated students who want an extra level of challenge and stimulus in their college experience. Honors students take a special sequence of classes that satisfy basic requirements and, at the same time, provide a well-balanced undergraduate education. The program teaches students to think critically and independently, to perceive connections between diverse areas of knowledge, and to express their thoughts clearly and effectively. Honors Program classes are small, enabling students to interact closely with the faculty and each other.

Admission to the program is competitive and is based on the student's interests and experience as well as the high school record. Students eligible to interview for the Honors Program will be contacted to schedule an interview.

Students admitted with distinction (at least a 3.50 recalculated GPA and at least a 25 ACT composite score) will be invited to interview for the Honors Program.

For more information, visit casl.umd.umich.edu/sp_honorsprog.

Personal Enrichment

Personal Enrichment (PE) is an admission status that enables students to enroll in undergraduate courses for the purpose of personal or professional development.

Eligibility

 Students must have already earned a baccalaureate degree and not be seeking an additional undergraduate degree.

Students in this category are subject to the following policies:

- A PE student may enroll for a maximum of 15 credit hours at the University. There is no limit on the number of semesters, but the total number of completed credit hours for all semesters enrolled may not exceed 15.
- A PE student may apply no more than 15 credit hours accumulated at UM-Dearborn to a degree program. Exception is possible only by written permission of the academic dean of the unit to which the student has applied.
- A PE student is limited to enrolling for nine credit hours (not

- to exceed three courses) in a single four-month term (four hours per half-term).
- A PE student with a grade point average (GPA) less than 2.0 should see the Director of Academic Assistance in the Student Success Center before registering for a subsequent term. The student will normally be put on probation. If academic performance persists below a 2.0 cumulative grade point average (GPA), the student may be required to withdraw from the University.

A Personal Enrichment student will have fees assessed and adjusted by fee regulations identical to those governing regular matriculated students. All courses taken under PE status are considered part of the undergraduate record.

Students who wish to request additional information should call the Office of Admissions and Orientation at 313-593-5100.

Prospective Degree Student

The Prospective Degree Student (PDS) program provides an opportunity for an individual whose previous high school and/or college work does not qualify for admission as a degree-seeking student to enroll in undergraduate courses.

Eligibility

 Students who are at least five years beyond high school graduation (or beyond last high school attendance for applicants with a GED)

OR

 Students who have completed some college work, and are at least five years out of high school, and have not been enrolled in college for at least two years

Students in this category are subject to the following policies:

- A student may enroll for a maximum of 15 credits toward degree as a non-degree student. The student may take additive credits with the approval of his/her advisor, but these credits are not used in determining eligibility for degree status, nor will they apply toward a degree.
- The 15 credit hours, GPA requirement, and prerequisite courses (if any) must be completed within two full academic years.
- A PD student with a grade point average (GPA) less than 2.0 should see the Director of Academic Assistance in the Student Success Center before registering for a subsequent term. The student will normally be put on probation.
- Upon completion of no more than 15 credit hours, the student must apply for admission to a degree program.
- Students who earn a GPA less than the academic unit requirement are unable to apply for admission and do not have permission to enroll in any status.
- Students who do not enroll at UM-Dearborn for one year or more and are in good academic standing must reapply by completing a new Prospective Degree Student admissions application.
- A PD student will have fees assessed and adjusted by fee regulations identical to those governing regular matriculated students. All courses taken under PDS status are considered part of the undergraduate record.
- PD students must take the English and Mathematics placement exams either before or during their first semester of enrollment.

Financial Aid Eligibility Limitations

Prospective Degree Students have a special status at UM-

Dearborn and are eligible to be considered for financial aid for up to 12 consecutive months before admission to a regular degree program. If a student is not admitted to a regular degree program at the end of the 12 consecutive months, the student is not eligible for additional financial aid.

Students who wish to request additional information should call the Office of Admissions and Orientation at 313-593-5100.

Alumni Enrichment Program

The Alumni Enrichment Program is an opportunity for UM-Dearborn alumni to enhance their education and to provide additional exposure to a variety of subject areas on a non-credit basis. Each alumni's selection of courses will be checked to ensure that the educational-broadening objective of this program is being faithfully pursued.

All courses must be taken on a pass/fail basis.

ELIGIBILITY

This program is available to UM-Dearborn Alumni only. Upon acceptance, students are eligible to elect up to 9 hours per term of undergraduate course work in one or more fields distinctly different from the field in which they earned their bachelor's degree (major or minor).

Undergraduate and graduate alumni from UM-Dearborn may pursue undergraduate courses. They are eligible to participate in the program one full term after graduation has been confirmed. Alumni participants are not eligible if currently enrolled in a degree or certificate program.

Course enrollments will occur on a space available basis. Alumni in this program will also have to meet the regular pre-requisites for any courses they elect. Internship, cooperative education, and online courses are not available to program participants.

ASSESSMENT

A discounted per credit hour charge will be levied as an "enrollment fee." This means that a portion of the tuition will be covered by an Alumni Scholarship. The Alumni Enrichment student will also be expected to pay any fees associated with registration, course elections, and technology.

TO APPLY

Complete an Alumni Enrichment Application and submit it to Enrollment Services. Applications are available in the Office of Admissions and Orientation or online at umd.umich.edu/otheradmission. Once approved and processed students will be allowed to register for classes. For further information, contact the Office of Admissions and Orientation at 313-593-5100.

Guest Students

A guest student is a regular degree student in good standing at another institution who is admitted to UM-Dearborn for one term only. Work completed under such an arrangement is considered to be a part of the student's program elected under the jurisdiction of the home institution.

Admission is by means of a Michigan Uniform Guest Application certified by the home institution, and a completed addendum to the application available at umd.umich.edu/guest-addendum. The Guest application deadline for any term is the first day of class of that term

Guest students are expected to receive academic advising from their home institution, although guest students are subject to all rules governing course prerequisites.

Enrollment is limited to a maximum of four semesters. A new application is required for each semester they wish to enroll. If a guest student has previously taken classes at UM-Dearborn, the admission decision will also be based on the UM-Dearborn GPA.

If there are prerequisites for any courses elected, the student is required to submit a copy of the home college/university's transcript to verify that all requirements have been fulfilled and receive the necessary overrides prior to registration.

Dual Enrollment Programs

HIGH SCHOOL DUAL ENROLLMENT

Dual enrollment provides an opportunity for public high school students with demonstrated academic potential to enroll in selected UM-Dearborn courses while completing their high school graduation requirements.

The purpose of the program is to supplement and enrich the educational experience by allowing students to pursue course work which otherwise would not be available. Admission as a dual enrolled student is a special non-degree status. Students are expected to complete all graduation requirements mandated by his/her high school. Although students are admitted with a special status, they are granted full privileges of UM-Dearborn students, including use of the library and recreational facilities and the opportunity to purchase student tickets to cultural and athletic events at the University of Michigan. After graduation, admission to a degree program at the University will be granted provided they meet the minimum admission criteria. Dual enrollment students may enroll for a maximum of eight credit hours per semester.

Admission Criteria:

Current Class Standing	Criteria
Seniors	• 3.0+ posted GPA on HS Transcript
Juniors	• 3.5+ posted GPA on HS Transcript
Sophomores and Freshmen*	 3.75+ posted GPA on HS Transcript Personal Interview with Admissions Representative to measure maturity level and preparedness for college coursework. Optional: provide any additional assessment scores if available (i.e.: Explore, Plan, ACT, Compass, MME, PSAT, SAT, or Accuplacer)

^{*}Upon admissions, high school freshmen and sophomores must sign a contract with the Student Success Center which will connect them with additional support services.

To Apply for Admission

Apply as early as possible. The deadline for all documents is **June 15** for the fall semester and **November 1** for the winter semester. No application will be processed until all of the following have been completed and received:

- 1. The Dual Enrollment application.
- Course election worksheet (back of the application). Be sure to select alternatives.
- Calculation sheet (back of the application) signed by your high school counselor or principal.
- 4. An official transcript (including test scores, if applicable).

Students must submit a new application for each semester they wish to enroll.

Orientation and Registration

Students will be notified of their admission status by the Office of Admissions and Orientation. Admission to dual enrollment status does not guarantee the ability to enroll in the class(es) specified on the application form, but every effort will be made to accommodate the student's request. Information about orientation and registration will be mailed upon admission.

IGNITE DUAL ENROLLMENT

IGNITE, an acronym for *Inspiring Gifted and Nurturing Individuals Through Enrichment*, is a program which has been developed through the combined efforts of local secondary school counselors and principals and the University of Michigan-Dearborn. The objective of the IGNITE program is to provide an opportunity for private, parochial, or home schooled high school students with demonstrated academic potential to enroll in selected UM-Dearborn courses while completing their high school graduation requirements.

The purpose of the program is to supplement and enrich the educational experience by allowing students to pursue course work which otherwise would not be available. Admission as an IGNITE dual enrolled student is a special non-degree status. Students are expected to complete all graduation requirements mandated by his/her high school. Although students are admitted with a special status, they are granted full privileges of UM-Dearborn students, including use of the library and recreational facilities and the opportunity to purchase student tickets to cultural and athletic events at the University of Michigan. After graduation, admission to a degree program at the University will be granted provided they meet the minimum admission criteria. IGNITE dual enrollment students may enroll for a maximum of eight credit hours per semester.

Students are not permitted to enroll in both programs simultaneously; a student will either be an IGNITE applicant or a dual enrollment applicant. If you have questions about the IGNITE program, call the Office of Admissions and Orientation, 313-593-5100.

Admission Criteria:

IGNITE applicants must be attending a non-public high school or home schooled, must be U.S. citizens or permanent resident aliens and meet the following criteria.

Current Class Standing	Criteria
Seniors	• 3.0+ posted GPA on HS Transcript
Juniors	• 3.5+ posted GPA on HS Transcript
Sophomores and Freshmen*	 3.75+ posted GPA on HS Transcript Personal Interview with Admissions Representative to measure maturity level and preparedness for college coursework. Optional: provide any additional assessment scores if available (i.e.: Explore, Plan, ACT, Compass, MME, PSAT, SAT, or Accuplacer)

*Upon admissions, high school freshmen and sophomores must sign a contract with the Student Success Center which will connect them with additional support services.

Scholarships

The IGNITE Scholarship pays half tuition and fees up to a maximum of eight credit hours per term for the fall and winter semesters only. Students do not have to complete a separate scholarship application; their tuition will automatically be adjusted.

Students may take classes during the summer semester, but are responsible for full tuition and fees; no scholarships are awarded for summer semester.

To Apply for Admission

Apply as early as possible. The deadline for all documents is **June 15** for the fall semester and **November 1** for the winter semester. No application will be processed until all of the following have been completed and received:

- 1. The IGNITE application (no application fee required).
- Course election worksheet (back of the application). Be sure to select alternatives.
- 3. An official transcript (including test scores, if applicable).

NOTE: Students must submit a new application for each semester they wish to enroll.

Orientation and Registration

Students will be notified of their admission status by the Office of Admissions and Orientation. Admission to IGNITE dual enrollment status does not guarantee the ability to enroll in the class(es) specified on the application form, but every effort will be made to accommodate the student's request. Information about orientation and registration will be mailed upon admission.

All dual enrollment applications can be found online at umd.umich.edu/otheradmission/.

Readmission

An undergraduate student (that is, a candidate for a bachelor's degree) who does not register for any courses at UM-Dearborn during a 12-month period must be formally readmitted in order to resume studies at UM-Dearborn. Such a readmitted student is then governed by the current *Catalog*.

Some instructional units at UM-Dearborn may have more stringent regulations. It is the obligation of students who leave the University for an extended period of time to acquaint themselves with the specific requirements of their instructional unit.

Since all *I* and *X* marks are permanently changed to *IE* and *XE* after six months, a readmit may not petition to make up *I*'s or *X*'s on his/her prior record.

Courses taken at other campuses will not count automatically toward graduation. Students must receive prior written permission from their academic unit to take specific courses elsewhere; otherwise, such courses may be rejected by the unit as credits toward a UM-Dearborn degree.

Readmitting students complete a Readmission Form available to download at umd.umich.edu/ddc and submit it directly to the academic unit in which they wish to enroll. Readmitted students are subject to the requirements in effect at the time of readmission. If students want to change their program of study, they should contact the academic unit of the program to which they would like to change.

DEFERRING ADMISSON

Students who have been admitted but did not enroll may defer admission up to one year. After that, a new admissions application must be submitted.

To defer admission, students complete an Admission Information Change Form available to download at umd.umich.edu/ddc and must disclose if there will be any enrollment at another school prior to the new deferred semester. Failure to disclose this information may result in the revocation of admission.

Teacher Certification

The College of Education, Health, and Human Services at UM-Dearborn can assist qualified persons who hold a bachelor's degree from an accredited institution to pursue a program of study leading to a recommendation for a Michigan Provisional Teaching Certificate-Elementary (COE) or Secondary (COS).

Michigan Tests for Teacher Certification (MTTC) are required for both admission and for certification.

Admission to these programs (COE and COS) requires a cumulative GPA of 2.75 or higher on a 4.0 scale. In addition, a GPA of 2.75 is required in the chosen teaching Major (M) and teaching minor (m) (see Major/Minors for Elementary Certification or Majors/Minors for Secondary Education). Once admitted, the 2.75 must be maintained in all areas.

Applications and additional information are available by calling 313-593-5090.

Second Degree

Applicants must submit the Application for Undergraduate Admission and Scholarships and meet the same admission requirements as transfer students. Each of the four academic schools and colleges of the University have their own admission criteria:

CASL 2.50 COB (BBA) 2.70* CECS 2.75** CEHHS 2.75

*Students must also have a 2.70 in the eight specific courses (COMP 105, 280; ECON 201, 202; MATH 113 or 115; BA 100; ACC 298, 299) required for BBA admission.

**Students must also have a 2.75 recalculated math, science, and engineering GPA.

Refer to the Transfer Student Admission section for additional information.

Retired Persons Scholarship Program

The Retired Persons Scholarship Program (RPSP) offers retirees the opportunity to attend classes alongside traditionally-aged students. The integration of younger students and older students into the mainstream academic curriculum bridges the generational gap. A limited number of Retired Persons Scholarships for undergraduate and graduate study are available at the University of Michigan-Dearborn.

Prospective students are required and expected to:

- have reached their 60th birthday prior to the semester of their first registration under this program.
- have graduated from high school and have the potential to succeed at college-level studies as demonstrated in an interview in the Retired Person Scholarship program (RPSP) Office. Appropriate education, career or life experience will be given special consideration.
- be a "retired person" -- to have no current career or employment.

 For more information visit casl.umd.umich.edu/rpsp. Applications are available at umd.umich.edu/ddc, select CASL Campus Options Program, or by writing to:

Retired Persons Scholarship Program

2200 Social Sciences Building University of Michigan-Dearborn 4901 Evergreen Road Dearborn, MI 48128 313-593-1183

Provisional Admission

UM-Dearborn offers provisional admission to prospective students who meet the academic requirements but whose English language proficiency does not meet the levels required for regular admission. All applicants whose first language is not English must provide proof of English language proficiency. Provisional status will continue until the minimum language proficiency (for regular admission) is attained. Provisionally admitted students will be provided intensive English language support through the English Language Proficiency Program with a goal of achieving admission into a degree program (see section "Office of International Affairs").

International Admission

All students must complete the Application for Undergraduate Admission. A \$30 application fee is required of all students (\$75 for those who will be studying on an F or J visa).

Application deadlines for students residing outside the U.S.:

	Undergraduate	Graduate
For the fall semester	July 1	April 1
For the winter semester	November 1	August 1
For the summer semester	March 1	December 1

You may submit your application first, and send additional materials afterwards however a complete packet with all necessary application components will expedite the admissions decision. All correspondence must be in English, and must contain the full name of the applicant with the family surname underlined. Once the application has arrived, applicants will be notified of any missing items. Applications will not receive a final evaluation until all required materials have been received.

PROOF OF STATUS

Students who are not U.S. citizens or Permanent Residents must provide proof of their current status in the U.S. Please refer to the appropriate category below.

F-1 or J1 Visa Students

If you are already in the U.S. studying on an F-1 or J1 visa, you must submit a copy of your current I-20 or DS-2019 form (front and back), a copy of your I-94 card, and a copy of the page containing the stamp which indicates your status in the U.S. Students currently outside the U.S. who plan to obtain an F-1 or J-1 visa from abroad for use in entering the U.S. should write "plan to obtain F-1 (or J-1)" in the "Type of Visa" section on the application.

Other Visa Students, Refugees, and Asylees

If you are currently in the U.S. as a refugee, asylee, or on a temporary visa other than the F-1 student visa (such as F-2, B-2, H-4, etc.), you must provide a copy of the identification page of your passport (name and photo) and a copy of the page containing the stamp which indicates your status in the U.S. If

you wish to change to F-1 status as you begin attending UM—Dearborn, please indicate this on your application.

Special Information for Canadians

- If you are a Canadian residing in the U.S. during your full course of study (12 or more credit hours), you must submit all documentation to the Office of Admissions and Orientation as if you were applying for an F-1 visa. An I-20 will be issued for the duration of the program of study.
- If you are a Canadian residing in Canada, you need to submit a financial document showing support for one semester. A Commuter I-20 will be issued for one semester at a time. Commuter Canadian Students do not receive all of the F-1 benefits.
- All Canadian students present the I-20 and other documents (i.e. passport) at the border, but they do not need to apply for a visa. The border will issue an I-94 document.

ACADEMIC RECORDS

Translations

Translations are required for all documents not originally in English. These translations are the responsibility of the student and must be complete, word-for-word, and in the same format as the original document. You must submit both the original document and the translation to the Office of Admissions and Orientation.

High School Records

All freshmen must submit official transcripts for all years of secondary school work completed (U.S. and abroad). If your secondary school work has been completed in a country which has national standardized examinations, you must also submit official certificates showing results of these examinations ("O" or "A" levels, Baccalaureate, Standard X and XII, etc.).

Transfer students must provide proof of secondary school completion (diploma, final transcript, leaving certificate, examination certificate, etc.), but are usually not required to provide records from all years of secondary school. However, you must provide complete records if you have attended college for less than one year of full-time study.

College and University Records

Transfers must have official transcripts sent to the Office of Admissions and Orientation from all post-secondary institutions attended. Notarized copies may be acceptable from institutions outside the U.S. (if originals are typically difficult to obtain).

If you have attended college or university outside the U.S., you must also submit transcripts from **all** post-secondary institutions you have attended outside the U.S. to one of two evaluation services:

- Educational Credential Evaluators (ECE) for a course-bycourse evaluation (www.ece.org)
- World Education Services (WES) for a course-by-course evaluation (www.wes.org)

Please also send a copy of these records (and translations) to the Office of Admissions and Orientation for your file, as requested above. ECE requires that you also submit records from your last year of secondary school along with your college or university records.

If you are admitted and enroll as a degree-seeking student at UM-Dearborn, we will reimburse you for \$100 of the cost of this evaluation by making a credit to your student account at the end of the drop-add period of your first term of enrollment at UM-

Dearborn. We will not reimburse for the extra rush service fee, so it is important that you start the evaluation process well in advance of your intended starting term at UM-Dearborn. Requests for reimbursement must be made in writing within 30 days of the start of the term to the Office of Admissions and Orientation.

ACADEMIC REQUIREMENTS FOR INTERNATIONAL ADMISSION

This section concerns grade-point average (GPA) and course/curriculum requirements. All first-year applicants must take either the SAT 1 or the ACT, AND a language proficiency test. See Sections "Requirements For Standardized College Entrance Examinations" and "English Language Proficiency Requirements" for details.

Freshman Academic Requirements

Freshmen who have attended secondary school abroad are expected to meet the same general admissions requirements as U.S. students.

- You must have earned a U.S. high school diploma or the equivalent secondary school completion credential in your country, by the time you would enroll at UM-Dearborn. Freshmen usually apply during their last year of secondary school. Any offer of admission is conditional upon successful completion of the secondary school program before enrollment at UM-Dearborn.
- You must have pursued a general academic (non-vocational) program of study. Solid preparation in the traditional academic college-preparatory subjects is required (English, mathematics, science, social studies).
- 3. You must have maintained above-average grades throughout your secondary school studies. Admission is competitive, and to be a strong candidate for admission, grades received should be equivalent to an overall GPA of 3.0 on a 4.0 U.S. scale. If you complete your secondary schooling abroad, please contact the Office of Admissions and Orientation for information on the credential and level of performance which would be acceptable for admission.

Transfer Academic Requirements

The Office of Admissions and Orientation will evaluate transcripts from all institutions attended as well as ECE or WES evaluations for foreign schools. Transfer students must have completed 24 transferable credits. If you are applying with fewer than 24 transferable credits, complete high school records including ACT or SAT scores will be required.

General academic requirements for each unit are listed below. You should contact the Office of Admissions and Orientation as early as possible in your academic career to be certain that you are completing courses that will not only transfer, but also count toward specific admission and/or graduation requirements at UM-Dearborn. All GPA requirements are given using the 4.0 U.S. scale.

All transfer applications are reviewed on an individual basis, and if you do not meet the stated requirements for your desired unit, it is suggested that you discuss your situation with an admissions counselor. Call 313-593-5100 to schedule an appointment.

- College of Arts, Sciences, and Letters Required GPA: 2.50
- College of Business Required GPA (BBA): 2.70

- College of Engineering and Computer Science Required GPA: 2.75 Other requirements: Students must also have a 2.75 recalculated math, science, and engineering GPA.
- College of Education, Health, and Human Services Required GPA: 2.75

If you do not meet the GPA requirement for the College of Business, College of Engineering and Computer Science, or the College of Education, Health, and Human Services but you do meet the requirement for the College of Arts, Sciences, and Letters (CASL), you may be admitted to CASL, then apply to join your desired program after you have completed additional courses and raised your GPA to the required level. Students should also be aware that there are limits to the number of transfer credits each unit will accept, and should contact the Office of Admissions and Orientation for more information.

REQUIREMENTS FOR STANDARDIZED COLLEGE ENTRANCE EXAMINATIONS

All freshmen are required to take a U.S. standardized college entrance examination, regardless of your citizenship/visa status or whether you have attended secondary school in the U.S. or abroad. Transfer students are not required to take this exam if they have earned at least 24 transferable credits. If for any reason, students are unable to provide a standardized exam result, the student should contact the Office of Admissions and Orientation immediately.

The Office of Admissions and Orientation will accept either the SAT I (Scholastic Aptitude Test: Reasoning Tests) or the ACT (American College Test). You must take one or the other of these tests (it is not necessary to take both). These tests are available throughout the world, and should be taken well in advance of the intended starting term. SAT and ACT scores take 6-8 weeks after the test date to arrive at UM-Dearborn. You may take the test(s) more than once, and UM-Dearborn will consider only your highest composite score.

Your score will be used as one factor in the admissions process. The standard requirement for U.S. students is a composite score of 22 on the ACT or 1030 on the SAT, but flexibility is possible in certain cases. If your secondary education has been completed partially or entirely abroad, and if English is not your native language, your individual circumstances will be considered when evaluating your test scores.

For students with international backgrounds, the score required for admission in each case will depend on various other factors, such as high school courses and grades, and English proficiency test scores (if required).

For information and registration materials for the ACT or SAT, please contact your high school counselor if you are in the U.S., or contact the testing agencies directly if you are currently living abroad:

SAT ACT College Board

Iowa City, Iowa 52443, U.S.A. P.O. Box 6200 Princeton, NJ 08451, U.S.A Phone: 319-337-1270

Phone: 866-756-7346 act.org

sat.org

P.O. Box 414

If you are not a native speaker of English, you must prove an

ENGLISH LANGUAGE PROFICIENCY

REQUIREMENTS

adequate level of English language proficiency to enroll in college credit courses, even if you are currently a U.S. citizen or permanent resident and regardless of how long you have resided or been educated in the U.S.

You must fulfill the English language proficiency requirement in one of the ways described below before regular admission will be granted.

Freshmen may prove their proficiency without additional testing by:

- completing two full years of general track English courses in a U.S. high school with grades of "C" or better and
- achieving an acceptable score on the verbal section of the ACT or SAT. There is no specific ACT/SAT verbal score required, but this score will be used in conjunction with other factors to evaluate your academic English skills.

If you have not met the conditions described above, you will be required to complete an English proficiency test.

Transfers may prove their English proficiency without additional testing by:

- presenting acceptable performance as described in the freshmen section above. You must provide records to verify acceptable courses, grades, and SAT/ACT scores, or
- completing two semesters of regular-track, transferable English courses. equivalent to UM-Dearborn's composition Composition 105 and 106, with grades of "C" or better in both courses ("C-" or below is not acceptable for transfer). If you are enrolled in the second semester of English composition when applying and earn a "C" or better in the first semester of English Composition, conditional admission may be possible.

If you have not demonstrated English language proficiency in one of the ways described above, you must take an English language proficiency test. The Office of Admissions and Orientation will accept the Test of English as a Foreign Language (TOEFL), the Michigan English Language Assessment Battery (MELAB), or the International English Language Testing System (IELTS) Examination. You must take one of these tests; it is not necessary to take all of them.

The minimum score required for admission is dependent on the test you take. Achieving the minimum score does not guarantee admission, only consideration.

Minimum Scores:

MELAB	76
TOEFL: Paper-based	550
TOEFL: Computer-based	213
TOEFL: Internet-based	80
IELTS	6.5

The TOEFL and IELTS are offered throughout the world. The MELAB is offered in the United States and Canada. You should take a test well in advance of your intended starting term. TOEFL and MELAB scores arrive at UM-Dearborn 6-8 weeks after the test date. IELTS mails results 13 days after the test

You may take the MELAB, TOEFL or IELTS test more than once, and only your most recent score will be considered. Test scores more than two years old will not be accepted for consideration. For testing information and registration materials, please contact:

MELAB Argus 1 Building 535 W. Williams Street

Suite 310

Ann Arbor, MI, 48103, U.S.A. Phone: 1-866-MYMELAB info@cambridgemichigan.org

TOEFL P.O. Box 6151

Princeton, NJ, 08541, U.S.A. Phone: 609-771-7600

toeflgoanywhere.org/

IELTS

IELTS International

825 Colorado Boulevard, Suite 112 Los Angeles, CA 90041, U.S.A.

Phone: 323-255-2771

ielts.org

UM-Dearborn offers English as a second language courses (see section "Office of International Affairs." The University also offers provisional admission (see section "Provisional Admission").

Admissions Committees

The Admissions Review Committee is chaired by the Director of Admissions and Orientation. Other members include members of the Office of Admissions and Orientation and a representative from the Student Success Center. The Review Committee meets regularly to review borderline admission cases and other unique admission circumstances.

The Conduct Review Committee is chaired by the Director of Admissions and Orientation. Other members include the Vice Chancellor for Enrollment Management and Student Life, two admissions staff members and a representative from the Department of Public Safety. This Committee reviews applicants with academic or criminal conduct history.

Orientation

The Office of Admissions and Orientation conducts orientation programs for newly admitted freshmen, transfer students, and parents of incoming students. These programs focus on academic expectations, requirements at UM-Dearborn, and various aspects of campus life. The programs also make students aware of existing services available to them: counseling; tutoring; academic advising; life/work planning; and social and cultural activities. The orientation program for parents of new students acquaints them with the organizational and programmatic structure of the University. Once admitted to the University, each student will receive information about Orientation. It is expected that all new students, freshmen and transfers, will attend Orientation. Questions may be directed to the Office of Admissions and Orientation by calling 313-593-5100.

PLACEMENT EXAMS

Newly admitted or readmitted students may need to take one or more placement exams. Placement exams are used to plan a student's program of study. Placement exams should be taken well in advance of orientation or meeting with academic advisor. Placement exams in English, Mathematics, and Foreign Language are offered. Placement exams are never used as a basis for awarding credit.

<u>Financial Aid</u>

Office of Financial Aid and Scholarships 4901 Evergreen Road 1183 University Center Dearborn MI 48128 313-593-5300 313-593-5313 [FAX] ask-ofa@umd.umich.edu umd.umich.edu/financialaid

Federal Title IV School Code: 002326

It is the goal of the University of Michigan-Dearborn that no student should be denied an education because of limited financial resources. To meet this goal, the university maintains programs of grants, scholarships, loans and part-time employment for eligible students who are accepted and enrolled in the university as a degree-seeking student in good standing.

Available Financial Assistance

There are three types of aid available through a single application (the Free Application for Federal Student Aid or FAFSA): grants, loans and employment. Most assistance is offered as a package of two or more kinds of aid. Undergraduates (pursuing their first bachelor's degree) are considered for grants, loans and work-study employment, according to their eligibility and preference. Students pursuing a second bachelor's degree are limited to loans and work-study employment.

Admission into an eligible program of study (i.e., a degreegranting program) is a primary criterion to receive financial aid funding. All Personal Enrichment status students are ineligible for financial aid. Most Guest, Prospective Degree status and Alumni Enrichment students are ineligible for financial aid however, there are limited exceptions which may be applicable to specific situations. Students admitted via Guest, Prospective Degree or Teaching Certificate status should make an appointment with a Financial Aid Officer to discuss their specific admission status and financing options.

Determining Need

Most financial assistance awarded by the Office of Financial Aid (OFA) is based on financial need as determined by a careful review of the resources of the student and of the student's

Need for financial aid is determined by the following calculation:

Cost of Attendance Budget (COA)

Expected Family Contribution (EFC)

Equals Financial Aid Eligibility (Need)

To determine the Expected Family Contribution (EFC), the calculation formula used is the Federal Methodology as mandated by the U.S. Congress. By completing the Free Application for Federal Student Aid (FAFSA), the student's family contribution is calculated and reported on the Student Aid Report (SAR) which is emailed or mailed to the student's home by the federal processor.

Cost of Attendance

umd.umich.edu/fa costdetail

Each year, the Office of Financial Aid (OFA) provides an estimated cost of attending UM-Dearborn for students interested in full-time enrollment. The estimated costs reflect a modest but adequate standard of living for the academic year. While there is some allowance for discretionary expenditures, there is no provision for costs not directly related to school attendance.

Tuition and fees are subject to change without notice by action of the Board of Regents. For current tuition and fees, individuals should consult umd.umich.edu/rr tuition-fees/.

How to Apply for Financial Aid

Most assistance is committed at a certain time of the year, so be mindful of application dates. Dates assume entrance for the fall semester.

Freshmen and Transfer Students

- After January 1, preceding Fall enrollment, complete the Free Application for Federal Student Aid (FAFSA). Students must apply online at fafsa.gov. Include student and parent (if applicable) PIN numbers. Release the FAFSA information to the University of Michigan-Dearborn by entering our Federal Title IV School Code 002326. Students and parents should use their Federal Income Tax Returns (FORM 1040, 1040A or 1040EZ) to complete the FAFSA. FAFSA results received in the Office of Financial Aid (OFA) by March 1 will receive first priority consideration for funds.
- Upon review of your FAFSA, the Federal Processor will provide you with a Student Aid Report (SAR). The Federal Processor will forward an electronic SAR to the email address you provided on the FAFSA. The OFA will receive your information electronically (assuming you have released the information to UM-Dearborn as described in #2 above).

CONTINUING STUDENTS

Students currently enrolled must apply every year at fafsa.gov after January 1 preceding fall enrollment. Applications, SARs and/or ISIRs (resulting from the FAFSA) must be received in the Office of Financial Aid by **March 1** to receive priority consideration for funds.

SUMMER

Summer is a separate processing period. Applications for Summer aid are available in late March/early April. Funding for the Summer term(s) is dependent upon funding levels after the two regular terms.

REMINDERS

- 1. Financial aid applications are processed only after a student has been admitted, but students need not wait until they are admitted to apply for financial aid.
- 2. Applications submitted after the stated dates will be considered, subject to the availability of funds, but notification may not come until after the term has begun.
- 3. Students must re-apply for financial aid each year.
- 4. All correspondence and documents must include the student's legal name and UMID number.

AWARD NOTIFICATION

New Students

Incoming students are notified in writing via U.S. mail of their initial financial aid offer. Thereafter, communication is via email and UM-Dearborn Connect (see below).

Current/Returning Students

Students are encouraged to regularly check their UM-Dearborn Email account and access their UM-Dearborn Connect account for award notification and other communication from the Office of Financial Aid. Email communication sent to student's UM-Dearborn Email address directs students to recent notices or activity on UM-Dearborn Connect.

Additive Credit

Additive credits are not eligible for financial aid and will not be used to establish enrollment status for financial aid. Additive credits include EDF courses and most co-op/internship courses. For more information about Additive Credits, see Policies and Procedures Section.

Award Procedures

All financial aid awards are made in accordance with two criteria: *demonstrated financial need* and the student's ability to maintain *satisfactory academic progress*. Completed files are processed on a first-come, first-served basis. A financial aid file is complete only after the following documents or information have been received:

- A completed FAFSA on fi le with the U.S. Department of Education. The processed FAFSA must be valid and have the University of Michigan-Dearborn school code (002326) listed so that Financial Aid Services can obtain the results electronically.
- The submission of all other information requested by the Office of Financial Aid (required prior to disbursement of federal aid), including verification documents if necessary.

Once a student's financial aid file has been reviewed and deemed complete by a financial aid counselor, a financial aid package will be processed and an award notification will be mailed or emailed to the student. The initial financial aid package will be based on assumed full-time status for the fall and winter semesters. Awards will be adjusted to actual enrollment. Financial aid awards can be viewed on Dearborn Connect.

Repeating Coursework

Federal financial aid programs can only pay for one repeat of a passed course (passed meaning grade "D" or higher). For example, if a student enrolls and earns a grade of "D" in a course, the student's enrollment status for financial aid will include that course attempt. If a student enrolls a second time in the same course, the course will be included in the student's enrollment status for financial aid. If the student enrolls for a third time financial aid will not include the course in the student's enrollment status. When a course is repeated, the previous enrollment is deducted from the calculation of successfully completed courses; therefore, this will lower your Cumulative Completion Rate.

The University of Michigan-Dearborn may allow a successfully-completed course to be repeated (two times, totaling three)

Types of Financial Aid

There are three basic categories of financial aid: gift aid (scholarships and grants), loans and part-time employment. Most assistance is offered as a package of two or more kinds of aid. Undergraduates (in pursuit of the <u>first</u> bachelor's degree) who apply to the OFA are considered for all three types of assistance. Undergraduates in pursuit of a second bachelor's degree are considered only for loans and work assistance.

GIFT AID

Scholarships and grants do not require repayment or work. Gift aid takes the following forms:

Freshman & Transfer Scholarships

The University offers a variety of scholarship resources for freshman and incoming students. University scholarship funds for incoming students are the following:

Adnan Aswad Transfer Student Scholarship

Alumni Legacy Scholarship

AMP Industry Scholarship

Athletic Scholarships

James Baughman Scholarships

Brick Program Endowed Scholarship

Center for the Education of Women (CEW) Scholarship

Chancellor's Scholarship

Chrysler Scholarships

City Year Detroit Alumni Scholarship

College of Engineering and Computer Science Scholarships

Community College Transfer Scholarship

Community Service Personnel Scholarships

Dean's Scholarship

Dependent Tuition Scholarship

Detroit Compact Scholarship

Detroit Edison Scholarships

Fielek Scholarship

Ford Motor Company Scholarships

General Dynamics Scholarships

General Motors Scholarships

Husak Scholarship

Junge Family Endowed Scholarship

Klungle Scholarship

Kurajian Scholarship

Henry Patton Endowed Scholarships

Maize and Blue Scholarship

Natural Science Scholarship

Non-Resident Scholarship

Retired Persons Scholarship

Frederick P. and Violet Sharpe Scholarships

UM-Dearborn Opportunity Scholarships

Wade McCree Scholarship

Each of the scholarships above has specific selection criteria. Some of the funds require prior commitment and participation, most do not. For detailed information regarding criteria for these scholarships, please refer to the OFA website (umd.umich.edu/financialaid), or contact the Office of Admissions and Orientation at (313) 593-5100.

Most scholarships have terms and conditions. These are accessible online at umd.umich.edu/accept.

Grants

Eligibility for the following Federal, State and University grant funds are determined according to demonstration of need (based on the outcome of the FAFSA), and availability of funds. The grants are considered for undergraduate students pursuing a <u>first</u> bachelor's degree. Unless otherwise stated, at <u>minimum</u>, eligibility requires adherence to Federal fund criteria, maintenance of the University's Satisfactory Academic Progress guidelines and enrollment on an at-least-half-time basis.

Federal Pell Grants

Pell Grant is a federal program with award ranges from approximately \$605 to \$5,645. An Expected Family Contribution (EFC) of 0 results in an award of \$5,645 based on full-time enrollment for the academic year. The Federal Pell Grant Program is considered the foundation grant to which all other sources are added to create a financial aid package. Pell Grant is one of the few programs that permit some students to receive a prorated portion of the award at a less-than-half-time enrollment status.

The Federal Pell Grant Program has lifetime eligibility limitations for all Pell Grant recipients. Pell Grant recipients are eligible to receive a maximum of 12 full-time semesters of this grant. Once a student has used 12 full-time semesters, he/she is no longer eligible for any additional Federal Pell Grant. There is no appeal for this restriction.

Students are able to track their eligibility used on the National Student Loan Data System (NSLDS). Access is gained using your Federal Student Aid PIN.

The limitations of financial aid eligibility impact financial aid and scholarship programs. It is important to work closely with your academic advisor to stay on track to meet degree requirements to make the best use of financial aid funds.

Federal Supplemental Educational Opportunity Grants (FSEOG)

FSEOG is a federal campus-based program used to supplement the Pell Grant of the needlest Pell Grant recipients. At UM-Dearborn, FSEOG is reserved for students with an Expected Family Contribution (EFC) ranging from \$0 - \$1,000.

TEACH Grant

(Teacher Education Assistance for College and Higher Education)

Funded by the federal government, the TEACH Grant provides up to \$3,760 per year for students whose intention is to teach in a "high need field" (subject area), in an elementary or secondary school serving students from low-income families. As a recipient, students agree (in advance of receipt) to teach a "high need field", full-time, for a minimum of four years within the eight years following program completion (or progress interruption from the program for which the grant was awarded). The FAFSA is required to be considered for a TEACH Grant. However, recipients do not have to demonstrate "need."

The TEACH Grant will remain a grant if recipients meet the specific criteria. If recipients do no meet the criteria, the TEACH Grant converts to an unsubsidized loan with interest calculated back to the initial disbursement date(s). For this reason, UM-Dearborn has defined our eligibility criteria as cautiously as possible.

The population UM-Dearborn currently considers for the TEACH Grant are: Seniors (at the undergraduate level) and graduate level students, with a high Cumulative Grade Point Average (CGPA), admitted into a degree-granting program of the College of Education, Health, and Human Services and pursuing majors that align with the "high need fields."

The minimum CGPA requirement for the TEACH Grant is 3.25.(for undergraduates). The undergraduate degree programs currently considered are: Bachelor of Arts and Bachelor of Science. The majors currently considered are: Education, General Science, Mathematics Studies, Science Education, Science Studies, Special Education and Teaching.

Michigan Competitive Scholarship (MCS)

Funded by the State of Michigan, the Michigan Competitive Scholarships are available to many Michigan high school graduates from the Office of Student Scholarships and Grants, Michigan Department of Treasury. Scholarships are awarded to qualifying undergraduates attending public colleges and universities in Michigan. To qualify for the scholarships, students must demonstrate aptitude based on their performance on the American College Test (ACT) as well as financial need as determined by uniformly applied methodology via information from the FAFSA. Recipients must also meet Michigan residency requirements.

Children of Veterans' Tuition Grant Program

The Children of Veterans' Tuition Grant Program offers Tuition Grant assistance to the children of Michigan veterans who were killed while in service, died as a result of service-related disabilities, or is considered 100% disabled because of service-connected disabilities. The child must be a Michigan resident between the ages of 16 and 25. Upon admission to a Michigan institution of higher learning, eligible undergraduates may qualify for a Tuition Grant of up to \$2800 each academic year for full-time enrollment (amounts are prorated for less than full-time enrollment.) Students must maintain a 2.25 or higher cumulative grade point average. Inquiries may be directed to the State at (1-888) 447-2687.

University of Michigan-Dearborn Grants

Funded by the University of Michigan-Dearborn, UM-Dearborn Grants are awarded to help high need students defray tuition costs. The Expected Family Contribution (EFC) is used to determine eligibility for these grants. Some UM-Dearborn Grants are strictly need-based, some are need-and merit-based. Given eligibility and funding, applicants are automatically considered for the appropriate type of grant.

LOANS

Eligibility for the following Federal loan programs are determined according to demonstration of need (based on the outcome of the FAFSA), availability of funds and also individual, annual and aggregate borrowing parameters. Eligibility requires adherence to Federal fund criteria, maintenance of the University's Satisfactory Academic Progress guidelines and at *minimum* enrollment on an at-least-half-time basis. Requirements are subject to change over time. Additional documents may be required (e.g., Promissory Notes and/or Entrance Counseling) prior to disbursement of funds.

William D. Ford Federal Direct Loan Program

Federal Direct Loans are available through the William D. Ford Federal Direct Loan Program. Under the Federal Direct Loan Program, funds are lent to student or parent borrowers directly by the U.S. government. There are several types of Direct Loans: the Federal Direct Subsidized Loan (Subsidized FDSL), Federal Direct Unsubsidized Loan (Unsubsidized FDSL), Federal Direct Parent

Loan for Undergraduate Students (FDPLUS), Federal Direct PLUS Loans for Graduate and Professional Degree Students and the Federal Direct Consolidation Loan program.

Federal Direct Subsidized loans are awarded on the basis of financial need. No interest will accrue during half-time enrollment or authorized periods of deferment. You can help to remember the term by thinking of the Federal government subsidizing interest during these periods. Subsidized loan are available to only to undergraduate students.

Federal Direct Unsubsidized loans are not awarded on the basis of financial need. Interest will accrue from the time of disbursement until the loan is paid in full. While you are not required to make monthly payments during half-time enrollment or authorized periods of deferment, interest will accrue on the loan. Each quarter, unpaid interest will capitalize (interest will become additional loan principal). If you make quarterly interest payments on your unsubsidized loan during periods when no repayment is required, you will reduce the amount that you repay over the life of the loan.

	Dependent	Independent	Graduate
	Undergraduate	Undergraduate	
Freshmen	\$5,500 (only	\$9,500 (only	
(0-24 credits)	\$3,500 can be in	\$3,500 can be in	
	subsidized loans)	subsidized loans)	
Sophomores	\$6,500 (only	\$10,500 (only	
(25—54 credits)	\$4,500 can be in	\$4,500 can be in	
	subsidized loans)	subsidized loans)	
Juniors and	\$7,500 (only	\$12,500 (only	
Seniors	\$5,500 can be in	\$5,500 can be in	
(55 credits and	subsidized loans)	subsidized loans)	
above)			
Graduate			Up to \$20,500 in
(Masters or			unsubsidized loan
Doctoral)			
Maximum Total	\$31,000 (only	\$57,500 (only	(\$138,500 (only
Debt From	\$23,000 can be in	\$23,000 can be in	65,500 can be in
Stafford Loans	subsidized loans)	subsidized loans)	subsidized loan).
Upon			Graduate loan
Graduation			debt will also
			include Stafford
			Loans received as
			an undergraduate.

Federal Direct Parent Loans for Undergraduate Students

Federal Direct Parent Loans for Undergraduate Students (FDPLUS) are for parent borrowers of dependent, undergraduate students. FDPLUS loans provide additional funds for educational expenses and, like Subsidized and Unsubsidized FDSLs, are funded by the federal government. FDPLUS enables parents to apply for an amount equal to the cost of education (minus the amount of other financial aid for the loan period). Borrowers should refer to studentloans.gov for current interest rates. FDPLUS is limited to parent borrowers who do not have adverse credit histories. FDPLUS funds are disbursed via the (dependent) student's tuition account. FDPLUS proceeds (after tuition is paid) are refunded to the parent borrower via check by mail, (unless the parent borrower authorizes post-tuition proceeds to be released to the student).

Repayment of principal and/or interest generally begins 60 days after the loan is disbursed. However, parent borrowers may also opt to schedule repayment to begin six months after their dependent student (on whose behalf the parent borrowed) ceases continual enrollment on an at least a half-time basis. For those choosing the later, interest will be capitalized on to the principal.

Federal Direct PLUS Loans for Graduate or Professional Students

Graduate and professional degree students may also borrow under the PLUS Loan Program. The terms and conditions of the Graduate/Professional PLUS Loan are similar to those of a Parent PLUS Loan, (including the requirement that the applicant does not have an adverse credit history). Applicants are required to complete the FAFSA.

The amount an applicant may borrow is determined by calculating their cost of attendance minus other financial aid. They also must have applied for their annual loan maximum eligibility under the Federal Direct Subsidized and Unsubsidized Loan Programs before applying for a Graduate/Professional PLUS loan. Like the Parent PLUS, applicants may arrange for current or deferred repayment.

Federal Direct Consolidation Loan

Federal Direct Consolidation Loans are designed to help student and parent borrowers simplify loan repayment. This loan allows the borrower to consolidate several types of federal educational loans with various repayment schedules into one loan, requiring only one payment per month. Interest rates, however, may differ depending on the loan category as well as repayment and deferment options for the borrower.

Borrowers in default on a previous federal education loan may be able to obtain a Direct Consolidation Loan as a method of resuming the educational process and regaining eligibility for financial aid funds. (Those in default are ineligible for any and all financial aid while the default status is unresolved).

Those interested may contact the Direct Loan Servicing Center at 1-(800) 848-0979 or access their web loanconsolidation.ed.gov/ for additional information.

STUDENT EMPLOYMENT

Federal Work-Study Program-Federal Work-Study is a Title IV program offering part-time work for students who demonstrate financial need. Students work up to 25 hours per week during the regular semester, depending upon the student's financial need, availability of federal funds and the student's class schedule. Seven percent of the school's annual Federal Work-Study allocation will be used to fund community service jobs. Priority is given to those who apply by the March 1 priority deadline. For more information please contact the Office of Career Services

On-Campus Employment

On-campus employment is funded by UM-Dearborn. There are many part-time and temporary jobs available in the academic departments and in the support offices. Eligibility for Federal financial aid funds is not a factor for University employment. Students may contact the Office of Career Services and inquire about job availability. The departments pay 100 percent of these wages. To locate an on-campus job, visit umd.umich.edu/693914.

OTHER SOURCES OF FINANCIAL AID

Other sources of financial assistance are available through government agencies such as Vocational Rehabilitation, Veterans Administration and Social Security. Students needing information on these programs should contact the nearest appropriate agency.

Assistance for educational expenses may also come in the form of tax allowances. The Internal Revenue Service publishes Publication 970. Publication 970 provides information on educational benefits allowed within the tax code. Publication 970 may be obtained from the Internal Revenue Service or viewed online at www.irs.gov/publications/p970.

Satisfactory Academic Progress

Federal regulation requires educational institutions that participate in federal financial aid programs to define and enforce Satisfactory Academic Progress (SAP) standards for students receiving financial aid. UM-Dearborn's Satisfactory Academic Progress policy establishes standards of progress toward a degree. Recipients must achieve and maintain these standards of progress in order to receive funding from the Office of Financial Aid (OFA). These standards are imposed on all federal and state programs, as well as programs supported by UM-Dearborn's General Fund and awarded through the OFA.

The standards of academic progress measure a student's academic program both qualitatively and quantitatively. These measurements include a Cumulative Grade Point Average (CGPA) requirement, a Cumulative Completion Rate requirement and a Maximum Timeframe requirement. In addition, certain types of courses are limited or excluded from eligibility. The standards apply to all federal financial aid programs and programs funded and administered by the University of Michigan-Dearborn Office of Financial Aid and include degree, (teaching) certificate and consortium guest students who receive financial aid.

SAP is evaluated at the end of each term (Fall, Winter, and Summer). Federal regulations require the University of Michigan-Dearborn to evaluate all students for SAP regardless of whether or not they receive financial aid. SAP is evaluated based on the student's cumulative academic record, from the date of entry to the university. Students at UM-Dearborn are not required to attend full time in order to receive financial aid or achieve satisfactory academic progress. The complete policy may be found at www.umd.umich.edu/sap

Return of Title IV Funds

Students receiving financial aid have the responsibility to follow the college's withdrawal procedures as outlined in the University of Michigan-Dearborn catalog. The Higher Education Act requires the college to calculate a Return to Title IV funds on all federal financial aid students who withdraw (officially or unofficially) from all classes. A schedule is used to determine the percentage of the semester the student attended based on the withdrawal date/last date of attendance. The percentage of the semester the student attended is calculated as follows:

> Number of days in attendance Number of days in Payment Period

The number of days counted includes all calendar days in the Payment Period including weekends and holidays, but excludes college breaks of five or more days. The percentage of the semester the student attended is used to calculate the amount of the student's earned versus unearned federal aid funds. The unearned portion of federal aid funds received must be returned to the appropriate aid program in accordance with the order of return as mandated by law. The order of return is: Federal Direct Unsubsidized Stafford Student Loan, Federal Direct Subsidized Stafford Student Loan, Federal Direct PLUS Loan, Federal Pell Grant, Federal SEOG Grant, other Title IV aid. The college is responsible for returning the lesser of unearned Title IV aid or unearned institutional charges. Unearned institutional charges are based on the percentage of the semester the student did not attend. The college is responsible for its return of funds first,

followed by the student's return of funds. The student is responsible for returning:

Amount of unearned Title IV Aid

- Amount of aid school returns

Amount Student Returns

The University must return its portion of unearned Title IV aid (loan and grant) to the appropriate federal program within 45 days of the student's withdrawal date as determined by the Office of Financial Aid. If the amount the student returns includes a federal loan program, the student is responsible for repayment of the loan in accordance with the terms of the loan program. If the amount the student returns includes grant aid, the student must repay 50% of the grant money received, rather than 100%. The student must return unearned grant aid to the college within 45 days from the date of notification. Failure by the student to return or make arrangements to return unearned grant aid to the college within 45 days will result in the student being reported to the U.S. Department of Education (ED). The student will be considered in an overpayment status, and will not be eligible for additional aid at any post-secondary institution participating in Title IV Aid programs. Students who are reported to ED in an Overpayment Status should contact the ED to make payment arrangements to repay the necessary grant funds.

Non-Attendance in Courses

Students who stop attending the University of Michigan-Dearborn may not receive further financial aid disbursements, may lose some or all of the aid that has already been disbursed to their account, may be responsible for repayment of unpaid charges, and may be considered in overpayment status with ED. Students who stop attending all classes without officially withdrawing from the college will be subject to a Return to Title IV Funds calculation at the end of the semester, based on their last date of attendance as determined by faculty.

If it is determined that a student has never attended a course(s), a reduction of some or all financial aid may be necessary. At the time the Office determines a non-successful grade, faculty will be contacted to confirm a last date of educational activity. A non-response from faculty requires the Office of Financial Aid to assume the student has never attended course(s).

Student Consumer Rights and Responsibilities

Section 493.A of the Higher Education Act requires postsecondary educational institutions to disseminate relevant, candid information on student financial aid programs available at the college. These rights and responsibilities may be found in the U.S. Department of Education (ED) publication entitled Funding Your Education: The Guide to Federal Student Aid. This guide is available online at www.edpubs.gov. Any change in a student's financial situation, address, or school enrollment must be reported to the Office of Financial Aid. Students have the right to request a review of their financial aid package when a change in family or personal circumstances occurs. Students also have a right to review their financial aid records and may do so during counseling hours.

Information Dissemination and Report Disclosure

The U.S. Department of Education requires UM-Dearborn to disseminate information and disclose certain information to students. This information includes, but is not limited to: Voter Registration, Equity in Athletics, Campus Crime and Security, Completion and Transfer-Out Rates, and Drug and Alcohol-Free Campus policies. For further information on the listed topics, please refer to the University website at www.umd.umich.edu/fa consumerinformationpolicy/.

Registration & Records

Office of Registration and Records 4901 Evergreen Road 1169 University Center Dearborn MI 48128 313-583-6500 313-593-4896 [FAX] registrars@umd.umich.edu umd.umich.edu/registration

The Office of Registration & Records is responsible for coordinating, conducting, and evaluating the registration of students; establishing, monitoring, and maintaining student academic folders and records; preparing, distributing, collecting, and handling Class Lists and Instructor Grade Reports; preparing and providing student transcript copies and enrollment certifications; and accepting, reviewing, and verifying Degrees, Honors and Certificates granted. The office also has the responsibility of preparing and verifying enrollment data and reports for local, state, and federal agencies and organizations. In addition, the Office of Registration & Records is responsible for Veteran Affairs and other on-campus and off-campus programs.

For current registration information, students should consult the *Schedule of Classes* for the term in which they are enrolling or visit the Registration & Records website: umd.umich.edu/registration.

Attendance (Instructor Requested Drop)

A student who is absent from class meetings of a course during the first week of any term and does not inform the instructor or the instructor's department of his/her intention to continue as a class member may receive a request, by the instructor, to drop the course. The student is responsible for processing all paperwork to officially drop this or any course. Please consult the Registration & Records web site for procedures on how to drop courses.

Auditing

Students are expected to elect courses for credit. The student's program adviser, however, with the concurrence of the instructor involved, may grant official auditing privileges when they are warranted for educational reasons. A student auditing a course is charged the usual fee for that course. Any specific conditions must be enunciated by the instructor at the time permission is granted for the audit. (Contact your unit office for specific information and instructions.)

Change of Fees and Refunds

When appropriate, a change of fees will be processed by the Office of Registration & Records when a student submits a "Add/Drop/Registration Form" or "Withdrawal Form" which affects the fee previously assessed. Individuals are also advised to see "Change in Course Elections" in this *Catalog*.

Refunds of tuition, fees, or student account credit balances are generated automatically. After authentication and processing, the refund is mailed to the address listed on the student account.

ADDING

A student who increases the number of hours elected will have a new fee assessment prepared by the Office of Registration & Records, which will indicate the appropriate fee to be paid.

DROPPING (FOR FULL, HALF, AND FOUR-WEEK MINI COURSES

A student who, during the first two weeks of a full term or the first week of a half term or mini-term reduces the number of hours elected, will have a new fee assessment prepared by the Office of Registration & Records, which will indicate the appropriate fee to be paid. No reduction in fee assessments will be made after the end of the second week of classes (first week of a half-term) except in cases of withdrawal from the University.

DROPPING (FOR LESS THAN ONE-MONTH MINI COURSES)

A student may drop from a less than one-month mini-course on or before the first class meeting of such a course without financial penalty. Thereafter, full tuition will be assessed and the academic record will reflect the symbol for withdrawal ("W").

WITHDRAWING (FOR FULL, HALF, AND FOUR-WEEK MINI COURSES)

A student who withdraws from UM-Dearborn is assessed as follows:

- Students who withdraw prior to the first day of classes will not be charged any tuition assessments or fees.
- Students who withdraw during the first week of a half term or mini-term, or during the first two weeks of a full term, will not be charged any tuition assessments or fees.
- 3. Students who withdraw during the second through thrd week in a half term or mini-term, or in the third through sixth week of a full term, will be charged 50% of the tuition assessed, as well as the non-refundable registration assessment. In addition, there is no reduction in lab/course fees or technology assessment.
- 4. Students withdrawing after the time periods indicated in Paragraph "3" will be assessed full tuition and fees.

WITHDRAWING (FOR LESS THAN ONE-MONTH MINI COURSES)

- Students who withdraw from a less than one-month mini course before the first class meeting of such a course will not be charged any tuition assessments or fees.
- Students who withdraw from a less than one-month mini course on the first day of class will not be charged any tuition assessments or fees.
- 3. Students who withdraw from a less than one-month mini course on the second day of class will be assessed 50% of the tuition assessed, as well as the non-refundable registration assessment. In addition, there will be no reduction in lab/course fees or technology assessment.
- 4. After the second class meeting of such a course, the student shall pay all fees and assessments.

Change in Course Elections: Add, Drop, Withdrawal

(See Also "Change Of Fees And Refunds")

Changes in course elections include adding a course(s), dropping a course(s), substituting course(s), and withdrawing (discontinuing) all courses. All students will process their add/drop and withdrawals online or at the Enrollment Services Counter (1169 UC, with signatures when appropriate).

Please consult the section on "Change of Fees and Refunds" for the impact on tuition and fees.

ADD

A student may add courses or change a standard graded course to Pass/Fail or Audit during the first two weeks of a full term, the first week of a half term or mini-term, or before the second class meeting of a less than one-month mini-term. Any exceptions for adding courses must be approved by the student's academic unit.

DROP

A student may drop a course(s) during the first two weeks of a full term, the first week of a half term or mini-term, or before the second class meeting of a less than one-month mini-term. No record of the student's brief enrollment will be recorded.

Courses may be dropped during the third through the ninth week of classes in a full term, during the second through the fourth week of classes in a half term or mini-term, and before the third class meeting in a less than one-month mini-term.

The effective date of the drop is the date the drop form is received and signed at the Enrollment Services Counter.

Permission to drop courses under circumstances other than stated above will require the approval of the student's academic unit.

WITHDRAWAL

A student may discontinue all of his/her courses through the last day of classes (for the term) by withdrawing from the term. The completed form must be presented to the Enrollment Services Counter for processing. The effective date of the withdrawal is the date the withdrawal form is received and signed at the Enrollment Services Counter.

If a student withdraws (drops all courses) from a term during the first two weeks of classes in a full term, the first week of classes in a half term or mini-term, or before the second class meeting in a less than one-month mini-term, no record of the student's brief enrollment will be recorded. Beyond those deadlines, the mark of W will appear on the transcript.

Permission to withdraw under circumstances other than stated above will require the approval of the student's academic unit.

Consecutive Withdrawals

Every student's academic record is reviewed for the purpose of observing academic progress at the end of each term in which the student is enrolled. A student who has not enrolled for one calendar year or who has withdrawn for two consecutive terms must apply for readmission and may not re-register without the explicit written permission of the student's unit office. (PDS/PE students see Academic Support and Outreach Services, 2136 UC.)

Required Withdrawals

Unless extenuating circumstances are presented by petition, a student who is required to withdraw from one academic unit may not be admitted to another UM-Dearborn academic unit within the same term as that in which such withdrawal action is taken.

REFUNDS AND FINANCIAL AID

Students receiving Title IV financial aid may be required to repay some or all of the financial aid received for a term in which the student withdraws. Students required to repay financial aid funds will have the refunds allocated to financial aid programs in the following order: Federal Direct Loans, Federal Perkins Loans, Pell, SEOG, other Title IV, federal, state, private, and institutional programs and finally, to the student. Students receiving financial aid and considering withdrawal should seek the advice of a Financial Aid Officer prior to taking such action.

Class Standing

Class standing is determined by the total credits earned that apply toward the student's degree program. The various classifications are as follows (numbers indicate semester hours):

Freshman	Sophomore	Junior	Senior
(0-24)	(25-54)	(55-84)	(85+)

Grades and Grading

Grading System

Grade point averages (scholastic averages) are computed by dividing the honor points a student has earned by the hours elected. The term grade point average and the cumulative grade point average are computed for each student at the end of each term and become part of the student's official UM-Dearborn academic record.

Symbols used in the grade reporting system common to all units are: F, failed (pass/fail option election); I, incomplete; NR, grade not reported; P, passed (pass/fail option election); S, satisfactory (courses graded S/E or S/U); NC, no credit; VI, audit; W, drop/withdrawal; X, absent from final examination; U, unsatisfactory (courses graded S/U only); Y, indicates the course extends beyond the term.

The grades of E, IE, UE or XE are not assigned honor points and thus will lower the student's grade point average. The grade NC is used only for certain courses. When this grade is officially granted, the grade NC and the course will appear on the student's transcript, but the course will not be used in computing a grade point average.

The recording of grades on a student's official academic record is governed by the following (4.0) grading system:

Letter Grade	Honor Points	Letter Grade	Honor Points
A,A+	4.0	C	2.0
A-	3.7	C-	1.7
B+	3.4	D+	1.4
В	3.0	D	1.0
B-	2.7	D-	0.7
C+	2.4	E	0.0

Note: The A+ and D- grades are not used by Engineering instructors. The A+ grade is not used by Education instructors.

Grades associated with transfer credit from other schools or colleges (including other University of Michigan campuses) are neither recorded nor used in computing grade point averages of students.

Students may repeat a course no more than two times. All grades received must appear on the transcript, but only the last grade received is counted in the grade point average (GPA). Please see the Repeat Course Policy for more information.

Grade Notations

The following notations may appear on a transcript to describe special situations in regard to a course.

NC No Credit. No honor points. Not computed in the grade point average. Used only in specially approved courses that are graded *A*, *B*, *C*, *No* Credit.

I Incomplete. No honor points. A student whose coursework for the term (other than final examination) is incomplete in a minor way may, upon completion and approval of the I Contract Form, be granted the privilege of completing the work within a fiveweek period for the College of Engineering and Computer Science or the College of Business, and a four-month period for the College of Arts, Sciences, and Letters and College of Education, Health, and Human Services beginning on the first day of classes of the immediately following term. If granted this privilege, a grade of I will be recorded. Failure to complete the required work within the specified time, or the denial of this privilege by the instructor, will result in a grade of E for the final grade. In extenuating circumstances an extension beyond the stated period may be requested by means of a petition that has been endorsed by the instructor and approved by the Academic Standards Committee. However, such arrangements for completing the work must be made within the above stipulated time period. Failure to complete the required work within the specified time will result in a grade of I being automatically treated as an IE and counted in the student's grade point average. The I will remain on the transcript even after the official final grade is assigned.

X Absent from Final Examination. No honor points. A student who is unavoidably absent from a final examination may be granted the privilege of making up the examination within five weeks after the closing date of the term involved. If granted this privilege, a mark of X will be recorded. Failure to take the examination within the specified time, or the denial of this privilege by the instructor, will result in a mark of E for the final grade. In extenuating circumstances an extension beyond the stated period may be requested by means of a petition that has been endorsed by the instructor. However, such arrangements for completing the work must be made within the above fiveweek period. The grade of X will automatically be converted to

XE and reflected in the student's grade point average as a failing grade if the Supplementary Grade Report is not submitted by the end of the five-week period.

Y Course extended beyond term end. No credit. No honor points. A mark of Y indicates that a course extends beyond the end of one term. This mark is only used for courses that have been specially designed and approved to extend beyond the end of one term. A course with a Y mark may not be completed after graduation. If such a course is not completed, the Y will be converted to an E upon graduation.

NR Grade Not Reported. No honor points. Student should consult the Registrar immediately.

W Official Withdrawal. No credit. No honor points. Not computed in the grade point average. Students who drop a course or withdraw from all courses for a term before the deadline for official drops and/or withdrawals will receive for these courses the *W* notation. This notation may not be removed from the transcript.

S/E. Used only for specially approved courses. If a student passes, an S (satisfactory) is awarded. It is not computed into the grade point average. If a student does not pass, an E is awarded. If a student stops attending, without officially dropping, a UE is awarded. Both the E and the UE are computed in the GPA as failing grades. (Exception: Failing grades in additive credit courses that are graded S/E have no impact on the GPA.)

P/F Pass/Fail Option. No honor points. A student must elect to take a course under the Pass/Fail option. Please check with your college for its policy on electing courses as pass/fail.

UE Unearned Fail. This grade is assigned to any student who has never attended, or stopped attending class during the semester and did not officially drop. It is computed in the GPA the same as an *E*.

VI Visitor-Official Audit. No credit. No honor points. Not computed into the grade point average. An official audit, or visitor status, allows a student to attend a course but not elect it for credit. The VI notation appears on the transcript. Regular tuition fees are assessed.

Change of Grades

The grade that an instructor records on the final grade sheet and that appears on the student's subsequent transcript is assumed to be final; that is, the instructor's official evaluation of all of a student's performance and work completed by the official end of the term (the last day of the final examination week).

Recognizing that mistakes can be made, UM-Dearborn permits a student to ask an instructor for a review of a grade within the four-month period after the end of the term involved. After a four-month period has passed, a student may initiate a request for a review only through the petition process involving the student's college Academic Standards Committee (or comparable group), whose decision shall be final. Such a review is entirely separate and distinct from the circumstances involving an X (Absent from Final Examination), I (Incomplete Coursework), or a Y (Course Extends Beyond Term).

Graduation/Application for Diploma

Each candidate for a degree must file a Degree/Diploma Application with the Office of Registration & Records, typically within ten days of the beginning date of classes for the term in which the student expects to complete the requirements for degree. Please consult the Applying to Graduate Webpage, umd.umich.edu/rr_apply-graduate, for specific dates. Applications will not be accepted after the published deadlines. If an application for a diploma was filed for a previous graduation period in which the student did not graduate, a new application is necessary. Degrees are granted at the end of the fall, winter, and summer terms, even though commencement exercises are held only in April (or May) and December.

Registration Information

ACADEMIC ADVISING

Academic advising should be sought from the student's school, college or graduate department office prior to registration.

APPOINTMENT TIME TO REGISTER

Continuing students who are eligible to register via the Web can determine their registration date based on credits earned as listed in the registration timetable. New students and those participating in non-traditional programs will receive written information regarding their registration appointment time. The Registration Timetable is available on the Office of Registration & Records Website (umd.umich.edu/registration).

CLOSED COURSES

Closed course information will be posted at the Enrollment Services Counter (1169 UC) and on the Office of Registration & Records Website (umd.umich.edu/registration).

COURSE LOAD

Students may elect a maximum of 18 credit hours in a given semester. Students should contact their college for policies and procedures regarding electing hours in excess of the maximum.

HOLDS

Students will not be allowed to register if they have a hold. A hold could result from having outstanding financial obligations to the University, academic probation, mandatory advising or other academic or non-academic conditions that require resolution prior to registration. Students can check their holds on UM-Dearborn Connect. See the "View Your Holds" page located in the secure area under the Student Accounts menu.

PERSONAL IDENTIFICATION NUMBER (PIN)

The University originally assigns your birth date (mmddyy) as your personal identification number (PIN). For your security (if you have not already done so), change this number immediately via UM-Dearborn Connect. Once you have changed the PIN, your new PIN remains in effect until you change it again. If you forget your PIN, use the 'Forgot PIN' button in UM-Dearborn Connect or you must report in person, with picture identification, to the Enrollment Service Counter to have your PIN reset.

REGISTRATION OPTIONS

UM-Dearborn offers eligible students two options for registration:

- Walk-in
- Web*

*All students (with the exception of some non-traditional programs) who have been enrolled at least one term within the last year, new graduate students, and readmitted students who do not have financial obligations, holds or other registration restrictions are eligible to register via UM-Dearborn Connect. New transfer and new freshman students will register during New Student Orientation.

Reporting of Grades

The Office of Registration & Records reports term grades to students via a Final Grade Report in UM-Dearborn Connect. Grades are also reported on each student's Academic Transcript. Updated Academic Transcripts are available to students two weeks following the close of the final examination period. Students requiring more immediate service may contact Enrollment Services for assistance. (Also see "Request for Transcripts").

Residency Classification Guidelines

PURPOSE OF THE RESIDENCY CLASSIFICATION GUIDELINES

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

CIRCUMSTANCES UNDER WHICH YOU MUST FILE A RESIDENCY APPLICATION

If you claim Michigan resident status and any of the following circumstances apply, you must file an Application for Resident Classification and be approved to qualify for instate tuition:

- you currently live outside the state of Michigan for any purpose, including, but not limited to, education, volunteer activities, military service, travel, employment.
- you have attended or graduated from a college outside the state of Michigan.
- you have been employed or domiciled outside the state of Michigan within the last three years.
- you are not a U.S. citizen or Permanent Resident Alien (if you are a Permanent Resident Alien, you must have a Permanent Resident Alien card).
- your spouse, partner, or parent is in Michigan as a nonresident student, medical resident, fellow, or for military assignment or other temporary employment.
- you are 24 years of age or younger and a parent lives outside the state of Michigan.
- you are 24 years of age or younger and have attended or graduated from a high school outside the state of Michigan.

- you have attended or graduated from an out-of-state high school and have been involved in educational pursuits for the majority of time since high school graduation.
- you previously attended any U-M campus (Ann Arbor, Dearborn, or Flint) as a nonresident.

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

HOW TO FILE A RESIDENCY APPLICATION

Residency applications and in-person assistance are available at the Residency Classification Office, University of Michigan Office of the Registrar, 1210 LSA Building, 500 S. State St., Ann Arbor, MI 48109-1382, phone (734) 764-1400. Business hours are 8 a.m.-5 p.m. weekdays. Applications can also be downloaded at ro.umich.edu/residency-application.pdf. Completed applications should be submitted to the Residency Classification Office.

FILING DEADLINES

September 30 for Fall Term January 31 for Winter Term

July 31 for Spring, Spring/Summer, and Summer Terms Applications must be received in the Residency Classification Office by 5 p.m. on the deadline date.

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

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

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

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

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

REQUIRED DOCUMENTS

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

- for all applicants: copies of your driver's license and the license(s) of the person or persons upon whom you are basing your claim to resident eligibility.
- for all applicants: copies of the front and signature pages of the most recent year's federal and state income tax returns and W2 forms for you and the person or persons upon whom you are basing your claim to resident eligibility.
- **for applicants born outside the U.S.:** verification of U.S. citizenship or visa status.
- for applicants who are dependents (see section B-2):
 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 that Michigan taxes are being withheld.
- **for all applicants:** any other documentation that supports your claim to resident eligibility.

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

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

THE UNIVERSITY OF MICHIGAN'S AUTHORITY TO ESTABLISH RESIDENCY GUIDELINES FOR ITS STUDENTS

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

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

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

1. Circumstances that may demonstrate permanent domicile

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

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

2. Circumstances that do not demonstrate permanent domicile

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

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

B. ADDITIONAL REQUIREMENTS, DEFINITIONS, AND SPECIAL CIRCUMSTANCES

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

1. Immigrants and Aliens

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

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

*Please note that individuals holding temporary visas, such as, but not limited to, F, H, J, K, L, Parolee, TN, TD, etc., are *not* eligible for resident classification at the University of Michigan regardless of their other circumstances.

2. Dependent Students

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

a. **Residents**

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

b. Nonresidents

The University presumes you are a nonresident if you are a dependent student and your parents are domiciled outside

the state of Michigan. (See exception under a-i and a-ii for married dependent students whose parents-in-law are domiciled in Michigan.)

3. Michigan Residents and Absences From the State

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

a. Absence for Active Duty Military Service (U.S. Army, Navy, Air Force, Marines, Coast Guard, Officers in the Public Health Service), Non-Administrative Missionary Work, Peace Corps, AmeriCorps, or Similar Philanthropic Work

If you are domiciled in Michigan at the time of entry into active military duty, missionary work, Peace Corps, or similar service, you are presumed to retain your eligibility for resident classification as long as you are on continuous active duty or in continuous service and continuously claim Michigan as the state of legal residence for income tax purposes. If you are a dependent child of such an individual, you are presumed to be eligible for resident classification provided: (1) you are coming to the University of Michigan directly from high school or have been continuously enrolled in college since graduating from high school, and (2) you have not claimed residency for tuition purposes elsewhere.

b. Absence Due to Temporary Foreign Assignment

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

c. Temporary Absence of Less Than One Year

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

C. THE APPEAL PROCESS

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

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

Appeals, which must be in writing, should be submitted to the Residency Classification Office. Please note that the written appeal must be received by the Residency Classification Office within 30 calendar days of the date on the denial letter. If the deadline falls on a weekend or University holiday, it will be extended to the next business day.

If there is additional information you would like the Residency Appeal Committee to consider beyond the materials you have already submitted, you should submit that additional information, in writing, with appropriate supporting documentation, when you submit your written appeal. Your request and any additional information and documentation you provide will be forwarded to the Residency Appeal Committee with your original file.

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

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

D. SPECIAL WAIVER OF OUT-OF-STATE TUITION FOR REGULAR ACTIVE DUTY MILITARY PERSONNEL LIVING OR STATIONED IN MICHIGAN

Regular active duty military personnel who are living or stationed 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 waiver is available to persons in the U.S. Army, Navy, Air Force, Marines and Coast Guard, and to officers in the Public Health Service. When the military person upon whom the waiver is based leaves the state, a child or spouse who remains in Michigan enrolled full-time in high school or an institution of higher learning will continue to be eligible to receive the waiver. Children must have completed at least the junior year of high school prior to the military person's departure. In order to request this waiver, the student must submit a residency application by the applicable filing deadline and provide documentation demonstrating eligibility.

WARNING: MISREPRESENTATION OR FALSIFICATION OF INFORMATION CAN BE COSTLY

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

OUESTIONS?

For questions on Residency Regulations, please contact: Residency Classification Office Office of the Registrar 1210 LSA Building 500 South State Street Ann Arbor, MI 48109-1382

Phone: (734) 764-1400

Transcripts

A transcript is a student's complete academic record at UM-Dearborn. The transcript(s) that were presented for admission have become an integral part of the files of the admitting offices and cannot be released, either directly or for copying purposes. It will be necessary for you to write directly to the institutions concerned to obtain copies of those previous records. In addition, documents such as SAT/ACT scores are not available from the Office of Registration & Records. UM-Dearborn transcripts will be released only upon written request of the student.

FINAL TRANSCRIPT

Once the degree has been posted on the transcripts, the transcript is final and the record is closed. No changes can be made to it

Students wishing more detailed information about final grades should make that request in the office of their instructional unit (CASL, CECS, COB, or CEHHS).

REQUESTS FOR TRANSCRIPTS

Requests for copies of UM-Dearborn transcripts should be made online via UM-Dearborn Connect or at the Office of Registration & Records, 1169 UC, Dearborn, MI 48128-2406. Requests may also be faxed to (313) 593-5697. For additional information, please telephone (313) 583-6500.

If the student indicates that he/she has also taken work through the Extension Service or at other campuses of the University, the Office of Registration & Records will forward the order to the appropriate offices which will send copies to the address indicated on the order. There is no charge for transcripts. Generally, up to five (5) working days are allowed for processing a UM-Dearborn transcript. Under certain circumstances, such as the end of the term or upon graduation, requests may take longer to process. Requests will not be processed if a student has any financial obligation outstanding to the University.

Tuition Assessments and Fee Regulation

Tuition and fees are subject to the approval of the Regents of the University and are subject to change at any time.

POLICIES GOVERNING STUDENT TUITION AND FEES

The Board of Regents shall determine the level of tuition and fees and a schedule of such shall be published. All other student tuition and fees shall be fixed by the Campus Fee Committee.

PAYMENT OF TUITION AND FEES

All tuition and fees are payable in accordance with regulations established by the University providing only that said regulations may not defer payment beyond the end of the term for which they are assessed.

Payment for tuition and fees may be made in full at the Cashier's Office, or online, after registration. The laboratory and/or course fees are refundable if the course is dropped during the first two weeks of a full term, the first week of a half term or mini-term, or before the second class meeting of a less than one-month mini-term. The procedure for obtaining a refund is described in the section "Change of Fees and Refunds."

APPLICATION FEES

A non-refundable application fee of \$30 will be required of each applicant for a degree or certificate program at UM-Dearborn. Students who have paid the appropriate application fee (graduate or undergraduate) at another campus of the University will not be assessed a second fee. There is no application fee charged to guest students.

COURSE LEVEL ASSESSMENT

Undergraduate students electing Graduate course(s) will be assessed at the Graduate Tuition rate for the graduate course(s). Graduate courses are numbered 500 and above. (Effective Winter 2007)

Graduate students electing Undergraduate course(s) will be assessed at the Undergraduate Tuition rate for Undergraduate course(s). Undergraduate courses are numbered 499 and below. (Effective Fall 2006)

Please note: This tuition assessment is dependent on various factors and a change in tuition may not occur for some students.

DUAL STATUS TUITION AND FEES: GRADUATE AND UNDERGRADUATE

Seniors who are within six hours of completing the requirements for graduation and who have been admitted to a UM-Dearborn graduate program may, with both undergraduate and graduate advisors' approval, register simultaneously in a UM-Dearborn undergraduate unit and in a graduate program. Tuition and fees will be assessed at the graduate program level for graduate courses and the undergraduate program level for undergraduate courses.

DUAL ENROLLMENT TUITION AND FEES: ON TWO CAMPUSES OF THE UNIVERSITY

A student electing courses at UM-Dearborn and at another campus of the University, by means of a "Guest Admission," will pay the appropriate tuition and fees at each campus. The only exception is that the student will not be assessed tuition and fees totaling more than a full program tuition and fees at whichever campus may have the higher full program tuition and fees.

UNDERGRADUATE CREDIT BY EXAMINATION (CBE)

See the Special Examinations Policy.

LABORATORY AND/OR COURSE FEES

Students will be assessed a laboratory or course fee if enrolled in any of the courses so designated in the *Schedule of Classes* (e.g., "Lab fee \$50.00").

LATE REGISTRATION ASSESSMENT

A late registration assessment of up to \$45 will be assessed for anyone registering later than two weeks (one week for a half term) after the first day of classes. It should be noted that students are not ordinarily permitted to register after the first two weeks of a full term, the first week of a half term or mini-term, or after the second class meeting of a less than one-month mini-term.

In exceptional cases, a student might be permitted to enroll even after the first two weeks (and be charged a late fee) if the student has obtained the written approval of the dean (or a designated representative) of the college or school. Late registrants not pursuing a degree (PDS/PEs) must have the approval of both the Office of Academic Support and Outreach Services and the Registrar, as well as the approval of any instructors involved.

FEES INCLUDED WITHIN TUITION

The tuition and fees assessed by the University include a nominal charge for parking and other transportation-related services, information technology services, the health referral service to the Henry Ford Hospital-Fairlane Clinic, facilities debt service, and support for student activities and organizations.

EXEMPTION FROM PAYMENT OF FEES

No exemption from the payment of fees shall be granted. Failure to fulfill financial obligations to the University may result in disciplinary action, including the withholding of degrees and transcripts.

NEW STUDENT FEE

The New Student Fee of \$75.00 is charged to all new incoming degree-seeking students at the time of registration. The fee will be automatically posted to the student's account. This fee covers operational expenses required to deliver high-quality orientation programming for students. It also includes the administration of placement exams, regardless of participation in these activities. The New Student Fee is non-refundable unless a student withdraws from all courses in his/her first term on or before the end of the drop/add period (the first two weeks of the term).

TUITION AND FEES

Students should obtain current tuition and fee information from the Office of Registration & Records Tuition & Fees webpage, umd.umich.edu/rr tuition-fees/.

Additional Assessments

Course levels 300 and above are assessed an additional amount per credit hour. For current tuition and fee information, students should consult the Office of Registration & Records Tuition & Fees webpage, umd.umich.edu/rr tuition-fees/.

Technology Assessment

A Technology Assessment is charged to all students. This assessment varies by academic unit. For current tuition and fee information, students should consult the Office of Registration & Records Tuition & Fees webpage, umd.umich.edu/rr tuition-fees/.

TUITION REFUND INSURANCE PLAN

The Tuition Refund Insurance Plan is an elective insurance which provides coverage for tuition and fees. If a student withdraws due to illness/injury or psychological/emotional reasons, the Tuition Refund Insurance Plan returns 85% of the insured term tuition and fees when specific insurance company criteria has been met.

For Tuition Refund Insurance Plan information or to enroll online, please refer to the Tuition Refund Insurance Plan website: umd.umich.edu/rr tuition-fees-refund-plan.

SPECIAL TUITION AND FEE ADJUSTMENTS

The Registrar and the Provost for Academic Affairs are authorized to make adjustments in the application of the policy stated above when, in their judgment, unusual circumstances warrant such action. Circumstances that may warrant special consideration include the death or serious illness of the student. The student who wishes to have his/her case reviewed must petition and submit documentation to the Office of Registration & Records, Room 1169, University Center, either in person or by mail. It is the responsibility of the student to make sure that required documents are submitted.

Except in rare and unusual circumstances, petitions will not be accepted after the last day of classes for the term concerned. Additionally, petitions will not be accepted once an account has been turned over for collection.

Verification of Enrollment

The following scale is used when verifying student enrollment status at UM-Dearborn:

Undergraduate Graduate
Full Time 12 or more hours 8 or more hours
Three-Quarter Time 9-11 hours 6-7 hours
Half Time 6 to 8 hours 4-5 hours
Less Than Half Time 5 or less hours 3 hours or less

Veteran Affairs

Enrollment Services/Registration and Records is primarily responsible for the administration of veteran's education benefits programs and enrollment certifications. Our goal is to effectively assist veterans, or the dependents of veterans, with the certification process. Students who are eligible for VA educational benefits are able to apply their respective benefits for their educational endeavors at UM-Dearborn with assistance from this office.

All students who are eligible for, and elect to receive, education and training benefits while attending UM-Dearborn, may address inquiries for information to the Office of Veteran Affairs, Enrollment Services/Registration and Records, 4901 Evergreen Road, 1169 UC, Dearborn, MI 48128-2406, (313) 583-6500 or umd-va@umc.umich.edu. Additional information regarding certification, and the policies and procedures for certification of benefits can be found on our website at: umd.umich.edu/rr_va. Questions regarding the eligibility of a veteran or dependent can be answered by calling the St. Louis Regional Office at 1-888-GIBILL1 (442-4551) or connecting to the Department of Veteran Affairs website at: gibill.va.gov/.

Policies and Procedures

Academic Standing

Every student's academic record is reviewed, for the purpose of observing academic progress, at the end of each term in which the student is enrolled at UM-Dearborn.

To be in good scholastic standing, a student must have a cumulative grade point average of at least 2.0. Students who fall below 2.0 in their grade point average will be placed on academic probation. After having been placed on academic probation, the student is allowed one more term of coursework on campus in order to attempt to bring the cumulative grade point average up to the required 2.0 level. If the student does not return to good scholastic standing at the completion of that term, the student may not reregister without the explicit written permission of the unit.

This general description of standards must be augmented by the regulations of each individual unit. All students must, therefore, be familiar with the academic requirements and rules of their own college.

ACADEMIC STANDING APPEALS

Students who wish to appeal decisions on their academic status, made by a unit's committee on academic standing, may do so by addressing a petition to the executive committee (the chief policy body) of the unit in which they are admitted. If a negative decision is rendered at this high level, the student may, under unusual circumstances, appeal the case to the Academic Appeals Board of UM-Dearborn.

- The UM-Dearborn Academic Appeals Board shall hear cases dealing only with academic matters, excluding matters of academic misconduct, which shall be addressed by the Code Appeals Board as defined in the UM-Dearborn Statement of Student Rights & Code of Student Conduct.
- 2. Individuals may seek redress from the Board only after all reasonable efforts have been made to settle the disagreement within the unit. Such an individual may then write to the Vice Chancellor for Academic Affairs, stating the grounds of the complaint, the name(s) of those most immediately involved, and a summary of the relevant information.
- 3. The Board is empowered to determine which complaints it will review. If a hearing is to occur, all parties shall receive written notice, ordinarily within thirty (30) days after the Vice Chancellor for Academic Affairs has received the written complaint. If, for any reason, a hearing is not to take place, the Board will inform the parties in writing and the reasons for its decision.
- 4. The Board will consist of the Council of Deans (minus the dean in whose academic unit the case is being contested), plus the Vice Chancellor for Enrollment Management and Student Life, the Registrar, the Academic Affairs "Proceedings Advisor", and one student representative named by the Student Government Council.
- The Provost and Vice Chancellor for Academic Affairs will chair the Board, without a vote, except to break a tie. All other members of the Board are regular voting members.
- Five regular voting members will constitute a quorum to hear appeals. There are no alternates for the eight regular voting members. The term of office is one full academic year for all members.
- 7. Each side may call upon the assistance of an adviser.
- 8. An audiotape record of the proceedings will be available to both sides.
- 9. Since it is the function of the Board to conduct hearings and not court trials, the Chair shall set reasonable limits upon the length of the presentations. The usual format will allow the opposing sides to make opening statements, present evidence, and make closing statements.
- 10. Within ten days after the hearing, all parties will receive written notice of decisions rendered by the Board. The Board's action represents the final decision in the UM-Dearborn academic appeal process.

Additional Program Recognition

DOUBLE MAJORS OR CONCENTRATIONS

With approval from the appropriate school/college, students who meet the requirements in two majors or areas of concentration may graduate with a double major or concentration. The Registrar will seek confirmation from the appropriate academic units before making such an entry on the transcript.

RECOGNITION OF MINOR

A student in a CASL, COB, or CECS degree program may apply for recognition of a minor, which consists of at least 12 hours in courses numbered 300 or above in a particular area of study. Minors are recorded on students' transcripts at the time the petition is granted.

SECOND BACHELOR'S DEGREES

A student who has already earned a bachelor's degree from UM-Dearborn or any other accredited collegiate institution may apply for permission to pursue a second bachelor's degree. If accepted, up to 90 credit hours from a previous University of Michigan degree will be counted toward the second degree. If the first degree was earned at a non-University of Michigan institution, up to 75 credit hours may count toward the second degree. If the student previously attended UM-Dearborn, the GPA for the second bachelor's degree will be based on the cumulative academic record of courses taken at UM-Dearborn for both degrees.

ADDITIVE CREDIT

UM-Dearborn Courses

Some courses have an additive credit designation. The course credit hours for additive credit courses do not count toward a student's degree. Several courses in UM-Dearborn curricula and some co-operative education/internships are reflected on a student's transcript but do not fulfill requirements for graduation. Mathematics 080, 090 and Composition 099, for example, bridge the gap between high school and college and are therefore offered only for additive credit. Courses taken for additive credit count in the determination of enrollment certification but not toward a degree or in determining class level

Additive credits are not eligible for financial aid and will not be used to establish enrollment status for financial aid.

With the exception of remedial courses (MATH 080, 090; COMP 009; CHEM 090), the Department of Veteran Affairs will not pay for courses offered as additive credit.

Additive Courses Taken Elsewhere

Such courses as described above in the paragraph on UM-Dearborn additive credit courses are not transferable from other institutions to UM-Dearborn.

Alcohol at Campus Events

(Policy on Serving)

Consumption of beverages containing alcohol is prohibited on the UM-Dearborn campus except under the conditions specified in this policy.

Alcoholic beverages may not be served at events in the Fieldhouse. Alcohol may be served at events held in other facilities on the UM-Dearborn campus under the conditions described below.

Any event at which alcoholic beverages will be served must have a designated host who is a full-time permanent faculty or staff member of the UM-Dearborn. The host assumes responsibility for implementing these guidelines, supervising servers and intervening if immoderate drinking or other high-risk behaviors are developing.

Beverages containing alcohol must be monitored by a designated server at all times. The designated server may not consume alcohol at the event. Alcoholic beverages may not be carried out of the designated event location.

Serving alcoholic beverages to individuals less than 21 years of age is illegal and expressly prohibited. Events at which the majority of participants will be under age should not include alcoholic beverage.

Under no circumstances may University General Fund accounts, including organization accounts funded with student activity fees, be used to purchase alcoholic beverages.

Any event at which alcohol will be served must be planned in such a way as to respect the preferences of individuals who choose not to drink for religious, personal, or health reasons; and in no case should an event be planned around or advertised to feature the consumption of alcohol. Substantial food and beverages that do not contain alcohol must always be served at an event that includes alcoholic beverages.

Written authorization to serve alcohol at a campus event must be obtained from the University Center Office at least one week before the planned event. Authorization will specify type of event, participants, location, time, and the responsible host.

Alcohol and Drug Prevention Program and Policy

This policy is intended to educate members of the University community about the health risks associated with the use and abuse of alcohol and other drugs and about the resources available for counseling and therapy. In addition, in order to assure a work and learning environment that promotes the University's mission and proper function, the University prohibits unlawful possession, use, or distribution of alcohol or illicit drugs by faculty, staff, or students on University property or as a part of any University activity. Federal and state sanctions also apply to such conduct.

HEALTH RISKS

The use or abuse of alcohol and other drugs increases the risk for a number of health-related and other medical, behavioral, and social problems. These include acute health problems related to intoxication or overdose (blackouts, convulsions, coma, death); physical and psychological dependence; malnutrition; long-term health problems including cirrhosis of the liver, organic brain damage, high blood pressure, heart diseases, ulcers, and cancer of the liver, mouth, throat, stomach; contracting diseases, such as AIDS; through the sharing of hypodermic needles; pregnancy problems including miscarriages, stillbirths, and learning disabilities; fetal alcohol syndrome (physical and mental birth defects); psychological or psychiatric problems; diminish behavior (hangovers, hallucinations, disorientation, slurred speech); unusual or inappropriate risk-taking that may result in physical or emotional injury or death; violent behavior toward others, such as assaults and rape; accidents caused by operating machinery while impaired; impaired driving resulting in alcohol and drug-related arrests, traffic accidents, injuries, and fatalities; negative effects on academic or work performance; conflicts with co-workers, classmates, families, friends, and others; and conduct problems resulting in disciplinary actions, including loss of employment; and legal problems, including imprisonment.

COUNSELING AND TREATMENT PROGRAMS

The University of Michigan encourages individuals with alcohol- or drug-related problems to seek assistance by contacting Counseling and Support Services, 2157 UC, (313) 593-5430. This office can also provide additional information on local, state, and national resources for those seeking assistance.

UNIVERSITY SANCTIONS

Unlawful possession, use, or distribution of alcohol or illicit drugs by faculty, staff, or students on University property or as a part of any University activity may lead to sanctions within the University, the severity of which shall increase as the seriousness of the violation increases.

Sanctions include:

- Verbal or written reprimand;
- Completion of an appropriate rehabilitation program;
- A disciplinary warning, with notice that repetition of the offense or continuation of the offense may result in a more serious sanction;
- Suspension from the University (student) or from employment (employee) from a specified University activity or facility for a fixed period of time or until completion of specified conditions, such as completion of an appropriate rehabilitation program;
- Expulsion from the University (student) or termination of employment (faculty or staff); and/or
- Other appropriate sanctions.

Sanctions for violations by faculty and staff shall be imposed pursuant to existing procedures applicable to acts of misconduct (e.g., Regental Bylaw 5.09, Standard Practice Guide 201.12, and appropriate collective bargaining agreements). Sanctions for violations by students shall be imposed pursuant to the UM-Dearborn Student Code of Non-Academic Conduct or pursuant to other approved procedures. Copies of the applicable student procedures are available at the Office of Enrollment Management and Student Life, 1060 Administration Building.

EXTERNAL SANCTIONS

Unlawful possession and use or distribution of alcohol or illicit drugs may lead to referral to the appropriate local, state, and/or federal authorities for prosecution for a misdemeanor or a felony, depending on the nature of the offense. The sanctions for such offenses may include fines and/or imprisonment.

For example, under federal laws, trafficking drugs such as heroin or cocaine may result in sanctions up to and including life imprisonment for a first offense involving 100 grams or more. Fines for such an offense can reach \$4 million. Offenses involving lesser amounts, 10 grams, may result in sanctions up to and including 20 years of imprisonment and/or fines of up to \$2 million. A first offense for trafficking marijuana may lead to sanctions up to life imprisonment for offenses involving 1,000 kilograms or more or up to five years of imprisonment for an offense involving less than 50 kilograms. Such an offense carries with it fines that can reach \$4 million for an individual offender. Federal and state sanctions for illegal possession of controlled substances range from up to one year of imprisonment and up to \$100,000 in fines to three years of imprisonment and \$250,000 in fines for repeat offenders. Under Michigan laws, use of marijuana is a misdemeanor punishable by up to 90 days in jail and a \$100 fine. Delivery of marijuana is a felony punishable by up to four years of imprisonment and up to \$2,000 in fines. Violations may also lead to forfeiture of personal and real property and denial of federal benefits, such as grants, contracts and student loans.

The State of Michigan may impose a wide range of sanctions for alcohol-related offenses. For example, a first drunk-driving offense may be punishable by up to 90 days in jail, a fine of not less than \$100 nor more than \$500, a suspended license for not less than six months nor more than two years, and attendance at a substance abuse program. Subsequent offenses can lead to significantly increased sanctions. The vehicle of a minor transporting alcohol may be impounded for up to 30 days. Furnishing or using fraudulent identification to obtain alcohol may be punishable by up to 90 days in jail and a \$100 fine.

More detailed descriptions of sanctions related to these and other drug and alcohol offenses are available in the libraries; at the personnel centers and offices; at the Office of the Vice President for Student Services, Room 3000, Michigan Union, Ann Arbor; at the Office of Student Affairs, 1060 Administration Building, Dearborn; and at the Office of the Dean for Student Services, 375 University Center, Flint.

On September 1, 1995, the Michigan Legislature expanded the law concerning minors and alcohol possession, consumption, and purchase. A minor is anyone under the age of 21. The minor may be required to submit to a preliminary chemical breath test and may be subject to suspension of his/her driver's license even if he/she was not in an automobile at the time of the arrest. In addition, it is now a misdemeanor, not a civil infraction, for a minor to **attempt** to possess, consume, or purchase alcohol. If the underage person is less than 18 years of age, the agency charging him/her must notify the parents or guardian within 48 hours.

EMPLOYEE REPORTING REQUIREMENT

Under the Drug-Free Workplace Act of 1988, in addition to the other requirement of this policy, a faculty or staff member who works in any capacity under a federal grant or contract must notify his or her University supervisor or department head, in writing, of his or her conviction for a violation of any criminal drug statue occurring in the workplace no later than five calendar days after such conviction. This applies to direct charge employees and to the indirect charge employees who perform any support of overhead functions related to the grant. The supervisor or department head must then promptly report the violation to the General Counsel's Office.

DISTRIBUTION OF POLICY

A copy of this policy statement shall be distributed annually to all faculty, staff and students.

REVIEW OF UNIVERSITY PROGRAM AND POLICY

Biennially, the University shall review its "Alcohol and Drugs Prevention Program Policy on Alcohol and Drugs" to determine the program's and policy's effectiveness and implement changes, if needed, and to ensure that the University's disciplinary sanctions are consistently enforced.

Code of Conduct for Student Loans

Although the University of Michigan-Dearborn's existing conflict of interest policies would already preclude the conduct prohibited by 34 C.F.R. § 668.14(b)(27),1 for clarity, the University of Michigan-Dearborn hereby establishes, as an addendum to the University of Michigan-Dearborn's *Conflict of Interest and Conflicts of Commitment Staff Implementation Guidelines* and the *Policy on Faculty Conflicts of Interest and Conflicts of Commitment*, this code of conduct in regards to private student loans2.

The responsibility for the administration of this code of conduct and its enforcement resides with the UM-Dearborn Provost and UM-Dearborn Vice Chancellor for Enrollment Management and Student Life of the University of Michigan-Dearborn.

This code of conduct is applicable to all officers, employees and agents of the University of Michigan-Dearborn and any affiliated organizations with responsibilities (directly or indirectly) with respect to private student loans. UM-Dearborn officers, employees and agents subject to this policy are prohibited from doing any of the following, either on their own behalf or on behalf of the University:

- Participating in a revenue-sharing arrangement with any lender by which the lender pays a fee or provides other material benefits to UM-Dearborn or any officer, employee or agent subject to this policy in exchange for the UM-Dearborn's recommendation of that lender or its loan products;
- Soliciting or accepting gifts, including reimbursement of expenses or payment of expenses in a manner inconsistent with the requirements set forth in UM-Dearborn's COI/COC Policies as requiring possible conflicts disclosure, from any lender, guarantor, or servicer that provides private education loans to students, unless the item or payment in question meets the exceptions set forth in 34 C.F.R. § 601.21(c)(2)(iii);
- Accepting from any lender or affiliate any fee, payment, or other financial benefit as compensation for any consulting arrangement or other services contract with or on behalf of a lender of private education loans, except that UM-Dearborn officers, employees, or agents subject to this policy who do not work in the Office of Financial Aid may serve on a lender's board of directors, provided that they recuse themselves from any board decisions relating to private education loans at UM-Dearborn;
- Directing borrowers to particular lenders or delaying loan certifications;
- Requesting or accepting from any lender any offer of funds to be used for private education loans in exchange for UM-Dearborn's providing the lender with a specified number of, loan volume of, or preferred lender arrangement for, private education loans
- Requesting or accepting any lender's assistance with call center or Office of Financial Aid staffing, except that UM-Dearborn may request or accept from any lender (a) professional development training for financial aid administrators, educational counseling or other materials to provide to UM-Dearborn's student borrowers (provided that such materials indicate the lender's involvement in preparing or providing them), or (b) short-term, nonrecurring staffing assistance with financial aid-related functions during emergencies; and
- Receiving anything of value from any lender, other than reimbursement for reasonable expenses, in exchange for service on an advisory board, commission, or group established by a lender, guarantor, or group of lenders or guarantors.

Any employee who is offered any gift or monetary compensation from a lender should contact the Office of Financial Aid for clarification and guidance before responding favorably to that offer.

Should an employee subject to this policy inadvertently accept a gift or other type of monetary compensation from a lender, that employee must immediately notify the Department's Director or Dean. The amount received, the name of the employee or agent, a brief description of the activity and the dates of the activity for which the expenses were paid or provided must be reported to the Department's Director or Dean, who must then share that report with the UM-Dearborn Director of Financial Aid. The Director of Financial Aid is responsible for reporting this information annually to the Secretary of the Department of Education.

The UM-Dearborn Director of Financial Aid is responsible for providing annual notification of these requirements to all employees and agents with responsibilities (directly or indirectly) for administration of private education loans. This notification will be done via email in January of each year. In addition, this code of conduct will be published on the websites of UM-Dearborn's Office of Financial Aid, Human Resources, Enrollment Management and Student Life, and the Provost's Office.

- 1. This regulation requires all institutions that participate in the federal Title IV student loan programs to adopt a code of conduct that meets the requirements of 34 C.F.R. § 601.21.
- Because the University of Michigan-Dearborn does not participate in the FFEL Program, the regulation cited applies to the University only as its terms relate to private education loans.

Completed and Approved 7/1/10

Coursework at Other Institutions

After the first enrollment at UM-Dearborn, it is assumed that students will sever their college-related connections with all other colleges and universities.

UM-Dearborn schools and colleges may refuse to accept any and all courses (credits and grades) if they are taken at another institution without prior written approval of the student's unit.

For information, contact your unit records office.

Dual Degrees

Students may apply for two or more degrees either within the same college or in different colleges. To earn both degrees, students must meet the degree requirements for each degree. Generally, distribution courses taken within the College of Arts, Sciences, and Letters may be used to satisfy both degrees. Students should expect to elect at least 30 more credits to earn both degrees. Students are advised to contact each program to learn the specific requirements that must be met.

Some degrees, such as the degrees in Engineering Mathematics or Computer and Information Science (CIS) Mathematics, are only available as concurrent degrees and must be paired with a primary degree in either engineering or CIS. There are special concurrent degree programs in which a student can earn both a BSE in Electrical Engineering and Computer Engineering or in both Industrial and Systems Engineering and Manufacturing Engineering. Students interested in dual degrees should see their advisor.

Electronic Communication

(E-Mail) With Students

The UM-Dearborn uses your assigned UM-Dearborn email address for all university email communications. You are responsible for accessing your UM-Dearborn email account on a frequent and consistent basis to stay informed of important University business such as information regarding your student account, financial aid, registration, grades or correspondence from faculty.

You may choose to forward messages from your UM-Dearborn email address to an alternate personal address. However, doing so may place you at risk of not receiving critical University communications. For additional information on your UM-Dearborn email account (including how to forward your UM-Dearborn email address), go to its.umd.umich.edu/ and select Accounts.

This policy reflects UM-Dearborn's commitment to using available technology to communicate among members of the campus community. It recognizes an expanding reliance on electronic communication among students, faculty, staff and the administration due to the convenience, speed, cost-effectiveness and environmental advantages it provides. This policy will define the proper use of electronic communications between University staff, faculty and students. Electronic communications may include, but are not limited to, electronic mail, electronic bulletin boards, and web sites.

UM-Dearborn authorizes the use of email for official communication between students, staff, faculty, and the administration. All members of the campus community are expected to comply with established guidelines and procedures that define the proper use of electronic communications.

To implement this policy, the following actions and services will be provided:

1. Provision of University email

UM-Dearborn will provide all staff, faculty, and students with an official University email address. This will be the address listed in University directories. All official University email communications will be directed to this address.

2. Appropriate use of University email

Certain University electronic communications may be timecritical. Students, staff, and faculty are responsible for checking their official email address on a frequent and consistent basis in order to stay current with University communications.

In general, email is not appropriate for transmitting sensitive or confidential information unless an appropriate level of security matches its use for such purposes.

Confidentiality regarding student records is protected under the Family Educational Rights and Privacy Act of 1974 (FERPA). All use of email, including use for sensitive or confidential information, must be consistent with FERPA.

Email shall not be the sole method for notification of any legal action.

3. Redirecting of University email

Members of the campus community may elect to forward University email to an alternate address (e.g., aol.com, hotmail.com, comcast.net). They are responsible for ensuring that the configuration of their email service does not accidentally label University messages as spam. Users who redirect email from their official address to another email

address do so at their own risk. The University will not be responsible for the handling of email by outside vendors or by departmental servers. Having email redirected to an alternate service does not absolve students, staff or faculty members from the responsibilities associated with communication sent to their official email address.

4. Access to University email

Students who are not in possession of a home computer, or do not have access to a computer at work, can use computers available in campus labs or in their local library.

5. Faculty use of University email

Faculty may determine how email will be used in their classes. It is highly recommended that if faculty have email requirements and expectations, they specify these requirements in their course syllabus. Faculty may reasonably expect that students are accessing their University email, and may use email for their courses accordingly.

Honors

ACADEMIC HONORS

WILLIAM J. BRANSTROM (FRESHMAN) PRIZE

First-term freshmen who rank in the upper five percent of their class and earn 14 credit hours and at least a 3.50 GPA on any campus and in any unit of the University of Michigan are named recipients of the William J. Branstrom Prize. This distinction is noted on the student's transcript as "William J. Branstrom Prize."

JAMES B. ANGELL SCHOLARS

Students who earn straight A's (A+, A, A-) for two or more consecutive terms with a minimum of 14 elected credit hours each term, 12 of which must be graded, are named James B. Angell scholars. This distinction is noted on the student's transcript.

UNIVERSITY HONORS

University Honors are awarded to all students who have achieved a 3.50 GPA and 14 credit hours (12 of which must be graded *A-E*). This distinction is noted on the student's transcript as "University Honors" after fall and winter terms only.

HONOR SCHOLARS RECOGNITION

Students who have achieved superior academic performance are invited to and individually recognized at an Honor Scholars Awards Dinner held in late March each year. Those honored include active undergraduate and graduate students, one per degree major, with a specific minimum GPA, a specific minimum number of credit hours, and other criteria deemed appropriate by the School, College, or Department. For further information, contact the Office of the Provost, 1080 Administration Building; telephone (313) 593-5030.

GRADUATION HONORS

CHANCELLOR'S MEDALLION

The Chancellor's Medallion is awarded at each Commencement Exercise to UM-Dearborn graduates. The students are selected based on his/her quality of character, vitality, intellect, integrity and academic record. The December awardees are selected from August degree recipients and December degree candidates. The April/May awardees are selected from April/May degree candidates.

WITH DISTINCTION

Students who graduate and have obtained a cumulative GPA of at least 3.2 but less than 3.6 are recommended for graduation "With Distinction". Such distinctions are noted on transcripts and diplomas.

WITH HIGH DISTINCTION

Students who graduate and have obtained a cumulative GPA of at least 3.6 are recommended for graduation "With High Distinction". Such distinctions are noted on transcripts and diplomas.

Institutional Equity

The University of Michigan, as an Equal Opportunity/Affirmative Action employer, complies with applicable federal and state laws regarding nondiscrimination 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, gender identity, gender expression, disability, or veteran status in employment, educational programs and activities, and admissions. Inquiries or complaints may be directed to the Senior Director for Institutional Equity and Title IX/Section 504 Coordinator, Office of Institutional Equity, 2072 Administrative Services Building, Arbor, Michigan 48109-1432, (734) 763-0235; TTY (734) 647-1388. University of Michigan-Dearborn inquiries may be addressed to the Dearborn Institutional Equity Officer, Office of Institutional Equity, 1020 Administration Building, Dearborn, Michigan 48128-2406, (313) 593-5320 or 593 -5190, TTY (313) 593-5430, fax (313) 593-3568.

The Office of Institutional Equity aims to ensure that all groups, including racial, ethnic and religious minorities, women, the disabled, senior citizens, gays, lesbians, transgender individuals and veterans all have equal opportunity and receive the support they need to be effective and successful as students, faculty or staff members. The office oversees the University's compliance with affirmative action/ nondiscrimination legislation, and University policies and procedures. The office is available to provide information and pre-grievance counseling to faculty, staff and students with discrimination or harassments complaints and co-sponsors training and educational programs.

The University of Michigan believes that educational and employment decisions should be based on individuals' abilities and qualifications and should not be based on irrelevant factors or personal characteristics that have no connection with academic abilities or job performance. It strives to build a diverse community in which opportunity is equal for all persons regardless of race, sex, color, religion, creed, national origin or ancestry, age, marital status, disability, individual's sexual orientation, gender identity, gender expression or veteran status. Such a policy ensures that only relevant factors are considered and that equitable and consistent standards of conduct and performance are applied. The University exerts its leadership for the achievement of this goal by all parties with which the University transacts business, which it recognizes, or with which students or employees of the University are involved.

Any University of Michigan - Dearborn employee having a complaint of discrimination should notify the Institutional Equity Officer, 1020 Administration Building, (313) 593-5320, TTY

(313) 593-5430, fax (313) 593-3568. A student should notify either the Institutional Equity Officer or the Ombudsman in 2106 University Center, (313) 583-6445.

Posting and Handbill Distribution

The posting of any information or advertisement and distribution of handbills (fliers) is governed not only by the policy below, but also by all other applicable University Policies and Procedures:

- The Posting Approval Log must be completed and signed by a representative of the organization or person responsible for the posted material.
- 2. All posted literature must be approved and officially stamped with a removal date at the lower left- or right-hand corner by a staff member of the Student Activities Office (SAO). Approved literature may be posted for a maximum of thirty days. Extensions to the thirty-day maximum posting period may be granted by the SAO in extenuating circumstances.
- The indiscriminate distribution (littering) of handbills on the UM-Dearborn campus is strictly prohibited. Offending parties may have their personal and/or organizational rights to distribute handbills on campus revoked and/or may be rebilled for inordinate custodial or plant maintenance cost.
- 4. Material must be posted on designated Campus News & Activities bulletin boards, tack stripping, and kiosk structures only. Posting on University walls, windows, doors, lighting poles, floors, telephones, restroom facilities, sidewalks, roadways, parking lots, plants, or any vehicle on University property is strictly forbidden.
- 5. Chalking of University property is prohibited.
- Fliers or posters partially or fully covering pre-approved material or Campus News & Activities signs will be removed.
- Standard staples, thumbtacks, and pushpins are the only acceptable methods of affixing posted materials to bulletin boards.
- 8. Individuals and organizations are limited to posting one (1) flier not to exceed 8-1/2 x 14 inches, or one (1) sign not to exceed 18 x 24 inches per designated bulletin board, except where specified. Individuals or organizations may post four (4) fliers or two (2) signs of the above-noted dimensions on the tack stripping in the University Mall. Fliers or posters with different formats or graphics which essentially provide the same basic advertisement information are considered the same and subject to the above noted one per bulletin board provision.
- Campus News & Activities bulletin boards may not be covered, amended or cleared without the express permission of SAO
- 10. One (1) 3 x 6 foot banner, with official approval, may be posted on the balconies in the CASL Atrium for a period not to exceed twenty-one (21) days and must be appropriately hung as not to result in an obstruction or fire hazard.
 - Banners used for commercial business gain or commercial advertisement are prohibited from posting.
 - Banners advertising events of an ongoing nature or events not primarily sponsored by a recognized entity from within the UM-Dearborn community are prohibited from posting.
 - The posting representative assumes responsibility for posting banners properly and removing all banners on the date stamped.
- 11. The content of the posters and signs is the direct responsibility of the posting individual and/or organization. Persons posting information written in a non-English language must provide

an exact English translation for SAO records.

- 12. SAO retains the right to refuse the approval of material that is not in keeping with University policy and procedure.
- 13. Failure to adhere to the Posting and Handbill Distribution Policy may result in disciplinary action under applicable University of Michigan-Dearborn policies and procedures and/or applicable civil statutes.

Advisory: The Rock Painting Policy, as codified in *The Student Clubs and Organizations Information and Policy Manual* governs painting on the rock outside the northwest entrance to the University Center.

Privacy and Access to Information

In collecting, utilizing, and releasing information about individuals associated with the University, the University will strive to protect individual privacy, to use information only for the purpose for which it was collected, and to inform individuals of the personal information about them that is being collected, used, or released. The University will not release sensitive information without the consent of the individual involved unless required to do so.

Repeat Course Policy

GUIDELINES

When a prior grade or mark other than "W" is recorded for a course, or its equivalent, or its cross listing, a subsequent enrollment ("repeat") of the course, or its equivalent, or its cross-listing, will result in an adjustment of the grade point average and credits earned.

- 1. Students may repeat a course up to two times (total of three attempts).
- Regardless of whether it is higher or lower than the previous grade(s), the last grade assigned in a course will be used in computing the student's cumulative grade point average and credits earned toward degree.
- 3. If a student takes a course three times (the maximum allowed), the previous two grades will not be reflected in the GPA.
- 4. Most courses can be elected only once for credit. The maximum number of credits/elections allowed in courses designed for multiple enrollments are indicated in the *Undergraduate Catalog*. For information regarding these courses, students may contact their unit Academic Advisor.

This policy applies to all undergraduate degree and non-degree students in all academic units. An exception not to accept the final grade in a repeated course cannot be petitioned.

The policy applies only to courses elected Fall 2005 or later.

Students who have repeated a course two or more times prior to Fall 2005 may repeat the course only one additional time. Only the two most recent previous grades will be affected by the new policy. Other previous grades will continue to be used in computing the grade point average.

Courses taken at institutions other than the University of Michigan-Dearborn do not affect the grade point average.

The use of an Audit Grade Mode or Pass/Fail Grade Mode may not be used to adjust grade point averages for courses previously elected under any other existing grade mode. For students who earned an undergraduate degree at UM-Dearborn and are now in the process of earning a second undergraduate degree at UM-Dearborn, the following rule will apply: If repeating a course in the second degree that was failed (with a grade of E) in the first degree, both course will be included in the GPA calculation and the course earned hours (assuming the course was passed) will be included in the earned hours of the second degree.

The limitation of the three-course rule will be monitored by the Office of Registration & Records. Students who elect a course more than three times will be dropped from the course and notified of the election change.

Rights and Obligations of Speakers, Audience Members and Protestors at Public Presentations of UM-Dearborn

- Members of the UM-Dearborn community and their invited guests have the right to set forth their views and opinions and to listen, watch, protest, or otherwise participate in communication.
- UM-Dearborn has an obligation to insure audience access to public events, to protect the rights of the speaker and those who wish to hear and communicate with the speaker, and to provide all with personal security.
- Protestors have an obligation not to abuse their rights of free expression by harassing or intimidating speakers in ways that unduly interfere with free expression or communication between a speaker and members of the audience.
- 4. The prohibition against undue interference does not include suppression of the usual range of human reactions commonly displayed by an audience during heated discussion of controversial topics, so long as such activities are consistent with the continuation of the speech and the communication of its content to the audience.
- 5. The broadest range of speech and expression will be tolerated in public forums in order to facilitate the discussion and debate of ideas and issues. However, the intentional use of racial, ethnocentric or sexual invectives, epithets, slurs or utterances directly to attack or injure another individual rather than express or discuss an idea of philosophy are beyond the boundaries of protected speech. Additionally, malicious and intentional verbal threats of violence directed towards an individual, physical violence and destruction of property are misconduct and will be subject to discipline.
- UM-Dearborn officials have a responsibility to make a
 judgment when there is a clear and present danger that the
 rights of free expression and communication will be infringed
 upon and to take appropriate measure to safeguard these
 rights.
- The overall goal of UM-Dearborn officials during a disruption shall be to re-establish an atmosphere conducive to communication between the speaker and the audience in full respect of the rights of all parties.
- Canceling, stopping an event, adjourning to another time or
 place, or allowing protracted interruption of a speech or
 meeting is inconsistent with full respect for the rights of free
 expression and communication of those present.

Sexual Harassment by Faculty and Staff

POLICY STATEMENT

It is the policy of the University of Michigan to maintain an academic and work environment free of sexual harassment for students, faculty, and staff. Sexual harassment is contrary to the standards of the University community. It diminishes individual dignity and impedes equal employment and educational opportunities and equal access to freedom of academic inquiry. Sexual harassment is a barrier to fulfilling the University's scholarly, research, educational, and service missions. It will not be tolerated at the University of Michigan.

Sexual harassment violates the University's long-standing policy against discrimination on the basis of sex. Sexual harassment is also illegal. It is prohibited in the employment context by Title VII of the 1964 Civil Rights Act, in the education context by Title IX of the Educational Amendments of 1972 and, in both employment and education contexts, by Michigan's Elliot-Larsen Civil Rights Act, adopted in 1976.

A claim under this policy may be brought by the University or by a faculty, staff, or student member of the University community based on the conduct of any University employee. Complaints based on conduct by students who are not also employees of the University are addressed in the Interim Policy on Discrimination and Discriminatory Conduct by Students in the University Environment, which is administered by the Office of Student Services.

Sexual harassment can be a very serious matter having far-reaching effects on the lives and careers of individuals. Intentionally false accusations can have similar impact. Thus the charge of sexual harassment is not to be taken lightly by a charging party, an accused party, or any member of the University community. A person who knowingly and intentionally files a false complaint under this policy is subject to University discipline.

DEFINITION OF SEXUAL HARASSMENT

For the purposes of determining whether a particular act or course of conduct constitutes sexual harassment under this policy, the following definition will be used:

Sexual advances, requests for sexual favors, and other verbal or physical conduct of a sexual nature constitute sexual harassment when:

- 1. submission to such conduct is made either explicitly or implicitly a term or condition of an individual's employment, education, living environment, or participation in a University activity;
- 2. submission to or rejection of such conduct by an individual is used as the basis for or a factor in decisions affecting that individual's employment, education, living environment, or participation in a University activity; or
- 3. such conduct has the purpose or effect of unreasonably interfering with an individual's employment or educational performance or creating an intimidating, hostile, or offensive environment for that individual's employment, education, living environment, or participation in a University activity.

Conduct alleged to be sexual harassment will be evaluated by considering the totality of the particular circumstances, including the nature, frequency, intensity, location, context, and duration of the questioned behavior. Although repeated incidents generally create a stronger claim of sexual harassment, a serious incident, even if isolated, can be sufficient. For example, a single suggestion that academic, other educational, or employment rewards or reprisals will follow the granting or refusal of sexual favors, will constitute sexual harassment and grounds for action under this policy.

This policy addresses intentional conduct. It also addresses conduct that results in negative effects even though such negative effects were unintended. Sexually related conduct forms the basis of a sexual harassment claim if a reasonable person of the same gender and University status as the complainant would consider it sufficiently severe or pervasive to interfere unreasonably with academic, other educational, or employment performance or participation in a University activity or living environment.

Sexual harassment most often occurs when one person has actual or apparent power or authority over another; however, it may also occur between individuals of equal status or rank within the University. Sexual harassment may occur between males and females and between persons of the same gender.

Although sexual harassment as described and prohibited by this policy includes a wide range of behaviors, it does not include certain discriminatory conduct even though that conduct may be otherwise unlawful, offensive, or prohibited by University policy. For example, unequal pay and denial of access to educational programs based on gender are unlawful sex discrimination not addressed by this policy. Also, not all harassment based on gender or sexual orientation may be addressed by this policy, if such conduct is not sexual in nature or sexually motivated. Some conduct which negatively emphasizes gender, gender differences or sexual orientation may violate this policy, but may also be a violation of another University policy. Harassment that is both racist and sexual in nature would be addressed by this policy and possibly by other University policies as well.

CONSENSUAL RELATIONSHIPS

Romantic and sexual relationships between supervisor and employee or between faculty or other staff and student are not expressly prohibited by University policy. However, even when both parties have consented to the development of such relationships, they can raise serious concerns about the validity of the consent, conflicts of interest, and unfair treatment of others. Similar concerns can be raised by consensual relationships between senior and junior faculty members.

In 1986, the University's Senate Assembly adopted a statement of principle concerning relationships between faculty (including teaching assistants) and students. The University concurs with the Assembly's position that sexual relationships, even mutually consenting ones, are a basic violation of professional ethics and responsibility when the faculty member has any professional responsibility for the student's academic performance or professional future.

The University's nepotism policy precludes individuals from evaluating the work performance of others with whom they have intimate familial or close personal relationships, or from making hiring, salary, or similar financial decisions concerning such persons, without prior written approval. The same principles apply to staff-student or faculty-student relationships in the context of work or academic evaluation. Thus, consensual romantic or sexual relationships between faculty or staff and students also require disclosure to the appropriate administrative supervisor so that arrangements can be made for objective evaluation and decision making with regard to the student.

Romantic or sexual relationships with students that occur outside of the instructional or supervisory context may also lead to difficulties. The Senate Assembly has concluded, and the University concurs, that the asymmetry of the faculty-student relationship means that any sexual relationship between a faculty member and a student is potentially exploitative and should be avoided. Faculty and staff engaged in such relationships should be sensitive to the constant possibility that they may unexpectedly be placed in a position of responsibility for the student's instruction or evaluation.

In the event of a charge of sexual harassment, the University will, in general, be unsympathetic to a defense based upon consent when the facts establish that a professional faculty-student, staff-student, or supervisor-employee power differential existed within the relationship.

RESPONSE AND PROCEDURES

Prevention and Education

The University is committed to preventing and eliminating sexual harassment of students, faculty, and staff. To that end, this policy will be published in pamphlet form and disseminated to the University community. The pamphlets will be included in orientation material for new students, faculty, and staff and made available in the Affirmative Action Office and other appropriate locations on each campus. in addition, appropriate educational sessions will be conducted by the University on an ongoing basis to (1) inform students, faculty, and staff about identifying sexual harassment and the problems it causes, (2) advise members of the University community about their rights and responsibilities under this policy, and (3) train personnel in the administration of this policy.

Assistance with Sexual Harassment Problems

The Affirmative Action Office is responsible for ensuring and monitoring the University's compliance with federal and state nondiscrimination laws. However, a discrimination-free environment is the responsibility of every member of the community. The University can take corrective action only when it becomes aware of problems. Therefore, the University encourages persons who believe that they have experienced or witnessed sexual harassment to come forward promptly with their inquiries, reports, or complaints and seek assistance within the University. Individuals also have the right to pursue a legal remedy for sexual harassment in addition to or instead of proceeding under this policy.

Confidential Counseling

Information about or assistance with sexual harassment issues may be obtained from a variety of University resources. Prior to or concurrent with making a report or complaint of sexual harassment, individuals may find it helpful to consult with a counselor. The following offices can advise and support victims of and witnesses to sexual harassment in a confidential setting. Discussions with representatives of these offices will not be considered official reports to the University and will not, without additional action by the complainant, result in intervention or corrective action.

- Counseling Services (available to students on each campus)
- Faculty and Staff Assistance Program (available to faculty and staff on each campus)
- Lesbian-Gay Male Programs Office (in Ann Arbor, but available to students, faculty and staff from Dearborn and Flint)
- Sexual Assault Prevention and Awareness Center (in Ann Arbor, but available to students, faculty and staff from Dearborn and Flint)

Inquiries About Sexual Harassment

Inquiries about sexual harassment and this policy may also be made to the University representatives listed below. Such inquiries will not be acted upon until an informal or formal complaint is made.

Informal Resolution Process

At the complainant's option, a sexual harassment report or complaint can be made centrally or locally on the Ann Arbor. Dearborn, and Flint campuses. Centrally, informal reports or complaints may be received by representatives of the Affirmative Action Office, Ombuds Services (students only), the Office of Student Services (students only), Dean's Office of the Horace H. Rackham Graduate School (graduate students only), Center for the Education of Women, Department of Public Safety, and appropriate Office of Human Resources.

At the local level, persons designated to receive informal reports or complaints are any dean, director, department head, unit manager, residence hall building director, and/or their designees. Each school/college or other unit shall be certain that at least one of the persons designated to receive complaints is a female.

The person who receives a sexual harassment report or complaint will advise the complainant about the informal and formal resolution alternatives available under this policy. At the complainant's option, the intake person can 1) provide information about sexual harassment and this policy, 2) help the complainant deal directly with the alleged offender, 3) assist with or mediate a resolution of the problem within the unit, and/or 4) help the complainant prepare a written complaint and pursue a formal investigation. Informal resolution measures should be customdesigned to address the particular circumstances. If the complainant wishes, the intake person can, in consultation with a representative of the appropriate Office of Human Resources and/or the Affirmative Action Office, conduct an informal inquiry into the reported incident and assist in resolving it. The person to whom an informal complaint is brought will not inform the accused of the complainant's action or identity without the consent of the complainant.

Formal Investigation

Either subsequent to or instead of following an informal process, a complainant may elect to make a formal charge of sexual harassment and have it pursued. The University will investigate all formal charges of sexual harassment.

There are two internal mechanisms available to pursue a formal charge and their availability depends on the employment status of the complainant. All employees represented by a union must pursue a formal charge through the grievance procedure in the relevant collective bargaining agreement. All other employees may pursue a formal charge through the use of the appropriate faculty or staff grievance procedure set forth in the Standard Practice Guide or, in the alternative, through the procedures set forth in this policy.

Formal charges under this Policy's procedures should be made in writing and filed either with a dean or director, the Affirmative Action Office, the appropriate Office of Human Resources, or, on the Dearborn campus, with the Office of the Provost. If a formal investigation is initiated, the person accused of sexual harassment must be notified of the charge and given the opportunity to respond to any allegations before disciplinary actions are taken.

The purpose of an investigation, which will include interviewing the parties and witnesses, is to gather and verify facts about the case. Formal investigations will be conducted in consultation with the Office of the General Counsel, by a three-person team consisting of a representative from the appropriate Office of Human Resources, the Affirmative Action Office, and the office of the dean or director. Investigation of a complaint against a dean or director will include a representative from the office of the appropriate Vice President or Vice Chancellor in place of a representative from the office of that dean or director. Faculty and student participants in an investigation may elect to have a peer representative included on the investigatory team. Student or faculty peer representatives will be drawn by lot from the student panel which hears complaints under the Interim Policy on Discrimination and Discriminatory Conduct by Students in the University Environment or from the faculty cognate panel for the faculty grievance procedure, respectively, on the Ann Arbor campus, and from an equivalent representative pool on the Dearborn and Flint campuses.

Investigations will be conducted promptly, thoroughly, and fairly, affording both the complainant and the accused a full opportunity to participate. Possible outcomes of an investigation are 1) a finding that the allegations are not warranted or could not be substantiated, 2) a negotiated settlement of the complaint, 3) a finding that the allegations are substantiated and, if so, 4) recommendations to the appropriate supervisor regarding corrective action to be taken. If an allegation of sexual harassment is substantiated, appropriate corrective action will follow. The University utilizes a disciplinary system for this and other misconduct in which the extent of the disciplinary action taken depends on all the facts and circumstances available at the time the decision is made. The severity of the punishment will depend on the frequency and severity of the offense. Corrective action could include a requirement not to repeat or continue the harassing conduct, a reprimand, denial of a merit pay increase, reassignment, and suspension. A finding of sexual harassment may be cause for the separation of the offending party from the University, in accordance with University procedures, including, for qualified faculty, the procedures set forth in Regental Bylaw 5.09. Every effort will be made to assure University-wide uniformity of sanctions. The complainant and the person complained against will be notified in writing of the final disposition of a formal complaint. In the event the allegations are not substantiated, all reasonable steps will be taken to restore the reputation of the accused if it was damaged by the proceeding.

University Action

At the request of a complainant or with the consent of one or more complainants who agree to participate as witnesses, the University may, in appropriate circumstances, assume the role of a complainant and pursue a report or complaint of sexual harassment, either informally of formally. The University may respond to complaints or reports by persons external to the University community about conduct of University employees alleged to be sexual harassment.

Appeals Process

Complainants and faculty and staff members against whom corrective action is taken may avail themselves of the relevant grievance procedure as to the appropriateness of the corrective action and the procedures followed. A student complainant who is not satisfied with the outcome of a formal investigation may appeal the outcome to the Provost and Vice President for Academic Affairs (if person complained against is a faculty member or teaching assistant) or relevant Vice President (if person complained against is a staff member). On the Dearborn and Flint campuses, student complainants should utilize the appeals process specific to their own campus.

Reporting Requirements

To assure University-wide compliance with this policy and with federal and state law, the Affirmative Action Office must be advised of all reported incidents of sexual harassment and their resolution. Reports in which the complainant's and/or the accused's names are not revealed should be reported generically. The Affirmative Action Office will use this information to prepare annual statistical reports for the campus community on the incidence of sexual harassment. The Office of the General Counsel will monitor repeated complaints within the same unit or against the same individual, where appropriately identified, to assure that such claims are appropriately handled.

General

In all cases, a person who 1) reports or complains, 2) participates in an inquiry or investigation, or 3) is accused of sexual harassment incidents may be accompanied by an individual of his or her choice who shall be permitted to attend, but not participate in, the proceedings.

The University will take appropriate steps to assure that a person who in good faith reports, complains about, or participates in an informal resolution or formal investigation of a sexual harassment allegation will not be subjected to retaliation. The University also will take appropriate steps to assure that a person against whom such an allegation is made is treated fairly. The University will also undertake appropriate follow-up measures to assure compliance with settlements and the goals of this policy.

Inquiries and complaints of sexual harassment shall be treated with the maximum degree of confidentiality. Only when required by law or when personal safety is at risk will confidential information be acted upon or disclosed to others without a complainant's consent.

Sexual harassment complaints should be made promptly and resolved as quickly as possible, generally within two weeks of the date the complaint is made. Formal investigations should be concluded within thirty (30) days from the date of the complaint. The complainant and the accused should be kept apprised of the progress of the investigation, as well as the ultimate outcome.

The University will make every effort to accommodate parties who are unable to participate in a formal investigation because of physical incapacity or geographical location.

Complaint-Handling Guidelines

The University will issue and make available to persons entrusted with administering this policy and other interested parties, appropriate complaint-handling guidelines, consistent with this policy. All guidelines shall be reviewed and approved by the Office of the Provost and the Office of the General Counsel. These guidelines shall be issued within ninety (90) days of the effective date of this policy.

Revisions

This policy and these procedures are subject to revision as determined necessary or desirable in view of experience or changes in the law.

Special Examinations

The UM-Dearborn will acknowledge proficiencies gained by students outside the bounds of traditional courses if such proficiency is certified by recognized examinations or departmentally prepared and/or approved alternatives. The University recognizes three types of such special examinations:

1) standardized examinations prepared and evaluated by nationally recognized organizations;

2) placement examinations prepared, administered on campus, and evaluated by UM-Dearborn academic departments; and 3) special examinations for individual courses, prepared, administered, and evaluated by specialists in the various academic departments and approved by the respective department chairs.

The number and nature of credits earned by examination must be approved by the department(s) normally responsible for teaching the subject matter areas for which credit is being granted. Decisions in individual cases related to departmental examinations will be made in light of the general departmentally approved policies that are not inconsistent with those for national examinations.

DEPARTMENTAL EXAMINATIONS

If a student believes that he/she has the knowledge and/or skill to merit credit for a specific course without attending classes and/or doing any assignments other than a single, comprehensive examination, the student and the academic unit or department must follow certain procedures.

If credit-by-examination is available in the area in which the student is interested, he/she should request permission to take an examination for specific credit in accordance with the unit's procedures. If the request is granted (it can be denied) and the examination is scheduled, the student will be assessed a \$20.00 fee.

All such examinations are graded on a Pass/Fail basis. If the student passes or fails, he/she will receive a written memorandum to that effect from the examiner. If the student passes the examination(s), he/she will be assessed regular University fees per credit hour received minus any fees previously paid.

Also see section on Tuition.

PLACEMENT EXAMINATIONS

Placement examinations are required by certain departments in an effort to determine the best course level for new students. No fee is assessed for the administration of these tests. For more information, telephone the Office of Admissions and Orientation Office at (313) 593-5100 or visit umd.umich.edu/plex/..

STANDARDIZED NATIONAL EXAMINATIONS

The Advanced Placement Program (APP) and International Baccalaureate (IB) subject examinations are the chief examples in this category. If the relevant academic units and/or the academic departments award credit, the student is responsible for having the test results sent to the institution (normally, along with the application for admission), and the Office of Registration & Records (current students) or the Office of Admissions and Orientation (for incoming students) will be responsible for the recording of the appropriate credit. The student is not charged a fee for such credit. For more information about AP or IB credit grant practices, visit casl.umd.umich.edu/index.php?id=687380.

Smoke-Free Policy

Since September 1, 1992, smoking has not been permitted in campus buildings. The success of this policy depends upon the thoughtfulness, consideration, and cooperation of smokers and non-smokers. All faculty, staff, students and visitors share the responsibility for adhering to and enforcing the policy. For the full policy, see the Dearborn Administrative Guide, umd.umich.edu/dag/.

In our ongoing effort to create an environment that is healthy for all members of our community, on July 1, 2011 the University of Michigan-Dearborn became a smoke-free university. This created a healthier environment for faculty, staff, students and visitors. For more information, visit umd.umich.edu/smokefree/.

Student Organizations

POLICIES FOR STUDENT ORGANIZATIONS

In an effort to coordinate the activities of all student organizations, policies were codified into a formal publication issued by Student Government, known as the *Student Clubs and Organizations Information and Policies Manual*.

The Student Clubs and Organizations Information and Policies Manual is a most useful booklet which contains information on forming an organization, the renewing and revoking of organizational status, office allocations, organizational accounting, the allotting of day sales and evening events, university services, descriptions of recognized organizations, etc.

The Student Organizations Coordinator and the Student Government Director of Student Organizations can assist any student group interested in this area of concern.

ACCOUNTING POLICIES AND PROCEDURES

The Student Activities Office (SAO) maintains and services the financial accounts for student organizations that have been recognized by the Student Government. Through this student service, SAO:

- 1. Ensures uniformity of accounting records.
- Facilitates continuity between business officers and their successors.
- Aids student organizations in keeping their activities on a sound financial basis.
- 4. Provides a means for recognized student organizations to use University facilities and services.

The SAO is prepared to offer staff consultation on matters of budgeting, detailed record keeping, and securing various University and outside vendor services and facilities. The information presented in the *Student Organizations Accounting Policies and Procedures Manual* is intended to assist the financial officers of organizations in conducting their duties and to inform them of the policies, procedures, and benefits associated with sound fiscal policy.

Special Programs

Officer Education Programs

Students at UM-Dearborn may apply for admission to the twoyear and four-year programs of Army or Air Force officer training. These programs include some scholarship options and may lead to a commission either in the Army or the Air Force.

These officer training programs are based in Ann Arbor. Interested students may get further information by visiting the Office of Registration & Records in Dearborn (1169 UC) or by telephoning Ann Arbor: for Air Force information, telephone (734) 764-2403; for Army information, telephone (734) 764-2400.

ARMY OFFICER EDUCATION PROGRAM (ROTC) (NOT A CONCENTRATION)

Upon graduation from the University and successful completion of the program, students enrolled in the Army Officer Education Program receive a commission as second lieutenant in the United States Army Reserve or in the Regular Army. Many students enroll for the first two years in order to sample career opportunities. No military obligation is incurred for the first two years.

AIR FORCE OFFICER EDUCATION PROGRAM

The program offers studies designed to prepare and commission selected individuals to serve in the United States Air Force. Both a four-year and a two-year program leading to a commission as a second lieutenant are offered. The four-year plan comprises eight terms of courses in aerospace studies plus a four-week field training course at an Air Force base, between the sophomore and junior years. The two-year plan comprises an initial six-week field training course followed by four terms of aerospace studies (AS 310 through AS 411 series). Cadets may enroll in either the four-year or two-year program by permission of the chairman.

Military Obligation

After being commissioned, graduates of the program are called to active duty with the Air Force in a field usually related to their academic degree program. The period of service is four years for non-flying officers, five years for navigators after navigator training, and eight years for pilots after flight training. A contractual obligation is established for non-scholarship students when they attend the first Professional Officer Course (POC). Scholarship students in the four-year program incur a contractual obligation upon entering the sophomore year of AFROTC, whereas those in the two-year program incur one on entering the POC.

UM-DEARBORN CREDIT FOR MILITARY OFFICER EDUCATION

College of Arts, Sciences, and Letters

Up to six credit hours of Military Science / Aerospace Studies / ROTC coursework may count as elective credit toward degree.

College of Business

Up to six semester credit hours will be granted to a student for successful completion of advanced military science courses towards the BBA degree requirements.

College of Engineering and Computer Science

Students who satisfactorily complete the requirements as established by the Military Officer Education Program Chairman for a commission and satisfactorily complete the engineering program of studies may count a maximum of four credit hours of advanced military science courses (300 and 400 level) as meeting program elective hours for an engineering degree at the discretion of the academic department.

College of Education, Health, and Human Services

Courses do not carry credit toward degree requirements.

Campus Services

Athletics and Recreation

Athletics and Recreation offers instruction, participation, and three levels of competition in a variety of sports. Participants can learn new skills or improve current levels of skill. Classes in Zumba, weight training, fitness/conditioning and weight reduction are designed to enhance physical fitness.

Open recreation time is scheduled in the Fieldhouse and Ice Arena for students, faculty and staff. The schedule is posted weekly and information can be obtained by calling the Athletics Department.

UM-Dearborn athletes participate in men's and women's basketball, women's volleyball, and softball and are affiliated with the National Association of Intercollegiate Athletics (NAIA) and the Wolverine-Hoosier Athletics Conference. Admission to games is free with a student ID card.

The recreational sports program provides opportunities to compete in club sports and intramural leagues and to participate in a variety of special events, "pick-up" games, seminars, and other related activities. The club sport program sponsors teams in lacrosse, rugby, soccer, cross-country running, bowling, and ice hockey that compete against other college/university. Intramural competition includes flag football, volleyball, broomball, wallyball, basketball and ice hockey.

The athletics complex is located at the south end of the campus. The gymnasium floor can accommodate eight volleyball or three basketball games. The ice arena has a seating capacity of 1,250 and is the home for the club and intramural teams, recreational skating, drop-in hockey and physical education classes.

Other facilities in the Fieldhouse/Arena include a Wellness Center equipped with free weights, numerous weight-training stations, stationary bicycles, rowing machines, treadmills, and a dance studio. The building also houses a conference room, administrative offices, concession stand and locker rooms. Hours of operation, schedule of activities, team tryouts and other information can be obtained by calling (313) 593-3534, going to the Fieldhouse/Ice Arena, or on the web at www.gowolves.net..

Internships or other student work experiences are available in sports information, exercise leadership, athletic training, coaching, officiating, marketing, communication, team manager/statistician and administration.

Football Ticket Distribution Policy

Season tickets to the University of Michigan-Ann Arbor football games are sold by the Ticket Office of the Ann Arbor campus Department of Athletics. UM-Dearborn students are handled by the Ticket Office on the Ann Arbor campus.

A student ticket information flyer outlining procedures to purchase tickets is mailed in March to students enrolled during Winter term. The deadline for purchase is mid-April. For more information, contact the ticket office at (734) 764-0247.

Bookstore

Located in the University Center, the Barnes & Noble Bookstore has a complete line of textbooks, trade books, and periodicals. The store also has a complete line of supplies, UM and UM-Dearborn souvenirs and sportswear. American Express, Discover, MasterCard and VISA are accepted. Normal bookstore hours: 8:00 am to 6:30 pm (Monday-Thursday); 8:00 am to 4:00 pm on Friday.

NOTE: Special hours are in effect at the start of each semester and during term breaks and holiday periods.

For additional information, telephone (313) 593-5551 or visit the website at umd.bncollege.com.

Campus Media Services

Campus Media Services (CMS) supports instruction and research by providing facilities and expertise in multimedia. These services include studio and remote video production, video streaming, video editing, audio production, Blue Stream conversion, and equipment repair. Most multimedia support for courses is provided without cost to faculty or the academic unit. CMS provides media production facilities and services for student projects. Production services that support course assignments are provided without charge to students. Production support for work that is not related to instruction may be provided for a fee. Costs vary depending on the nature of the production. All service requests should be made 24 hours in advance. Major productions require production proposals. CMS also supports a room with teleconferencing capability. Please call 313-593-5150 for more details

Career Services

Career Services provides a range of services to assist undergraduates, graduate students, graduating seniors, and alumni in their career development and job search. Students are encouraged to schedule a career counseling appointment early in their college experience to create a career plan.

Overall services offered include individualized career counseling, job search events, workshops on career planning and job search topics, job listings, online career resources, an online job club through Linked In, Career Planning classes (Exps.102) and employer connections. *FOCUS*, an online career planning system, is available for self-assessment and career exploration, at no cost

Annually a Fall Career Fair and a Spring Career Fair are held on campus, linking employers with our students and graduates. Other career fairs or recruiting opportunities, in which UM-Dearborn participates, are also promoted. Campus recruiting programs provide opportunities for graduating students and recent alumni to connect with recruiters. Students and alumni can create on-line resumes and employers recruit by posting job listings, requesting resumes, and through campus interviews. Career counselors are available to provide advice on job search techniques, resumes, and interviewing.

Career Services is a great place for career exploration, professional development and job search. Alumni also utilize the Career Services programs for individual needs and/or as recruiters.

Career Services is located in 2149 UC, telephone (313) 593-5020. URL: www.umd.umich.edu/careerservices.

Counseling and Support Services

2157 University Center Phone: (313) 593-5430 Fax: (313) 593-3263

Email: counseling@umd.umich.edu Website: umd.umich.edu/support

The mission of Counseling and Disability Services is to resolve barriers to the learning process and serve as a vital link in the UM-Dearborn "safety net." Counseling and Disability Services advance the academic mission of the University by enhancing personal development, problem solving, and communication. Our office is located at 2157 University Center.

Personal Counseling

We provide short-term therapy (up to 12 sessions per academic year) to all registered UM-Dearborn students. UM-Dearborn faculty and staff are also eligible (FASAP). There is no fee for counseling. Counseling is provided by licensed psychologists. *Note:* We do not prescribe medication. Counseling begins with an assessment of your concerns and leads to a recommendation, which may include individual counseling, couples counseling, group counseling, or referral to a specialist.

Scheduling an Appointment

Telephone or stop by the C&D Office at 2157 University Center, (313) 593-5430. The first step in arranging an appointment will be to complete a questionnaire, and then an appointment will be scheduled. Please inform our receptionist if your concern is urgent.

Confidentiality

Use of counseling and personal information shared with our counselors is confidential in accordance with Michigan Privileged Communication Statutes. There are limits or exceptions identified in these statutes. No information is released without a client's written permission and no information is entered into a student's college record.

Consultation Services

Consultation Services include faculty and staff support in assisting students in distress, Faculty and Staff Assistance Program (FASAP), career assessment services, and substance use assessment.

Career Assessment Services

This service is for students who are undecided or wanting to change their majors and/or career plans and would like some assistance. After an initial interview, a series of personality and career tests may be used to provide students with feedback on work and career preferences that match their interests, values and personality type.

Outreach Programs

These programs emphasize personal development topics. Many are designed to respond to the diversity among students and reach students who are less likely to make use of traditional counseling services. To request a program, contact our office at (313) 593-5430 or email: counseling@umd.umich.edu.

Training/Internship Program

Currently, our training/Internship program (clinical or counseling psychology and community counseling) is only available to graduate students. Please contact our training coordinator, Dr. Sarah Pouliot, for more information.

Disability Services

Disability Services offers aid to differently-abled individuals seeking the opportunity for further learning. Some of the services provided, as deemed appropriate after departmental review, are: 1) early registration; 2) course/classroom accommodations; 3) tutorial referral and mentoring services; 4) assistance while using the Computer Center; 5) note-taking; and 6) referral for auxiliary services such as interpreters for the deaf and the taping of texts for the blind. Staff will train students to use the Adaptive Equipment Lab in the Mardigian Library. Please contact (313) 593-5430 if you have any questions.

Student Health Insurance

A student group health insurance policy is available to any enrolled student. Information and application forms are available at 2157 UC. It is recommended that all students have health insurance coverage. All international students are *required* to have such coverage. Students applying for financial aid should be aware that the cost of health insurance could be included as a budget expense.

Referral Service

A low-cost referral service can be provided for faculty, staff and students at The Henry Ford Medical Center – Fairlane only, located at 19401 Hubbard Drive, Dearborn, Michigan. You must contact Counseling & Disability Services located in The University Center, Room 2157, or telephone (313) 593-5430 prior to any medical services for authorization.

Housing Service

A Housing Referral Service is located at 2136 UC. Listings are available, in addition to a telephone to call local landlords. For further information, contact the Housing Referral Service, telephone (313) 583-6600.

Food Services

There are a variety of food service retail locations across campus to fill your needs while on campus. Beginning July 2013, Sodexo will be the food service provider for the University. They are also able to provide catering services for meetings and events across campus.

MCKINLEY CAFE

The McKinley Café is located on the first floor of the University Center and features a variety of retail food services including Subway, Starbucks, a grill serving food made to order, a pizza/Italian station (pizza, calzones & pasta), a station featuring healthier dining options, and a variety of "grab and go" food choices.

FAIRLANE CENTER SOUTH

Fairlane Center South contains Sandella's Flatbread Café, featuring made-to-order wraps, rice bowls, salads, and paninis. There is also a wide selection of pre-made food options for those on the go.

MARDIGIAN LIBRARY

Mardigian Library is home to a coffee shop serving hot and cold beverages and offering a variety of pre-packaged snacks.

VENDING

Beverage and snack machines are located throughout campus for the convenience to the campus community.

Current information on food services, retail hours, catering services, and vending can be obtained by visiting http://umd.umich.edu/universitycenter/

Information Technology Services

General Purpose Labs: 1140 CW, (313) 593-5073

1070 ML (Campus dialing only: x54992) **Help Desk:** (313) 593-HELP (4357) or

helpdesk@umd.umich.edu

Internet Address: its.umd.umich.edu

Information Technology Services (ITS) supports the computing needs of faculty, staff and students. The department has responsibility for: 1) the campus network, including Internet access; 2) computer labs in the CW and Library; 3) computer access accounts; 4) email and webmail services; 5) Help Desk support; and 6) the Banner student information system.

FACILITIES

The primary computing support facilities are two general purpose computer labs located in the Computing Wing (CW) of the Science Building and in the Mardigian Library (ML). Together, they contain over 130 64-bit processor computers, running Windows XP. Adjacent to the Library lab is the Adaptive Learning Lab, with comparable equipment. In addition to the standard software products, it runs a voice synthesis package that allows visually impaired students to run standard application programs on the computer. Additional departmental computer labs are also operated by individual schools and colleges across campus.

SOFTWARE

ITS offers a wide variety of software in the labs it supports, including communications, databases, word processing, spreadsheets, and artificial intelligence. Specialized software is also available, including Visual Studio, SPSS, SAS, Minitab, and Mathematica. The lab also provides instructional software required for some classes.

In addition, the University of Michigan has established a licensing agreement with Microsoft that provides students with excellent discounts on some of their products. ITS offers Windows 7, Office 2007, and Visual Studio 2008 for sale in the Computing Wing on Fridays.

COMPUTER ACCOUNTS

The ITS Accounts Office assigns user ID's and passwords for all university network systems. They process requests for several types of computer access, and assist with questions and problems with these types of computer access logins. These include Uniqnames, Kerberos and Dearborn passwords, lab access, and access to your home directory. The Accounts Office can also provide information on UM-DEARBORN's Webmail service, which allows you to more directly access and manage your mail from off campus.

ASSISTANCE AND SERVICES

The ITS Help Desk is the primary point of contact for support. Please call or email the Help Desk when you need assistance, service, documentation and information regarding the campus network, software, hardware and services. Many questions can be answered immediately on the phone. An automated ticket system is also used to keep track of each request that is received

and the service that is provided. Both general purpose computer labs are staffed with student assistants who can provide answers to most questions or refer you to someone who can. Equipment problems and malfunctions in the labs should be immediately reported to the lab Counselor on duty so that the amount of downtime experienced is minimized.

HOURS

During the Fall and Winter semesters, the computing labs normally follow the schedule below. Holiday hours and other hour changes are posted on the ITS web site and in the computer labs. CW lab hours are 8:00 am until 9:45 pm, Monday through Thursday; 8:00 am to 5:45 pm on Friday; 12:00 noon until 4:45 pm on Saturday; and 12:00 noon until 8:45 pm on Sunday. ML lab hours are 10:00 am until 10:45 pm, Monday through Thursday; 10:00 am to 5:45 pm on Friday; 12:00 noon until 5:45 pm on Saturday; and 1:00 pm until 9:45 pm on Sunday.

Institutional Equity Officer

The Institutional Equity Officer (IEO) helps to ensure that the campus promotes equal opportunity for all students, faculty, and staff, including racial, ethnic, and religious minorities, women, the disabled, senior citizens, veterans, and gay, lesbian and transgender individuals. The IEO oversees compliance with Regental by-laws, Presidential policy and legislation regarding nondiscrimination, equal opportunity, and /affirmative action and provides information and pre-grievance counseling to faculty, staff, and students with questions or complaints. The office of the OIE is located in 1020 Administration Building, telephone (313) 593-5190.

International Affairs

Office of International Affairs 760 Town Center Drive Dearborn MI 48126 Telephone: 313-583-6600

Fax: 313-583-6725

Email: international@umd.umich.edu

Web-address: umd.umich.edu/internationaloffice/

SERVICES

The Office of International Affairs welcomes and has the commitment to provide support services to international and domestic student, faculty and visiting scholars at the University of Michigan-Dearborn. Our campus community is dedicated to providing quality services addressing the following:

- Processing DS-2019 and /or I-20
- Admission Process
- Students Success Assistance
- Faculty Exchange
- Employment
- Community Engagement
- English Language Program
- Overseas Traveling
- Health Insurance domestic and international
- Housing Referrals
- Homeland Security Compliance Advising
- Cross-cultural programs and workshops
- Emergency Assistance

Potential students are afforded assistance to ensure a seamless admissions process. Assistance begins once prospective students express an interest in the university and continues throughout their academic tenure. The OIA Provides information to international students scholars about maintaining F-1 and J-1 status, they are encouraged to explore and integrate within the local and metropolitan communities while being challenged with the rigor of the university's academic process. The students Success Center offers diverse academic, personal and professional support through blended services that are designed to complement and support the educational track.

As we prepare our students to achieve the "Degree That Makes the Difference," we encourage and support our students to participate in study abroad, global civic engagement projects and international internships. These opportunities help provide practical applications to what our students are learning within their academic programs. UM-Dearborn offers faculty led study abroad opportunities and assistance to students that participate in non-UM-Dearborn programs.

OIA works with the academic units to explore and support faculty exchange opportunities. Currently, the University of Michigan-Dearborn works with colleges and universities in over ten countries where faculty, students and resources are shared and rich friendships are discovered. The University of Michigan-Dearborn welcomes worldwide intellectual dialogue and exchanges that provide our students with a diverse global perspective and that challenges and prepares them for the Twenty-first Century and beyond.

Mardigian Library

The Mardigian Library offers a student-centered environment that fosters learning by providing access to authoritative sources of knowledge and information, and by helping students learn critical information literacy skills and concepts. The library provides access (http://library.umd.umich.edu) to a multitude of research resources, including over 20,000 online journals, over 500 online research databases, and thousands of online books. The four-story Mardigian Library houses a 365,000-volume collection and offers space for 1,200 students. Twenty-two public workstations on the main floor provide access to all online resources, most of which are also accessible from off campus.

Two floors are available for silent study and one floor is for group study. Facilities housed in the Mardigian Library include a coffee shop, computer lab, and distance learning classroom on the first floor, the Alfred Berkowitz Gallery, the Voice-Vision Holocaust Survival Oral History Archive, the Archives of the University of Michigan-Dearborn, and the Integrated Learning and Community Partnership Office (ILCPO).

Students may borrow materials from the library's collection. Items not owned by the library may be requested from other libraries through the Interlibrary Loan Department or from MeLCat, a statewide resource-sharing service of over 400 public and academic libraries. Currently enrolled UM-Dearborn students are eligible to borrow materials directly from most of the libraries in the UM-Ann Arbor University Library system. Additional information regarding this service may be obtained from University Library Circulation Services at the Harlan Hatcher Graduate Library. Call (734) 764-0401.

Librarians at the Mardigian Library are committed to teaching students the skills and concepts that are necessary to develop effective search strategies for research assignments, and to use library and information resources effectively. During the Fall and Winter terms, librarians offer over 80 hours per week of

regular drop-in research assistance. Other research assistance includes by phone, "Ask-A-Question" (e-mail service), Instant Messaging (IM), text messaging, and scheduling one-on-one appointments with librarians for in-depth assistance. Students may also attend scheduled group research education sessions as part of their classes. Occasional open research education workshops are offered as well.

Guides to the use of the library and its resources are available on the library's website. As of January, 2013 the library is open 95 hours per week during the Fall and Winter terms, with extended hours during final exams and study days. Library hours of operation can be found on the website.

Ombuds Services

Ombuds Services provides students of the campus community with individual, informal assistance in resolving concerns and addressing issues regarding students' rights and responsibilities. Ombuds Services is an impartial resource for obtaining:

- Information about university policies;
- Guidance in following university procedures;
- Assistance in resolving concerns and critical situations:
- Help in cutting red tape and in obtaining appropriate and timely answers and information;
- Opportunities to discuss or question university actions;
- Active support for UM-D's commitment to ensure that students are treated with fundamental fairness and personal dignity.

Ombuds Services is located in 2106 University Center, telephone (313) 593-5440, e-mail ombuds-office@umd.umich.edu.

Parking

Parking of all motor vehicles at UM-Dearborn is by permit only. Parking for students, faculty and staff is allowed in designated permit lots only when vehicles are properly registered and display the appropriate parking decal. Student parking permits are available at the Parking Office and the University Center Information Desk. If you would like a permit mailed to you, apply online at parking@umd.umich.edu. Send your name, address and UMID number and a sticker will be sent to you. Parking for all visitors is provided in the parking structure. For further information, refer to the University of Michigan-Dearborn Parking Manual or call the Parking Office at (313) 593-5480.

Public Safety

The Department of Public Safety, located in the Campus Support Services building, provides 24-hour emergency, safety and security services. Services offered include: crime prevention, emergency assistance, health/safety/crime reporting, escort service, patrol of buildings, grounds and parking lots, administration of the lost & found program, and safety programs.

For immediate response to any campus emergency, DIAL 911 from a campus phone or (313) 593-5333 from a cell phone. There are 53 direct-dial emergency phones strategically placed around campus.

For emergency medical assistance, DIAL 911 from a campus phone or (313) 593-5333 from a cell phone. For minor injuries, transportation from campus to the Henry Ford Hospital-Fairlane may be provided.

For additional information telephone (313) 593-9953 (department office), or (313) 593-5333 (dispatch center).

Student Engagement

In support of the mission and goals of the University of Michigan-Dearborn and Enrollment Management and Student Life, the Office for Student Engagement works to:

- Foster an inclusive living and learning community through innovative programs and services designed to build global leaders and citizens
- Provide support and resources to assist students in their personal, professional and academic development
- Advance engagement through strategic collaborations with academic affairs, University and community partners

This mission is accomplished through a variety of programs and services that complement students' academic experience including student organizations, leadership programs, civic engagement opportunities, volunteer experiences, inclusion programming and much more!

The Office for Student Engagement is located in 2136 University Center, (313) 593-5390. They can also be reached at student_engagement@umich.edu. For more information about Office for Student Engagement programs and services, please visit http://sao.umd.umich.edu.

Student Success Center

The mission of the Student Success Center is to prepare and educate students to succeed. Students are encouraged to stop by the Student Success Center whenever they need help. The SSC can help students manage and succeed academically, personally, and professionally.

The Student Success Center offers counseling, training, workshops, and resources to help students achieve success today and tomorrow. Whether it's tutoring in math, learning to set goals, finding the right career path, or making good choices, our Student Success Center helps students gain the confidence needed to reach their full potential.

A large range of services in Academic Assistance, Career Planning, Counseling and Disability Services, Personal Development, Women's Services, International Services, and Veteran's Services are offered by the Student Success Center. Overall services offered include:

- individual tutoring
- group study
- mentoring
- writing assistance
- supplemental instruction for classes
- study skills assessment & training
- exploring majors
- career planning
- career assessment
- interview training
- resume writing
- individual counselingprocrastination assistance
- procrastiliation assistance
- stress & time management
- test & math anxiety assistance
- disability services
- motivational interviewing

- goal setting
- self-advocacy
- work/life balance
- returning student support,
- personal safety
- English language assistance
- health insurance
- housing referrals
- homeland security compliance advising
- emergency assistance

Workshops/Seminars are also available in essay writing, test taking, note taking, overcoming math anxiety, goal setting, interviewing techniques, and how to study effectively. Students are referred to the College Writing Center, Math Learning Center, and Student Clubs & Organizations.

The Student Success Center (SSC) is a coalition of the following Enrollment Management & Student Life (EMSL) departments: Academic Assistance; Career Services; Counseling & Support Services, Office of International Affairs, and the Women's Resource Center.

The Student Success Center is located on the second Floor of the University Center. Telephone: 313-583-6776. Website: umd.umich.edu/success.

Transportation

Access to the campus is available on bus routes operated by the Suburban Mobility Authority for Regional Transportation (SMART). Connecting service is available on routes operated by the Detroit Department of Transportation (DOT).

Direct service is available for most Detroit and western Wayne County residents, with transfer service available for Oakland and Macomb County commuters. The bus schedule may change without notice. Additional information may be obtained by telephoning SMART at (313) 962-5515.

Women's Resource Center

The Women's Resource Center (WRC), located in 2106 University Center, offers assistance with self-advocacy, work/life balance, returning student support, and personal safety through programming and individual appointments. The overall mission of the center is to increase the empowerment of all women by offering quality programs; providing personal, professional, and academic coaching; encouraging students to reach their academic and post-graduate goals; linking women to current campus and community resources; and partnering with academic units and other women's agencies to address gender and diversity issues.

In support of its mission the WRC provides quality programming and activities, extensive resources, a meeting place, volunteer opportunities and a commitment to collaborations. Visitors will find a variety of written materials for their use. A lending library offers books and magazines on issues of interest to women. A resource shelf offers pamphlets on diverse topics including scholarships, childcare, and domestic violence. An on-line resource guide contains community resources and referrals. The WRC's Impact Grant provides small, emergency grants for students. These one-time grants, typically between \$50 and \$150, are meant to address serious unanticipated emergencies that could delay or halt the education of students. Grants may not be used for tuition.

For more information about these services and programs contact the Women's Resource Center at (313) 583-6445 or WomensResourceCenter@umd.umich.edu or visit the WRC website at http://www.umd.umich.edu/womenscenter/.

Statement on Academic Integrity

The University of Michigan-Dearborn values academic honesty and integrity. Each student has a responsibility to understand, accept, and comply with the University's standards of academic conduct as set forth by the Code of Academic Conduct, as well as policies established by the schools and colleges. Cheating, collusion, misconduct, fabrication, and plagiarism are considered serious offenses. Violations will not be tolerated and may result in penalties up to and including expulsion from the University.

<u>Student Rights And</u> <u>Responsibilities</u>

The University of Michigan-Dearborn is composed of a diverse group of individuals and interests, drawn together by a common belief in the values of an education and appreciation for the significant contribution of our personal differences to that education and each other. Maintaining an environment that ensures harmony and a positive learning environment is a responsibility shared by all members of the campus community. The following information identifies behavior expectations in support of fulfilling these responsibilities and the means by which complaints may be resolved. Any member of the campus community who believes that a violation of any of these rights and responsibilities has occurred may obtain assistance in seeking redress from Ombuds Services or the Affirmative Action Coordinator.

For information regarding student academic conduct policies and procedures, see sections on Arts, Sciences, and Letters; Education; Engineering; and Management.

Student Records and Student Rights

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

Because the University does not maintain all student records in one location, the following contains general information related to student records. By direction of the Regents, however, each office that maintains student records is required to develop a written statement of its policies and procedures for handling those records. For more information about FERPA, visit the University of Michigan Office of the General Counsel's web page at: umich.edu/~vpgc/faq student.html.

STUDENT RECORDS LOCATION

If you are in any college except Rackham, your dean's office or your academic advisor has information concerning your academic progress: admissions application, test scores, letters of recommendation, copy of academic record, notes (if any) made by academic counselors, information about honors awarded and/or academic discipline imposed, and similar items.

Only two offices have records on all students. The Office of Registration & Records maintains information pertaining to your enrollment (registration) and your official academic record. The Student Accounts Office maintains information about charges assessed and payments made to your account.

The other offices listed at the end of this document will usually have information about you only if you have had dealings with them or utilized their services.

STUDENT RIGHTS

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

- The right to inspect and review all material in your 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 to the mental health of the student or of others. These records may, however, be reviewed by a physician or other appropriate professional of your choice.
 - Financial information furnished by your parents in support of an application for financial aid.
 - c. Confidential letters of recommendation that were placed in your file prior to January 1, 1975.
 - d. Confidential letters of recommendation concerning admission, employment, or honorary recognition, for which you have waived access. (The University may not require you to sign a waiver in order to obtain services, but a person writing a recommendation may insist on a waiver as a condition for his or her writing it.)
 - e. Personal notes made by a faculty member or counselor that are accessible only to that person and are not shared with others.
 - f. Materials in any admissions files, until you have been admitted to, and have attended in the U-M school or college for which the materials were submitted.

Most offices will require you to file a written request if you wish to review your records. Sometimes the response will be immediate, but in most instances you should expect to wait several days; in no case, however, may the response be delayed more than 45 days from the date of your request. Also, once you have submitted such a request, no non-exempt material may be removed from the file in question until the matter is resolved.

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

particular record. For example, most offices will not copy transcripts (whether from U-M or another institution you have attended) that are in their files; rather, you will be advised to obtain them directly from the Office of Registration & Records here or at your former school.

- 2. The right to a hearing if you feel that (a) you have been improperly denied access to your records, (b) your records contain information that is inaccurate or misleading, or (c) information from your records has been improperly released to third parties. Each record-keeping office has a procedure for this purpose. The use of that procedure will result in one of the following:
 - a. If the head of the office involved agrees with your contention, he or she will see to it that the necessary corrective action is taken.
 - b. If the head of the office does not agree with your contention, you may request a hearing by a hearing panel or hearing officer designated by the unit's procedures.
 - If the decision of the hearing panel or hearing officer agrees with you, the necessary corrective action will be taken.
 - d. If the decision disagrees with you, you have the right to submit an explanatory statement, which must be included as a permanent part of your record.
- 3. The right, in most instances, to control access to information in your records by persons or agencies outside the University. Within the University, information from your records will be made available to those staff members who demonstrate a legitimate educational interest consistent with their official functions for the University and consistent with normal professional and legal practices.
 - Except for directory information (see d below), however, persons outside the University - including your parents and/or spouse - will be given information from your records only (1) when you authorize it in writing, or (2) in connection with your application for or receipt of financial aid, or (3) 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 (4) when disclosure is required in a health or safety emergency or by federal or state law or by subpoena. If information from your record is subpoenaed, you will be notified as quickly as possible. In addition, the results of a disciplinary hearing conducted by the institution against the alleged perpetrator of a crime of violence will be made available to the alleged victim of that crime.
 - b. Each office is required to keep a record of all requests for non-directory information from your records made by persons outside the University, and to make that record available for you to examine.
 - c. Federal law requires that the University designate what it regards as directory information and which may, therefore, be released to those outside the University without specific authorization. The law also requires that each currently enrolled student be given the opportunity to direct that items designated as directory information not be released without his or her consent.
 - d. The University of Michigan-Dearborn has designated the following items as directory information: (1) name, (2) permanent and local address and telephone, (3) U-M college, (4) class level, (5) major field, (6) dates of attendance at the University of Michigan, (7) degree received and date awarded, (8) honors and awards

- received, (9) participation in recognized activities, (10) previous school(s) attended, and (11) height and weight of members of intercollegiate athletic teams.
- e. You have the right to direct that directory information about you not be released, however, you should carefully consider the consequences of that action before making the decision to do so. Information is not withheld selectively. If you choose to have directory information withheld, it is withheld from everybody who inquires.
- f. If you wish the University not to release those items designated as directory information, you must file a written request to that effect with the Office of Registration & Records not later than ten (10) days from the beginning of the term for which the restriction is to begin. If you elect to have the University not release this information, all items designated as directory information will be withheld.
- 4. The right to file a complaint to federal officials if you feel that there has been a violation of the rights afforded you under the Family Educational Rights and Privacy Act of 1974. The complaint must be submitted in writing within 180 days of the alleged violation to:

Family Policy Compliance Office U.S. Department of Education 400 Maryland Avenue, SW Washington, D.C. 20202-4605 Telephone (202) 260-3887 TDD (800) 877-8339

Questions about the policies and procedures of any unit should be directed to the head of that unit. Questions about the University's "Policies on Student Records" or about the Family Educational Rights and Privacy Act of 1974 should be directed to:

Vice Chancellor for Enrollment Management & Student Life 1060 Administration Building Telephone (313) 593-5151

Student Records Locations

Student Accounting 1187 UC

Administration Building AB Engineering Complex EC Fieldhouse/Arena FH/A University Center UC Academic Support and Outreach Services 2170 UC Admissions 1145 UC Alumni Society 1040 AB Athletics FH/A College of Arts, Sciences, and Letters 1091 CA College of Business168 FCS College of Engineering and Computer Science 2000 EC Counseling and Support Services 2157 UC Enrollment Management and Student Life 1060 AB Financial Aid 1183 UC Honors Program 2062 CA Library 1157 ML **Parking CSS** Personnel 1020 AB Placement 1110 AB Registration, Records and Student Certification 1169 UC Safety and Security CSS College of Education, Health, and Human Services 262 FCS

Statement of Student Rights and Code of Student Conduct

The following are excerpts from the "University of Michigan-Dearborn Statement of Student Rights and Code of Student Conduct." Complete copies of the Code are available in the Office of Student Affairs, 1060 Administration Building.

SECTION 1. INTRODUCTION

The primary purpose of the Statement of Students Rights and Code of Student Conduct is to assist the University of Michigan-Dearborn (hereinafter in this document called the University) in providing an environment that supports the educational process and well-being of the campus community. The responsibility for maintaining such an environment is shared by all members of the campus community.

Student rights and student conduct are defined in this Statement and Code 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. Disciplinary proceedings initiated in response to a charge of violation will be the responsibility of the Code Judicial System and will be undertaken according to the provisions and procedures articulated by the Code. The focus of inquiry in disciplinary proceedings will be on the question of guilt or innocence of those charged with violating the Code.

The Statement and Code 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 that 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 Code. 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.

The discontinuance of enrollment of a student does not negate the jurisdiction of this Code, which shall remain applicable with respect to matters that arose when the person was a student. Adjudication of alleged violations of the Code by a University employee will be handled, via the Code Judicial System, by the appropriate University resources.

The UM-Dearborn Statement of Student Rights and Code of Student Conduct was written by students, faculty, and staff of the UM-Dearborn.

SECTION 2. STUDENT RIGHTS

In recognition of students' rights and dignity as members of the University community, the University of Michigan-Dearborn is committed to supporting the following principles and to protecting those rights guaranteed by the Constitution, the laws of the United States and the State of Michigan, and the policies adopted by the Board of Regents.

 Students have the right to free inquiry, expression, and association.

- 2. Students have the right to editorial freedom in student publications and the student media.
- Students have the right to representation on the appropriate, designated University decisionary bodies.
- Students accused of misconduct or of violating University policy have the right to have their guilt or innocence determined in accord with University procedures.
- Students have the right to protection against improper disclosure of their student record as provided for in the Family Educational Rights and Privacy Act.
- Students have the right of access to their personal records and other University files as provided for under the Family Educational Rights and Privacy Act and the Michigan Freedom of Information Act.
- Students have the right to access all policies, rules, and decisions concerning their continued enrollment, and to those course materials and facilities necessary to pursue their studies.
- 8. Students have the right to educational programs that meet the objectives of the discipline, to teaching consistent with those objectives, and to a learning environment that encourages the students' active participation.
- Students have the right to be informed by the faculty at the beginning of each term about course requirements, evaluation procedures, and evaluation criteria to be used, and the right to expect that those criteria be employed.
- 10. Students have the right to take reasoned exception to the data or views offered in any course of study; they are, however, responsible for learning the content of any course of study for which they are enrolled.
- 11. Students have the right to be evaluated solely on relevant academic criteria and to have protection against prejudicial or capricious academic evaluation.
- 12. Students have the right to request and receive timely assessment of their academic work.
- 13. Students have the right to request and receive a reasoned, impartial, and timely review of their grades.
- 14. Students have the right of redress if their rights have been violated.

SECTION 3. STUDENT CONDUCT

Students are expected to conduct themselves in a manner conducive to an environment of academic integrity and of respect for the educational process and the safety and well-being of all members of the campus community. The actions cited as prohibited conduct should be used as a guide rather than an exhaustive list of behaviors the University considers misconduct and subject to disciplinary action.

Prohibited Academic Conduct

The following actions shall be considered academic misconduct and be subject to disciplinary action:

- Furnishing false information to the University pertaining to one's own or to others' academic work, activities, records or status or initiating, or causing to be initiated, any false report pertaining to one's own or to others' academic work, activities, records or status (Falsification of Records or Official Documents).
- Possessing, using, or distributing and altering or destroying any materials or information for the purpose of dishonestly affecting one's own or others' academic work, grades or student status (Cheating).
- 3. Aiding or abetting another in obtaining, using or distributing any materials or information for the purpose of dishonestly

- affecting one's own or others' academic work, grades, or student status (Aiding and Abetting Dishonesty).
- 4. Submitting as one's own any work which, in part or whole, is not entirely one's own work without properly attributing it to its correct source (Plagiarism).
- Presenting data that were not gathered, or are not accounted for, in accordance with the appropriate methods for collecting and generating data (fabrication).
- Interfering with the academic work or study of other members of the University community. This includes, but is not limited to, alteration, destruction, and denial of access to learning materials.
- Failing to comply with additional specific criteria for academic conduct communicated by the instructor to his/her class regarding assignments, tests, and/or exams.
- Violating, or aiding and abetting the violation of, any published University academic policy, regulation, or procedure.
- 9. Attempting to commit, or assisting another in attempting to commit, any act prohibited by Section 3.A. of this Code.
- 10. Violating the terms of any disciplinary sanction imposed in accordance with Section 3.C. of this Code.

Prohibited Non-Academic Conduct

The following actions shall be considered non-academic misconduct and be subject to disciplinary action:

- Causing or threatening to cause harm to any person on University premises or at University-sponsored activities and events.
- 2. Hazing, i.e., action taken or situation created for the purpose of initiation of affiliation with any University organization or team, with or without the consent of the individual, which jeopardizes the physical or mental well-being of the individual. Hazing includes: physical injury, assault, or battery; kidnapping or imprisonment; forced consumption of any liquid or solid; mandatory personal servitude; interference with academic endeavors.
- 3. Interfering with normal 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.
- Interfering with the freedom of expression or rights of individuals on the University premises or at Universitysponsored activities.
- 5. Harassment, i.e., physical force or violence or behavior, including stalking, that involves a deliberate interference or a deliberate threat to interfere 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. Students may not use threats concerning the terms or conditions of an individual's education, employment, housing, or participation in a University activity as a way to gain sex and/or sexual favors.
- 6. Furnishing false information to the University.
- Failing to comply with directions of University officials, including campus safety, acting in performance of their duties.
- 8. 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.
- 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.
- Destroying, or damaging, or misusing, or unauthorized use of any University funds, equipment, materials, or property

including safety equipment and library materials; or such equipment or materials of others when on University premises.

- 11. Unauthorized use, possession, or storage of any weapon on University premises or at University- sponsored activities.
- 12. Unauthorized use or possession of fireworks or explosives on University premises or at University-sponsored activities.
- Unauthorized use or possession or distribution of any controlled substance, alcoholic beverage, or illegal drug on University premises or at University- sponsored activities.
- 14. Violations of any published University policies, including those regarding affirmative action or procedures regulating entry and use of University facilities and properties, sales or consumption of alcoholic beverages, use of vehicles and sound equipment, use of telephone equipment or privileges, campus demonstrations, and use of identification cards.
- 15. Commission of any state or federal crime on University premises or at University-sponsored activities.
- 16. Violations of the terms of any disciplinary sanction imposed in accordance with Section 3.C. of this Code.
- 17. Attempt to commit any act prohibited by Section 3.B. of this Code.

Sanctions

The sanctions to be imposed should be commensurate with the offending conduct. Because education may be the most effective and appropriate means of addressing behavior that violates the standards of a university community, the University encourages fashioning sanctions to include an educational element that may help students understand their behavior in the context of the academic community. Although it is inappropriate for the University to try to change student's convictions, it is appropriate for the University to ask a student to change behavior. Sanctions should, therefore, be designed which may Fdeter behaviors that harm, intimidate, harass, or threaten others.

Factors that may be considered in determining the nature of sanctions to be imposed for Code violation include the intent of the respondent, the effect of the conduct on the victim and the University community, presence or absence of violations of the Code on the part of the student, the presence or absence of past violations of the standards 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 that disrupt the educational process and/or when there has been willful failure to comply with a lesser sanction. The Chair of the Conduct Board shall consult with the Dean of the School/College in which the student is enrolled before expulsion or suspension is imposed.

The range of potential sanctions is as follows:

- Suspension from Specific Course or Activity. The student is removed from a specific course or activity, or is moved to a different section of the course.
- Class Attendance. The student enrolls in and completes a class 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.
- 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.
- Restitution. The student makes payment to the University for damages incurred by the University as a result of his/her violation.
- 10. Other Disciplinary Actions. In addition to or in place 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 recession of a degree, withholding of course credit, loss of credit for an assignment/exam, assignment of additional work, loss of special privileges, behavioral counseling, or a behavioral contract.
- Combined Sanctions. A combination of the sanctions described above may be imposed.

The sanctions imposed under these standards do not diminish or replace the penalties that 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 various local, state and federal laws and, therefore, also be subject to legal action.

JUDICIAL SYSTEM

The University of Michigan-Dearborn judicial system shall provide a uniform, fair, and impartial process for the reporting, adjudicating, and resolving of alleged violations of the University of Michigan-Dearborn Statement of Student Rights and Code of Student Conduct. Copies of this document, which describes procedures for reporting and responding to incidents of alleged misconduct, are available in the Office of Enrollment Management and Student Life, 1060 Administration Building.



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College of Arts, Sciences, and Letters

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General Information

Arts, Sciences, and Letters the Liberal Arts College at the University of Michigan-Dearborn

The College of Arts, Sciences, and Letters (CASL) is the liberal arts college at UM-Dearborn. Following the long-standing University of Michigan tradition of sound liberal arts education, the College emphasizes breadth and depth of learning. The programs of the College are designed to prepare students who can communicate clearly, reason and make critical judgments, distinguish facts from values, and understand their cultural and artistic heritage. Individuals who are educated in this manner will be able to adapt successfully not only to their first jobs but also to a rapidly changing world. With a sound liberal arts education, they will be equipped to give society leadership and vision.

With a full-time faculty of over 150, the College offers 35 liberal arts degree programs and over 1000 courses to its 4500+ undergraduates, who represent nearly half of the total student enrollment at UM-Dearborn. In addition, the College provides the liberal arts foundation for all degree programs on campus and is the academic unit on campus that reflects in itself the diversity essential to and inherent in a modern comprehensive university. The College is the largest academic unit at UM-Dearborn and the third largest of all academic units on the three campuses of the University of Michigan.

History of the College

From the beginning of the Dearborn Center of the University of Michigan, as it was first called, there was "an intent to provide a full schedule of daytime courses in Engineering, Business Administration, and the Liberal Arts and Sciences" (Report by the University's Dean of Statewide Education, January 1957). On January 10, 1958, the Regents approved the creation of the Division of Literature, Science, and the Arts (LSA) as an official academic division. Full programs in the liberal arts began in Fall, 1960; and in Fall, 1965, the LSA Division became the largest academic unit on the Dearborn Campus, a distinction which continues to the present.

When it became a four-year undergraduate institution in 1971, the Campus was designated the University of Michigan-Dearborn (UM-Dearborn). Two years later, the Regents approved a new set of UM-Dearborn Bylaws, in which the Department of Education became a separate division, and the LSA Division became the College of Arts, Sciences, and Letters (CASL), administered by a Dean. Since then, CASL has evolved to comprise six multidisciplinary departments: Behavioral Sciences; Mathematics and Statistics; Language, Culture and Communication (LCC); Literature, Philosophy and the Arts (LPA); Natural Sciences; and Social Sciences. CASL is also home to ten college wide programs: African and American African Studies (AAAS); American Studies; Arab American Studies; Criminal Justice Studies; General Studies; Law and Society; Liberal Studies; Religious Studies; Science and Technology Studies; and Women and Gender Studies.

Mission of the College

As was true in Paris and Bologna in the fourteenth century and as is true in Cambridge, Ann Arbor, and Dearborn in the twenty-first, liberal arts colleges are the *sine qua non* of universities. The pre-eminence of the College of Literature, Science, and the Arts at Ann Arbor is mirrored in the status of the College of Arts, Sciences, and Letters at Dearborn. The reason for this pre-eminence of liberal arts colleges is not difficult to ascertain. Together, they share an ideal, a goal: the cultivation of students' intellectual abilities, the refining of their sensibilities, and the enlargement and deepening of their awareness and knowledge.

CASL is the intellectual core of the campus. In the College, a distinguished faculty of teacher-scholars aims to cultivate the intellectual abilities of a diverse and talented student body and to enlarge, refine, and deepen their awareness and knowledge. Through traditional degrees and such distinctive programs as undergraduate cooperative education, research interdisciplinary honors, the College emphasizes both the practical and the intellectual side of the liberal arts. In collaboration with the professional schools, it prepares students for the professions while helping them toward an understanding of human values and ethics. In partnership with the broader academic community, its faculty contribute significantly to the creation, application, and dissemination of knowledge. In addition, it provides significant service to the University and the wider community.

In mathematics and the natural sciences, emphasis is placed on rational, analytical, conceptual thinking and on mastery of precise methods of inquiry, especially experimentation, that produces results that may be replicated.

In the humanities, methodology is equally important, but it is less exclusively rational, because the study of art, literature, and music depends on the manner – partly emotional, partly imaginative – in which these are experienced.

The social and behavioral sciences offer a political, social, economic, psychological, and cultural storehouse from which students can draw in order to understand the past, cope with the present, and design the future.

In CASL, emphasis is not placed exclusively on specific preparation for a narrow career track, but rather on providing a broad-based liberal arts background which offers an ethical and moral foundation from which graduates may grow. Basic core knowledge will aid graduates in their vocational career choices, but facts in many occupations may have a life of less than a decade. By contrast, values endure for a lifetime.

Organization of the College

Among the three liberal arts colleges on the University of Michigan campuses (Ann Arbor, Dearborn and Flint), our College stands out because it is organized in a unique manner. Instead of being fragmented into many traditional single-discipline departments, the College is mainly organized into six multidisciplinary departments: Behavioral Sciences; Mathematics and Statistics; Language, Culture and Communication; Literature, Philosophy and the Arts; Natural Sciences; and Social Sciences.

The Behavioral Sciences Department houses and offers degree programs in three disciplines: anthropology, psychology, and

sociology. The Department also offers interdisciplinary degree programs in behavioral sciences and health policy studies and a graduate program in Health Psychology. The office of the Behavioral Sciences Department is located in Room 4012, CB.

The Language, Culture and Communication (LCC) Department houses six disciplines: Comparative Literature, Composition and Rhetoric, Journalism and Screen Studies, Linguistics, Modern and Classical Languages (including Arabic, French, German and Spanish), and Public Communication and Culture Studies (including Speech). It offers degree programs in French Studies, Communication, and Hispanic Studies. It also offers an interdisciplinary degree in International Studies. In addition, the Department offers minors in Arabic Studies, Comparative Literature, Film Studies, German, and Linguistics. To support its programs in Modern languages, the Department houses the Kochoff Foreign Language Media Laboratory (3065 CB) with extensive resources for language learning such as audio and video course materials, foreign language writing assistant programs, and foreign language TV programs via satellite. To support its programs in Communications, the department houses a TV studio, an audio lab, and video editing facilities with stateof-the art software, as well as a dedicated computer classroom (3034 CB) with 24 workstations. The office of the Language, Culture and Communication department is located in Room 3016, CB. The phone number is (313)593-4778.

The Literature, Philosophy, and the Arts Department (LPA) houses degree programs in three disciplines: art history, English literature, and philosophy. It offers an interdisciplinary degree program in humanities, a minor in medieval and renaissance studies, as well as courses in applied art, applied music, and music history. The Literature, Philosophy, and the Arts Visual Resources and Music Collections (VRMC) supports the instructional needs of the department, especially art history, applied art (studio art), and English literature. The collection contains over 95,000 analog slides, 1500 compact discs and phonograph records, 200 videocassettes and other instructional materials. Digital images from the VRMC collection are available from the Image Collections supported and maintained by Digital Library Production Service (DLPS) quod.lib.umich.edu. The office of the Literature, Philosophy, and the Arts Department is located in Room 3011, CB.

The Mathematics and Statistics Department offers a degree program in the discipline of mathematics, with an emphasis on either pure or applied mathematics. In addition, the Department offers minors in Applied Statistics, Computer and Computational Mathematics, and Mathematics. The Mathematics Placement Exam and the Mathematics Learning Center are both administered by the Department. The office of the Mathematics and Statistics Department is located in Room 2014 CB.

The Natural Sciences Department houses and offers degree programs in three disciplines: biological sciences, chemistry, and physics. The Department also offers interdisciplinary degree programs in biochemistry, chemistry instruction, earth sciences, environmental science, environmental studies, integrated science, and microbiology; geology and astronomy are available as minors. Also available are the GIS and MEDS certificate programs. The Science Learning Center, the greenhouse, and the observatory are administered by the Department. The office of the Natural Sciences Department is located in Room 125, Science Building.

The Social Sciences Department houses and offers degree programs in Economics, Geography, History, Political Science, Social Studies and Urban and Regional Studies, as well as graduate degrees in Public Policy and Public Administration. The office of the Social Sciences Department is located in Room 2140 Social Sciences Building.

The College supports several interdepartmental programs, some administered directly by the College and some administered by departments. These include degree programs in American Studies, Criminal Justice Studies, General Studies, Health Policy Studies, Liberal Studies, and Women's and Gender Studies, and minors in African and African American Studies, Law and Society, Leadership and Communication in Organizations, Medieval/Renaissance Studies, Organizational Change in a Global Environment, Religious Studies, Science Technology Studies, Social Science Research Methodology, and Society and Technological Change. The College also supports the Honors Program, coursework in Arab and Arab American Studies, a program for study in Japan, and the Cooperative Education Program.

Degrees Offered

Students may obtain a Bachelor of Arts (AB), Bachelor of Science (BS), or Bachelor of General Studies (BGS) from CASL. The BGS degree, reserved for students transferring from a community college with an associate degree, is discussed under Degree Requirements.

A liberal arts degree program affords a student both breadth and depth of learning. The course requirements for a degree may be divided into types: courses that give a broad, general education, those that provide depth in a specialization, and those that offer the tools needed for success in college and life.

Distribution

Distribution requirements are divided into Skills and Competencies, and Areas of Inquiry. Courses included under Skills and Competencies are intended to give students tools they will need in English Composition, Foreign Language, and Mathematics. Areas of Inquiry courses give students experience across the breadth of the liberal arts: Arts, Behavioral and Social Analysis, Biological and Physical Sciences, History, and Letters. Liberal Studies (LIBS) courses which appear in distribution areas are first year seminars, are generally taught only in Fall semester, and open only to newly admitted freshmen.

A student seeking a degree from CASL must fulfill the coursework specified below. All of these courses, except as noted, are at the 100 and 200 level. They should generally be completed during the freshman and sophomore years. These requirements, adopted in 1987, apply to newly admitted freshmen, transfer students, and readmitted students alike.

SKILLS AND COMPETENCIES

English Composition (6 hrs)

Writing & Rhetoric I COMP 105 COMP 106 Writing & Rhetoric II

Each incoming student will take the UM-Dearborn Composition Placement Examination (CPAS). Excellent performance on the examination may result in a determination that learning outcomes for COMP 105 and/or COMP 106 have been fulfilled. If a student without transfer credit for either COMP 105 or 106 performs below the minimum acceptable level he or she will be required to take and pass COMP 099, which does not count toward a degree. A transfer student with COMP 105 and 106

equivalency who is placed into COMP 099 will be required to take and pass COMP 227. Students completing COMP 105, 106, 270, or 280 at UM-Dearborn must pass these courses with a minimum *C*- grade. Students who earn a grade lower than a *C*-will be given an *NC* (No Credit), and will be required to repeat the course.

Note: Students enrolled in the Honors Program will take COMP 110 and 220 in place of 105 and 106.

Foreign Language (8 hrs)

A two-course sequence from:

ARBC 101 & 102 Arabic
FREN 101 & 102 French
GER 101 & 102 German
LAT 101 & 102 Latin
MCL 111 & 112 Armenian
MCL 105 & 106 Greek
SPAN 101 & 102 Spanish

The foreign language distribution requirement can be met by:

- Successfully completing a two-semester beginning language sequence at UM-Dearborn, or
- Transferring the equivalent of 8 semester hours of a beginning language sequence from another college or university, or
- Successfully completing a 3- or 4-semester hour foreign language course (this course cannot be taught in English) at the 102 level or higher, or
- Having completed at least 3 years (in the same language) of foreign language in high school with a grade of C or better in the final course, or
- Having completed the equivalent of a high school diploma at a school that used a language other than English for instruction. (Appropriate documentation attesting to the language of instruction and graduation from the high school program is necessary, and official English translations of foreign transcripts must be provided), or
- Passing an oral and written proficiency exam.

A student with prior knowledge of Arabic, French, German or Spanish should take a placement examination before registering for a course in that language. Placement/proficiency exams in French, German, and Spanish are administered by the Office of Admissions and Orientation; call (313) 593-5100. Placement/proficiency exams in Arabic are administered by faculty in the Language, Culture, and Communication Department; call (313) 593-4778. A student wishing to take a proficiency exam in a language not mentioned above or not taught at UM-Dearborn should consult a CASL advisor; call (313) 593-5293 for more information and to see if a tester is available. A student wishing to waive the foreign language requirement must officially submit a request in writing via a petition form. Please note that when the requirement is waived, or proficiency is demonstrated by exam, credit will not be awarded for courses not taken.

Mathematics (3-4 hrs)

Suitable distribution courses for most non-Math, non-Science majors: LIBS 111, 127; MATH 131, 363
Pre-Calculus and Calculus I courses:
MATH 104, 105, 113.

Note: MATH 080 and 090 do not count toward degree however, math placement must be followed. A C- or higher grade is required to advance to the next level of mathematics required for degree.

AREAS OF INQUIRY

Arts (3 credit hours) ARTH 101, 102, 103, 104, 106 JASS 240, 248 MHIS 100, 120, 130, 340, 333

Behavioral and Social Analysis (9 hrs)

A student must elect at least one course from Group A and one from Group B.

Group A

ANTH 101, 202 LIBS 112, 116, 117, 118, 123, 126, 128 PSYC 170, 171 SOC 200, 201

Group B

ECON 2001, 201, 202 LIBS 112, 114, 116 POL 101, 201, 205, 250, 260

Biological and Physical Sciences (7-8 hrs)

At least one 4 credit hour lecture and lab is required.

Non-science major options:
ASTR 130 or 130+131
BIOL 100
CHEM 100
ESCI 275
NSCI 120, 121
PHYS 100
Science major options:
BIOL 103 & 105
CHEM 134, 136, 144, 146
GEOL 118, 218
LIBS 117, 123
PHYS 125, 126, 150, 151

Courses with a "+" provide an optional laboratory component. The first number is the lecture course, which may be taken separately. The second number is the optional lab course, which requires prior completion or concurrent enrollment in the lecture. BIOL 100, ESCI 275, PHYS 100 are lecture only; there is no associated laboratory course. Although BIOL 103 and BIOL 105 may be elected separately, they must be taken together to meet the requirement. NSCI 120 and BIOL 100 (or 100+101) may not be used together to meet the requirement. NSCI 231, 232, 233, normally taken by elementary education students, have a prerequisite of EXPS 220 Exploratory Studies. Students who take these courses and ultimately transfer to CASL may use them toward CASL distribution as follows: one course from NSCI 231, 232, 233 would fulfill the nonlaboratory course requirement; two courses would fulfill the laboratory requirement; three courses would completely satisfy the biological and physical sciences requirement.

History (3 hrs)

Any HIST course offered except HIST 300, 398, 399, 485, 497, 498, or 499

LIBS 112, 113, 116, 119, 120, 121, 132

Letters (3 hrs)

COML/HUM 221, 222, 223 ENGL 200, 230, 231, 232, 233, 235, 236, 237, 238, 239 RELS 201 LIBS 112, 114, 115, 122, 123, 124, 125, 129, 130, 131, 133, 134,135 PHIL 100, 120, 200, 240 CASL Honors Students may use Western Culture 261 and 262 to fulfill the History and Letters requirements. Western Culture 263 and 264 may be used to fulfill the Behavioral and Social Analysis Group A requirement. Western Culture 262 or 263 may be used to fulfill the Arts requirement.

Diversity Requirement

Students who enroll after September 1, 2004, must satisfy a three-credit hour diversity course requirement. Students will choose from a list of approved courses on global issues, national issues, or both. Diversity is defined here to include cultural diversity, racial as well as ethnic diversity, religious diversity, social class, gender, sexual orientation, age, and ability/disability status. Some courses may be "shared" to also satisfy a distribution requirement or a requirement for a major or minor.

The list of approved courses is available in the CASL Advising and Records Office, 1039 CB, (313) 593-5293, and is posted on the CASL Advising and Records Office website.

Majors

WHAT IS A MAJOR?

A college degree experience includes depth as well as breadth. Each student in an AB or BS degree program must choose a field in which to specialize, which is called a major.* A major is a program of specialized study that normally consists of a minimum of 30 credit hours of work at the upper-level level (courses numbered 300 through 499 and 3000-4999) taken mainly during the student's final two years. A major allows a student to develop independence and discrimination of thought and judgment and to learn to appreciate, assimilate, and apply a coherent body of knowledge.

The College offers the following majors that normally lead to the degree (AB, BGS, or BS) listed.

American Studies	AD
Anthropology	AB
Art History	AB
Behavioral Sciences	AB
Biochemistry	BS
Biological Sciences	BS
Chemistry (ACS Certified)	BS
Chemistry/Instructional	BS
Communication	
Criminal Justice Studies	AB
Earth Science	BS
Economics	AB
English	
Environmental Science	
Environmental Studies	AB
French Studies	AB
General Studies	BGS
Health Policy Studies	AB
Hispanic Studies	AB
History	
Humanities	AB
International Studies	AB
Journalism and Screen Studies	
Liberal Studies*	AB, BS
Mathematics	AB, BS
Microbiology	BS
Philosophy	AB
Physics	
Political Science	AB

Psychology	AB
Social Sciences	
Sociology	AB
Urban and Regional Studies	
Women's and Gender Studies	AB

*Liberal Studies offers the student an opportunity to design an AB or BS degree program from three 12 or 15 credit hour fields of study called Areas of Focus.

MAJOR REQUIREMENTS

Certain introductory courses, designated prerequisites, are designed to give students the knowledge and skills needed in the advanced courses. Undecided students will find these courses helpful in making a decision about majoring in the field.

A program of study in a major should be planned in consultation with the faculty program advisor. The advisor must approve the content of the major and can help the student achieve a sound and harmonious program.

The following rules apply to most majors:

- Generally in most single discipline majors, at least 30 upperlevel credit hours are required. At least 24 credit hours must be taken in the field of the major and at least 6 credit hours of cognate courses are required. A cognate course is in a related field.
- The courses used to fulfill the 30 or more upper-level credit hours must be numbered 300-499 or 3000-4999. Note that courses taken at community colleges and lower division courses taken at other four-year institutions may not be used to fulfill this requirement.
- Courses taken as major prerequisites may not be counted in the major.
- Courses used to satisfy distribution requirements (with the exception of the diversity requirement) may not be used to satisfy major requirements.
- 5. A minimum grade point average (GPA) of 2.00 must be achieved in both major courses and cognate courses.
- At the minimum, students must complete between 12 and 15
 of the 30 credit hours at UM-Dearborn. Students transferring
 upper-level credits from other institutions should check with
 their major advisor for specifics of this residency requirement.
- Students who have been off campus for one full year must complete the degree requirements in effect when they return.
- 8. Courses used in the major cannot dually be used in a minor.
- 9. Courses used in the major cannot be taken P/F (Pass/Fail)

DOUBLE MAJOR (OPTIONAL)

Students who want a double major must meet all requirements in two fields and must officially declare, and be approved for, both majors, in the CASL Office of Advising and Student Records, Room 1039 CB. Courses that satisfy major and/or cognate requirements for more than one field can be applied simultaneously to both fields.

AREAS OF FOCUS

Instead of a traditional major, students in the General Studies or Liberal Studies degree programs elect three Areas of Focus which can be in single disciplinary areas or in multi-disciplinary areas. A single disciplinary focus requires 12 hours at the 300 level or above. Multi-disciplinary areas of focus require 15 hours. At least two areas of focus must be within CASL. One area of focus may be in Business or CIS. Students interested in these programs should contact CASL Advising and Records in 1039 CB or call (313) 593-5293 for additional information.

RECOGNITION OF A MINOR (OPTIONAL)

A student in an AB or BS degree program (other than Liberal Studies) may apply for recognition of a minor. A student may declare a minor (completed or not) by filing the appropriate form at the CASL Office of Advising and Student Records. A final audit will be conducted at the time of graduation. Any posted minor that has not been successfully completed will be deleted from the student's transcript.

A minor generally consists of a minimum of 12 or 15 credit hours of upper-level (300-499 and 3000-4999) coursework in a particular field of study. A minimum grade point average (GPA) of 2.00 is required in the courses applied to a minor. For minors offered by CASL, the grades (including *E*'s) in all upper-level courses in the discipline of the minor will be reflected in the minor GPA. Courses elected pass/fail (*P/F*) cannot be used in a minor. Courses used in a minor cannot dually be used in a major.

A single disciplinary minor requires a minimum of 12 credit hours of upper-level coursework. No more than three credit hours of transfer credit, field placements, internships, seminars, *S/E*-graded courses, and independent study/research may be applied to any 12 credit hour minor. Note that a few interdisciplinary majors do not offer minors. A minor may be obtained in the following fields of study even though there is no major offered: Applied Statistics; Arabic Studies; Astronomy, Comparative Literature; Computer and Computational Mathematics; Geology; German; Linguistics; and Music. In these fields, 12 credit hours of upper-level coursework are required.

An interdisciplinary minor consists of a minimum of 15 credit hours of upper-level coursework. Interdisciplinary minors are available in African and African American Studies; Arab American Studies; Communication; Environmental Studies; Film Studies; Geography; Global Cultures; Health Policy Studies; Journalism and Screen Studies; Law and Society, Leadership and Communication in Organizations; Medieval and Renaissance Studies; Organizational Change in a Global Environment; Religious Studies; Science and Technology Studies; Social Science Research Methodology; Society and Technological Change; Urban and Regional Studies and Women's and Gender Studies. There is no minor in International Studies, American Studies, Behavioral Sciences, General Studies, Liberal Studies, Chemistry/Instructional Track, or Social Studies.

In addition, there are several non-CASL minors available – Computer and Information Science (CIS), CIS-Game Design Option, Accounting, Finance, Information Technology Management, Management, and Marketing. The GPA for the CIS minor is based on CIS 150, 200, 275, and all upper-level CIS coursework. The GPA for the Business minors is based on ACC 298, ACC 299 (if taken), and all upper-level courses offered by the College of Business. Students who are not in the College of Business cannot elect or transfer more than 30 credit hours in courses offered by the College of Business. A maximum of six credit hours of transfer credit, field placement, internships, seminars, *S/E*-graded courses, and independent study/research may be applied to any interdisciplinary or non-CASL minor.

Other Requirements

TOTAL CREDIT HOURS

A minimum of 120 credit hours with an overall average of C (2.00) or better is required for graduation.

UPPER-LEVEL COURSEWORK

A minimum of 48 hours of upper-level (courses numbered 300-499 and 3000-4999) coursework must be completed by each student.

SENIOR RESIDENCY

Students must normally complete the last 30 credit hours required for graduation with coursework taken at UM-Dearborn. Students who have earned at least 30 hours of credit required for graduation at UM-Dearborn prior to the beginning of their senior year may, with the prior written approval of the advisor, 1) elect the last 30 credit hours at another campus of the University of Michigan, or 2) elect six credit hours at an institution other than a campus of the University of Michigan, subject to the CASL policy regarding coursework at other institutions.

CREDIT HOUR LIMITATION

There are maximum credit hours in any one discipline which may be applied toward the 120 credit hours needed for graduation. See major requirements for specific rules.

Degree Requirements: Summary

BACHELOR OF ARTS (AB)

To be recommended for the AB degree a student must have satisfied the CASL requirements previously listed in distribution, residency, credit hours, grade point average, and upper-level work. For all programs except Liberal Studies, the student must also complete the requirements for the major. The AB degree in Liberal Studies does not involve a major, but three fields of study called Areas of Focus. Minors are not available in Liberal Studies.

BACHELOR OF SCIENCE (BS)

To be recommended for the BS degree a student must have satisfied all the requirements for the AB degree and must have majored in one of the following programs: biochemistry, biological (ACS sciences, chemistry certified), chemistry/instructional, earth science, environmental science, microbiology, or physics. Alternatively, a student who earns 60 or more credit hours (at least 20 credit hours of which are in upper division courses 300 or above) in mathematics (including CCM and CIS courses 150 and above, and statistics courses) and/or the physical and biological sciences may, upon petition to the CASL Office of Advising and Student Records, Room 1039 CB, be granted the BS degree.

BACHELOR OF GENERAL STUDIES: TWO PLUS TWO (BGS) REOUIREMENTS

The Bachelor of General Studies degree is designed and ordinarily reserved for students who have earned an associate degree from a community college that has a "two-plus-two" articulation agreement with UM-Dearborn. Students with associate degrees from other appropriately accredited institutions may be considered for this "two-plus-two" option.

To be recommended for this degree, a student must have completed:

- one course in mathematics; one course in the natural sciences; two courses in the behavioral and/or social sciences; two courses in the humanities; courses equivalent to two semesters of English Composition 105 and 106
- 2. 12-15 upper division (300 or above) credit hours in each of

three areas of focus with a GPA of at least 2.00 (exception: the GPA for the CIS area of focus is based on CIS 150, 200, 275 and all upper-level CIS courses)

- 3. one approved diversity course
- 4. a minimum of 48 upper division credit hours
- 5. a minimum of 120 credit hours with an overall GPA of at least 2.00.

Note: No more than 30 credit hours of upper-level coursework in any one discipline or area of focus can count in the 120 hours required for graduation. Students not in the BBA program of the College of Business cannot elect more than 30 credit hours in courses offered by the College of Business.

Only one area of focus may be outside CASL. At least 30 upperlevel credit hours must be in courses taken in CASL. All courses used to satisfy area of focus requirements must be upper-level. No credit hours transferred from a community college or lowerdivision courses taken in a four-year institution may be included. Courses used to satisfy distribution requirements (with the exception of the diversity requirement) may not also be used to satisfy area of focus requirements. Courses elected on a Pass/Fail (P/F) basis may not be used to fulfill the 12-15 credit hour requirement in an area of focus. No more than three hours in a 12-hour area of focus, or six hours in a 15-hour area of focus, may be transfer, independent study/research, internship, or S/E graded. Students should be aware that upper-level courses, particularly in the sciences, mathematics, and CCM, may have substantial prerequisite requirements. Minors are not available with the BGS degree.

Students should consult with a professional staff advisor in the CASL Office of Advising and Student Records, 1039 CB, to discuss areas of focus and to develop a rationale for their individualized BGS curriculum.

Other Degree Options

SECOND BACHELOR DEGREE

A student who has already earned a bachelor degree from UM-Dearborn or any other accredited collegiate institution may apply to pursue a second bachelor degree through the Admissions Office (1145 University Center). If accepted, the student must complete at UM-Dearborn at least an additional 30 credit hours (regardless of the number of credit hours completed for the first degree), if the first degree was earned at UM-Dearborn; or 45 credit hours, if the first degree was earned elsewhere; and must satisfy all the requirements for the second degree program. The GPA for the second degree will be based on the cumulative academic records of all courses taken at UM-Dearborn. For further information, contact the CASL Office of Advising and Student Records, 1039 CB.

DUAL DEGREES

Students may apply for two or more degrees either within CASL or in CASL and another unit at UM-Dearborn. To earn both degrees, students must meet the degree requirements for each degree. Generally, distribution courses taken within CASL may be used to satisfy both degrees. Students should expect to elect at least 30 more credits to earn both degrees. Students are advised to contact a representative from each program to learn the specific requirements that must be met.

Some degrees, such as the degrees in Engineering Mathematics or CIS Mathematics, are only available as concurrent degrees

and must be paired with a primary degree in either engineering or CIS. Students interested in dual degrees should see an advisor.

JOINT DEGREES

Students can get an early start in the graduate degree programs of the University's Ann Arbor Campus Dental School, Medical School, or School of Natural Resources and still be awarded a liberal arts degree from UM-Dearborn. Students must have a GPA of at least 3.00 and have completed the requirements for graduation except for the senior residency requirement. A maximum of 15 credit hours of appropriate required courses in the first two years of the graduate/professional degree program may count toward both the bachelor and the graduate degrees. At least 45 of the remaining 105 credit hours must be in residence at UM-Dearborn. For more information, contact the CASL Office of Advising and Student Records, Room 1039 CB.

CONCURRENT UNDERGRADUATE / GRADUATE STUDY (CUGS)

An exceptional student who has virtually completed an undergraduate program in three and one-half years with an outstanding record and who, in the judgment of both graduate and undergraduate faculty, is ready to enter a graduate program, is eligible to apply for early admission to the Horace H. Rackham School of Graduate Studies at the University's Ann Arbor campus. A maximum of 15 credit hours earned in courses elected in this early admission program count toward both the bachelor and the graduate degree. The bachelor degree is conferred at the next commencement upon the student's satisfactory completion of the prescribed course work and receipt by UM-Dearborn of the official transcript and diploma application.

Admission to CUGS requires: 1) a minimum 3.70 GPA, 2) completion of all requirements for the bachelor degree except in the concentration and in independent study or its equivalent. The student must have at least six courses in the field of concentration and one independent study experience. 3) During the junior year, the student should discuss the possibility of participating in the CUGS program with his/her program advisor and departmental chair. If the student's academic record and other qualities are judged exceptional, the chair brings them to the attention of the chair of the proposed graduate program at the Ann Arbor campus. 4) If the Ann Arbor graduate program chair agrees that an application should be submitted, the student contacts:

Office of Student Services Room 120 Rackham Building Horace H. Rackham School of Graduate Studies University of Michigan Ann Arbor, MI 48109 (734) 734-0171

Requirements for Transfer Students

ADMISSION REQUIREMENTS

A student who applies to UM-Dearborn with 24 or more semester hours of transferable credit (excluding advanced placement credit) is considered a transfer student. Students with fewer hours of college credit are considered freshmen for admission purposes. For freshman admission requirements, see the General Information section of this *Undergraduate Catalog*.

Admission to the College as a transfer student is based on the quality and content of both the high school and the college academic records. Standards of evaluation are designed to ensure that each student admitted has the intellectual capacity and the preparation to pursue advanced undergraduate work successfully. Admission criteria are not based on race, sex, color, religion, national origin or ancestry, age, marital status, handicap or veteran status.

The process of determining equivalent UM-Dearborn course and appropriate credit hours for a course taken at another institution is called credit certification. A student who believes that a course was not certified correctly should immediately contact the CASL Office of Advising and Student Records, Room 1039 CB. Any request for re-evaluation of credit must be petitioned in writing within six months.

Courses will not be transferable if completed with a grade lower than C. The College reserves the right to place students on registration hold if they have not provided an official transcript of their studies taken at another institution.

GENERAL REQUIREMENTS

Students entering the College with junior status will be expected to have completed most of the distribution requirements and, if applicable, major prerequisites. Deficiencies in either of these areas must be made up with all deliberate speed. Check with your major advisor for limits on the number of transfer credits that will be accepted toward degree requirements. Courses taken at other fourvear institutions may be used in some cases to satisfy upper-level requirements in the major. Courses transferring from community colleges or other two-year institutions will be considered lower level or general elective credit only. They will not be considered upper level in the College of Arts, Sciences, and Letters.

Reminder: All students are required to declare a major when they reach 60 credit hours. Students transferring 62 hours or more are not required to declare a major before admission, but must do so during their first term at UM-Dearborn.

RESIDENCY REQUIREMENTS

Transfer students must complete at UM-Dearborn the last 30 to 58 credit hours before graduation. The precise number depends on the previously attended institution(s) and the maximum number of transferable credits. Institutions are classified into three categories: (2Y) includes all two-year institutions, (4Y) includes all four-year institutions other than the schools and colleges of the University of Michigan, (UM) includes only the schools and colleges of the University of Michigan. The table below gives the maximum transferable credits and minimum residency requirements.

- 6. The transferable credit hours listed below are maximums. The exact number of transferable hours is determined upon official evaluation and may vary depending on the student's
- 7. Advanced Placement, International Baccalaureate and A level coursework is treated the same as coursework from a four-year institution.
- 8. A maximum of 12 credit hours of applied art, applied music and music theory coursework may transfer and count toward graduation.

Previously	Maximum	UM-Dearborn
Attended	Transferable	Residency
Institutions	Credit	Requirement
2Y (only)	62	58
4Y (only)	75	45
2Y & 4Y	75 (62 from 2Y, 75 total)	45
UM (only)	90	30
2Y & UM	90 (62 from 2Y, 90 total)	30
4Y & UM	90 (75 from 4Y, 90 total)	30
2Y, 4Y, & UM	90 (62 from 2Y, 75 from	30
	2Y + 4Y, 90 total	

(not necessarily in this sequence)

Other Programs

GRADUATE PROGRAMS

The College offers a Master of Arts in Liberal Studies, a Master of Public Administration, a Master of Science in Applied and Computational Mathematics, a Master of Science in Environmental Science, a Master of Science in Psychology with tracks in Health Psychology and Clinical Health Psychology, and a Master of Public Policy. See the UM-Dearborn Graduate Catalog for admission requirements, complete program descriptions and a listing of graduate courses.

CERTIFICATES

The College offers six certificates: African and African American Studies (AAAS), Geographic Information Systems (GIS), Medical Sciences (MEDS), Public Relations (PR), Women's and Gender Studies (WGST), and Writing (WRIT). Consult the program description in this Catalog for additional information and requirements.

Special Programs

HONORS PROGRAM

The College offers an Honors Program for students from all units of the campus who are highly motivated and qualified academically. The program provides them with an opportunity to broaden and enrich their undergraduate education by offering an alternate route for satisfying the course distribution requirements while retaining the concentration requirements. The program emphasizes general education grounded in the traditional liberal arts. It includes special honors courses, a tutorial and seminar, reduced class size, close student-professor relationships, and interaction with other honors students.

Students in the Honors Program participate in an interdisciplinary curriculum of the most stimulating courses on campus in a relaxed, intimate learning environment geared to heightening their perceptions and deepening their knowledge. The curriculum is organized to produce a cumulative effect: students who reach their junior year in the program share a common core of literature, language, and methodology upon which they can build. By their senior year, honors students have gained the skills needed for rigorous, independent critical thinking.

The Honors Program is a repository of "quality" education. This implies commitment from teachers, advisors, and students, a coherent and unified curriculum that moves toward specific goals, and a carefully monitored series of courses. It is understood that the curriculum is demanding, and that the program makes as few compromises as possible in order to maintain its integrity.

Special features of the Honors Program include:

- A freshman seminar which focuses on a particular topic but emphasizes examination of method: critical analysis of both primary and secondary texts; historical, interpretive approaches; research techniques and comparison of how different disciplines pose questions of a wide variety of texts.
- 2. Four lower-division interdisciplinary honors courses, at least one per term during the first two years. Each course deals with the evolution and content of Western culture from the vantage points of several academic disciplines: anthropology, art, economics, history, literature, music, political science, psychology, sociology, and the sciences. The four courses provide honors students with a common body of knowledge, language, and literature. They foster critical thinking, help students gain a perspective on the traditions and problems of Western civilization, and equip them with a well-rounded background so that they may more intelligently construct their lives in the modern world. Honors students are also required to take six hours in non-Western culture chosen from a wide variety of courses.
- 3. The tutorial, a crucial part of the Honors Program, is one of its main features. Tutorials enroll between five and ten students. They create a sense of collegiality that is frequently lacking on a commuter campus. The tutorials provide an opportunity for intensive concentration, study, and discussion. In most cases a major writing assignment will be required.

Students are automatically qualified to apply to the Honors Program if they have a 3.5 high school GPA, have an ACT composite score of 25 or higher, score in the 90th percentile or higher in PSAT scores, or achieve a combined SAT score of at least 1150. Other incoming freshmen, transfer students, and freshmen or sophomores at UM-Dearborn who are genuinely interested in the Honors Program are encouraged to apply.

For information, contact the Honors Program Office at (313) 593-5183.

WRITING PROGRAM

The Writing Program offers introductory and intermediate courses and other academic support to all UM-Dearborn students in CASL, COB, CEHHS and CECS. The Writing Program oversees the UM-Dearborn Writing Center, the campus Writing Awards competition, and the Composition Placement Examination. One important aspect of the Program's work is supporting innovative teaching approaches across the disciplines for improving students' abilities with writing and research.

Writing Program courses include the first-year writing sequence. with special sections devoted to multi-media, community-based and cross-cultural writing, and intermediate courses focused on creative and expository writing and writing in professional settings. First-year writing courses at UM-Dearborn provide a basis for both upper-level writing classes and also the writing students will need to complete to fulfill requirements in other courses. Courses therefore support students as they learn to write effectively, think critically, and develop rhetorical awareness about print, visual, and digital texts, and to write for academic, civic and workplace audiences. Writing Program courses stress inquiry-based research, critical reflection, revision, collaboration, and active learning.

PLACEMENT INTO INTRODUCTORY WRITING COURSES

All UM-Dearborn students are required to complete six hours of composition in order to graduate. Most students fulfill this requirement by taking COMP 105 and 106 (Writing & Rhetoric I & II). Each entering student should make every effort to complete the composition sequence during his or her first year on campus, since it is designed to acquaint students with expectations and strategies of university writing. Placement in the appropriate introductory course is determined by the Composition Placement Examination (CPAS). No student may enroll in an introductory composition course before taking the Composition Placement Examination.

All students – first-time as well as transfers – must take the Composition Placement Examination, preferably at the time of enrollment or during the student's first semester on campus. Transfer students who score below the COMP 105 level will be required to take COMP 227 (which carries degree credit) even if their previous composition courses have been accepted for transfer credit. Students who did not take the Placement Examination during the orientation session should contact the Orientation Office or Writing Program Office to schedule an examination.

Based on the results of the Placement Examination, students will be placed either into COMP 099, COMP 105 or COMP 106. Students taking COMP 099, which carries additive degree credit and does not satisfy any part of the six-hour composition requirement, must pass the course with a grade of C of better before enrolling in COMP 105. Students may submit a portfolio of written work to appeal a placement decision, but no degree credit is given for courses exempted via portfolio.

Students in the Honors Program fulfill their six-hour composition requirement by taking COMP 110 and COMP 220 (Honors Writing & Rhetoric I & II). Engineering students substitute COMP 270 (Technical Writing for Engineers) for COMP 106, taking the course during the second semester of their sophomore year. College of Business students take COMP 280 (Business Writing & Rhetoric) in place of COMP 106. Transfer students admitted with credit in composition from other institutions of higher education will be placed in an appropriate composition course based on their transfer credit and performance on the Composition Placement Examination, as determined by the Director of the Writing Program. Only courses judged equivalent to COMP 105 and 106 may be substituted for the required courses. Students are urged to take their composition courses at UM-Dearborn.

UM-Dearborn does not accept hours earned in composition through placement examinations at other universities.

For more information, contact the Writing Program office at (313) 593-5238.

FIRST YEAR SEMINARS

First Year Seminars are special classes designed for entering first-year students to ease the transition from high school to college. These are small, welcoming classes developed by dedicated UM-Dearborn faculty who have made a special commitment to helping students master important college skills. In a First Year Seminar, students find it much easier to get acquainted with college life and explore the university's academic resources.

Each First Year Seminar benefits new students in the following ways:

- Exposure to exciting ideas on a special topic
- Linkage between the First Year Seminar and a related Composition course
- Special attention to college-level reading, writing, discussion and research skills
- Extra-curricular activities and opportunities, such as field trips, tours and projects
- Extra mentoring and support
- A ready-made peer group

For many students (especially in CASL), the First Year Seminar experience automatically fulfills two requirements: a required Composition course and a distribution requirement.

A few of the many seminar topics that have been developed include the following:

- "Car Culture": the history of the automobile in American life and imagination
- "Fast Food Nation": a look at the fast food industry through various lenses (economics, anthropology, sociology, environmental studies, politics, history and more)
- "To Infinity and Beyond": an exploration of the concept of infinity using very creative learning techniques
- "Shakespeare on Stage, Page, & Screen": this seminar incorporates films, texts and a trip to the Shakespeare Festival in Stratford, Ontario, to explore variations on Shakespeare plays based on different media, cultural contexts, and different artistic and ideological agendas.

All First Year Seminars are listed as Liberal Studies (LIBS) courses under "College-Wide Offerings" in the Schedule. For further information, contact the CASL Dean's Office, 2002 CB, or view the First Year Seminar page on the CASL website: umd.umich.edu/673401.

COOPERATIVE EDUCATION PROGRAM

Cooperative Education in CASL is an academic program founded on UM-Dearborn's commitment to "excellence in teaching and learning." It promotes liberal arts learning and career/personal development through student participation in paid, professional employment. Expected learning outcomes include clarification of values, development of problem-solving and career-related skills, and enhancement of academic knowledge.

Students work one or more terms in part-time or full-time positions paying \$8-15.00/hour. They also earn upper-level academic credit for their co-op experiences and attend a co-op seminar. To be eligible for the co-op program, students must be admitted to n undergraduate major in the college and must have completed 30 credit hours with a minimum 2.25 GPA. Transfer students must complete 12 credit hours at UM-Dearborn before they are eligible.

Students compete for open co-op positions offered by area employers. After being hired by a co-op employer, students register for co-op and are required to submit academic learning objectives and a critical evaluation essay for approval by the Faculty Director, who determines the awarding of credit. The Co-op Office reviews requests for student-arranged co-ops. Contact the Co-op Office in Room 1038 CB for more information.

CASL ONLINE: Online and Blended Courses

Regular credit-bearing courses are offered via online and blended formats to UM-Dearborn students (and guest students) who can benefit from the flexibility and convenience of online course

delivery. Students who want to pursue a university education but have special constraints such as job demands, childcare or eldercare responsibilities, pregnancy or medical limitations may also find that online learning helps them stay on track. Online learning classes are taught by UM-Dearborn's distinguished faculty and are equivalent in academic depth and rigor to face-to-face versions taught in the traditional classroom. New courses are added to the OL repertoire each year. A few courses are in blended format; that is, the classes meet on campus for one or two class periods and online for the remainder.

Regularly enrolled students may elect online learning courses as part of the registration process. Guest students must submit the Michigan Uniform Guest Application, available in our Admissions/Registrar's offices or in the Registrar's office of the student's home institution, and complete the admissions process before registering for classes.

Online Learning courses usually require regular participation in online discussion groups established for the class. Required materials may be made available in various formats, including conventional textbooks and online resources, including video and/or audio recordings. Some online courses may require attendance on campus at an orientation session and/or for exams. though special proctoring arrangements can be made, especially for non-local students. CASL Online also offers the ONLINE Bachelor of General Studies (BGS) degree program. This program is designed exclusively for transfer students with associate degrees in any field from community colleges that have "Two plus Two" articulation agreements with UM-Dearborn. UM-Dearborn offers the upper-level component of the BGS degree for these students. In addition, some lower-division courses that fulfill UM-Dearborn distribution requirements or serve as prerequisites are also available via online learning.

For further information about the CASL Online program, the Online BGS, and currently offered courses, consult the program website: casl.umd.umich.edu/caslonline/ or the OL staff. The CASL Online program office is located in 1150 Social Sciences Building, (313) 593-1392, email caslonline@umd.umich.edu. The Director and the OL staff are available for program information, and general student support in online education.

INTERNSHIPS AND FIELD EXPERIENCES

In addition to the paid work experience offered in the cooperative education program, non-paying off-campus educational opportunities for academic credit are offered by various departments in the College. For specifics, see the course description for each discipline's offering in *Programs and Courses* beginning on page 70.

Criminal Justice Studies Internship

Criminal justice internships are available through the disciplines of political science, psychology, sociology, and women's and gender studies. Internships provide students with practical experience in law enforcement-related placements at the state, local, and federal levels of government and also in the non-profit sector. Placements are available through the Departments of Social and Behavioral Sciences. Internships vary from three credit hour programs to six credit hours. Students may elect CRJ 478 Social Work/Criminal Justice Internship; CRJ 479 Women's Studies Internship; CRJ 485 Psychology Internship; or CRJ 494-495 Political Science Internship. For more information about internships, contact the Director of Criminal Justice Studies in the Department of Behavioral Sciences, (313) 593-5520; email: criminal_justice@umd.umich.edu

Economics Internship

The economics internship offers students field experiences with businesses, non-profit organizations and government agencies. The placement allows students to get hands-on experience applying the tools of economic analysis to specific job and project assignments. Student interns spend either eight or 16 hours per week in unpaid work at their placement site, for which they earn either three or six academic credits. Only three credit hours may be used to satisfy the concentration requirements in economics. All interns are assigned to an economics faculty advisor. This program is open to all declared economics majors, who, by the start of the internship, have completed at least two upper-level economics courses in addition to two of the following core courses: ECON 301, 302 and 305. Permission of the Internship Coordinator is required. To inquire, call the Economics Internship Faculty Coordinator in the Department of Social Sciences at (313) 593-5096.

Environmental Studies Internship

The environmental studies internship, which is required of all environmental studies concentrators, involves students in a wide variety of positions with government organizations (Department of Environmental Quality, departments of health, city and county agencies), consulting firms, and non-governmental organizations as field assistants and researchers. Students work a prescribed number of hours per week as arranged by the advisor and employer, typically earning three credit hours. Written permission of instructor is required to participate. To inquire, contact the Department of Natural Sciences at (313) 593-5277.

Health Policies Studies Internship

In the health policies studies internship, students volunteer eight hours a week for a semester in a health care delivery setting, to develop an understanding of health care system issues and problems. An internship paper describes the setting and discusses the student's project and its relationship to an organizational or health system issue. Students may enroll for one semester or for two consecutive semesters. Permission of program director and senior standing are required to participate. To inquire, contact the Department of Behavioral Sciences, at (313) 593-5520.

History and Humanities Internship

The history and humanities internship offers practical experience to students in art history, communication, English, foreign languages, history, humanities, music, and philosophy. Students develop job-entry experiences in humanities and history-related careers. The internship includes a required seminar. Although, in general, the internship is offered for elective credit, it may be used to satisfy the following concentration requirements: Three credit hours may be applied towards a Communication major/minor or toward an Art History/Museum Studies degree and six credit hours may be applied towards a Journalism concentration. For students with a foreign language focus, three credit hours may be used within the International Studies Support Studies component or toward the cognate requirement of the French or Hispanic Studies concentrations. Prerequisites are junior or senior standing. Students earn three to six credit hours per semester. The maximum total credit hours are 12. To inquire, contact the History/Humanities Internship Office, 3028 CB, (313) 593-5136.

Psychology Internship

Psychology internship placements offer work experiences in a wide variety of human services organizations. These include programs related to child abuse, criminal rehabilitation, crisis intervention, geriatrics, human resources, mental illness, organizational development, special education, substance abuse,

and women's issues. Students spend six or 12 hours per week at their field placement and attend a weekly seminar involving training in listening and helping skills. Students may register for three or six credits. Prerequisites are PSYC 171 and permission of instructor. To inquire, contact the Department of Behavioral Sciences at (313) 593-5520.

Public Affairs Internship

The public affairs internship program allows students to participate in the political process through placements in a variety of governmental offices. Students in the local internship program work for state and local elected officials, law firms, and interest groups. Students in the Washington, D.C. program have worked in the White House, the Pentagon, and for Members of Congress. Students in the Ottawa, Canada program work in a Member of Parliament's office for a period of five weeks. Admission is reserved primarily for qualified juniors and seniors of all majors. Six upper-level credits are granted for successful completion of either program. Scholarships are available. To inquire, contact the Department of Social Sciences at (313) 593-5096.

Sociology/Social Work Internship

The sociology/social work internship offers students the opportunity to work in social welfare agencies and/or human services organizations such as domestic violence shelters, criminal justice agencies, head start programs, substance abuse rehabilitation, gerontology, hospice, human resources, health care, urban planning, and so on. The emphasis in the field experience is on the social problems that bring clients to agencies and on the social contexts within which agencies deliver services. Students spend six to eight hours per week on site and two hours in a classroom seminar. Prerequisites are SOC 200 or SOC 201 and permission of instructor. Students may enroll for three to six credit hours. To inquire, contact the Department of Behavioral Sciences at (313) 593-5520.

Women's and Gender Studies Internship

The WGST internship offers students an opportunity to work in a variety of fields that address gender inequities and/or serve the needs of women and girls. These include, but are not limited to, adolescent services, domestic violence shelters, legal clinics, human resources, health care settings, advocacy organizations, and residential counseling settings. Students spent six to eight hours per week on-site and two hours in a classroom seminar. Prerequisites are WGST 303 or permission of instructor. To inquire, contact the WGST office, 2040 CB, (313) 593-1391.

WOMEN IN LEARNING AND LEADERSHIP (WILL)

The Women in Learning and Leadership (WILL) program is designed to develop the analytical abilities and skills of undergraduates and promote their will to be community leaders for gender equity. WILL allows students to connect knowledge gained in the classroom with learning experiences in the community by combining courses in Women's and Gender Studies, co-curricular programming, a student leadership organization, and internship and co-op opportunities. The following are the main goals of the program:

- To encourage critical thinking, intellectual curiosity and active learning opportunities that empower women as leaders during and beyond college;
- to increase awareness of obstacles created by gender, ethnic and social class stratification, with attention to what those obstacles mean for students living in metropolitan Detroit, and to develop awareness of individual and collective strategies to address these obstacles;

- to promote self-confidence, assertiveness, a realistic sense of efficacy and willingness to lead;
- to provide opportunities for students to explore their career and life choices, and to build a multicultural and cogenerational community on campus that supports this learning and exploring;
- to develop ongoing networks of collaboration between community organizations, leaders, and students.

Requirements for WILL

Students accepted into WILL complete 4 courses in Women's and Gender Studies and an internship or co-op experience in a field of their choice. There are two required courses for the program: Introduction to Women's and Gender Studies, and a Women, Leadership and Social Change class. For their two electives, students may choose from the wide variety of courses offered by the Women's and Gender Studies program. In addition to fulfilling these curricular requirements, WILL students spend a minimum of 15 hours per semester engaged in co-curricular activities related to gender equity and community building. Among their other activities, the WILL student group engages in volunteer opportunities with social service agencies in metropolitan Detroit. In addition, they have the opportunity to meet with locally and nationally known gender equity leaders for casual "fireside chats" and are offered annual training seminars by local women leaders. They organize speaker and film series on topics such as leadership for global gender justice, eating disorders and body image, and violence awareness on campus. They also run an innovative and successful mentoring program for middle school girls in Southwest Detroit. WILL students' internship placements have allowed them to work with women in the criminal justice system, in programs for at-risk youth, in an oral history project interviewing Arab-American women, and in a variety of positions in legal, medical, business and education fields with women leaders as mentors.

The program recruits in April every academic year for acceptance into the program the following Fall term. Students accepted into the program have a minimum of a 3.0 grade point average, demonstrated leadership ability, and an interest in fostering gender equity.

For more information, contact the Director of WILL at (313) 593-1391 or visit 2040 CB.

JAPAN CENTER FOR MICHIGAN UNIVERSITIES

Since 1989, the fifteen Michigan public universities have operated a unique program in Japanese language and culture in our sister state in Japan, the Shiga prefecture. The Japan Center for Michigan Universities is in Hikone, a beautiful, medium-sized, non-westernized city in central Japan. The \$15 million facility, built by the Shiga government, includes classrooms, offices, and apartments with cooking facilities for student occupancy; home stays, of varying duration, may also be arranged. The full academic program runs from September through the end of April; students may also select a one-semester program, or the Summer Intensive Program in the Japanese language. UM-Dearborn students receive 26 hours of credit for UM-Dearborn courses in Japanese language (see course descriptions under Japanese in this Catalog for the following: JPN 128-129, 178-225, or 228-229), Japanese Culture and Society (JPN 395, 396), and two other courses taught by visiting professors. These have included Japanese art and painting, Japanese technology and business, energy and environment in Japan, modern Japanese history, and mass media.

For current information on program fees and housing, visit the website: isp.msu.edu/JCMU/. Applicants need not know Japanese, but they should have studied another foreign language and have had some foreign travel experience. They must have sophomore standing by the end of Winter term and a 2.5 or higher GPA. Students should contact the International Office, 2136 UC, (313) 593-6600, for further information.

STUDY ABROAD

Students interested in other study abroad programs should consult faculty in Modern and Classical Languages, or their major advisor, or the International Office in 2136 UC for additional information.

Special Centers, Facilities and Services

OFFICE OF ADVISING AND STUDENT RECORDS

The Office of Advising and Student Records helps students make informed decisions about their course of study and the liberal arts. To provide this help, the Office offers students current and accurate information regarding CASL academic policies and procedures, coordinates academic advising between students and faculty advisors, provides necessary College forms and materials, and reviews students' academic progress and performance at specified intervals.

The Office offers a systematic program of guidance and advising that attempts to support students from registration through graduation. Advising occurs in many forms and at various levels. For new students, an orientation program is available for academic testing and advising. The initial advising is done by professional staff and faculty who work through the Office.

The Office also provides expert academic help of a general nature. Its staff is specifically trained to work with the undecided student. It also oversees the AB and BS degree programs in Liberal Studies and the BGS degree program. Traditional majors also have faculty advisors. A list of these advisors is available in the Office, 1039 CB, (313) 593-5293, and online at casl-advising@umd.umich.edu.

UNIVERSITY OF MICHIGAN-DEARBORN WRITING CENTER

The University Writing Center, staffed by experienced student peer consultants under the supervision of full-time faculty in composition, provides support for all UM-Dearborn students wishing to improve their writing. Students needing regular one-on-one help in developing basic writing skills, as well as more advanced students wishing to improve their writing, will find the Writing Center useful.

The Writing Center is open five days a week during Fall and Winter terms and on a more limited basis during the summer term. It is strongly recommended that students make an appointment should they wish to work with a peer consultant. The center is equipped with personal computers and software for student use including word processing software, grammar programs and Internet access and research. For further information, contact the Writing Program Office, 3018 CB, or telephone (313) 593-5238. The center is located in 3035 CB with smaller satellite locations around campus. The center tries to accommodate walk-ins but make prefers students appointments online http://casl.umd.umich.edu/writ_center/.

CENTER FOR ARAB AMERICAN STUDIES

The Center for Arab American Studies focuses on scholarship, research, and engagement with the Arab-American community in Dearborn and Metropolitan Detroit. Faculty in Arab American Studies are actively engaged in research and scholarship on current issues facing Arab Americans as well as Arab American history and culture. As teachers, they seek to help all students understand the role of Arabs in American society, the role of America in Arab society, and the vibrant interplay between them. For additional information contact the Center in Room 1080 SSB or call (313) 593-4925.

CENTER FOR ARMENIAN RESEARCH

The Armenian Research Center (ARC) was established for the documentation and the publication of materials in the field of Armenian studies and affairs. The ARC accomplishes this work in a variety of ways. It provides access to a computerized database of books, periodical articles, audiovisual material, and other items concerning Armenians. This database is gradually also becoming accessible through the on line catalog of the Mardigian Library. The ARC also regularly publishes scholarly books on Armenian topics. It supports both academic and public outreach by participating in forums, sponsoring conferences, exhibitions, public lectures and answering questions from scholars, students and the public media. Finally, the ARC sponsors and supports the teaching of Armenian language instruction courses on the University of Michigan, Dearborn campus. For additional information call (313)-593-5181.

CENTER FOR MATHEMATICS EDUCATION

The Center for Mathematics Education is dedicated to improving the quality of teacher preparation for prospective teachers and to making continuous professional development available for current teachers. The goal is to strengthen the teaching of mathematics and improve student learning. The professional development programs offered by the Center seek to deepen teachers' understanding of the mathematics they teach and emphasize best teaching practices through the study and use of current research and standards-based curriculum resources. These professional development activities are offered at school district sites and at regional intermediate school districts, and carry at least 3 SB-CEU credits. It is also possible for classroom teachers to enroll for graduate credit. These credits can be applied towards the degree requirements for the Specialty in Middle Grades Mathematics program that is part of the College of Education, Health, and Human Services' Master of Arts in Education degree. Additional information can be obtained at umd.umich.edu/casl/math/MathEd.

CENTER FOR THE STUDY OF RELIGION AND SOCIETY

Established in 2001, the Center for the Study of Religion and Society (CSRS) provides a focus for interdisciplinary scholarly research and teaching on religion and its relationship to American society. It is home to four interrelated programs: the interdisciplinary minor in Religious Studies; the Worldviews Seminar; the Pluralism Project at UM-Dearborn, and the Metropolitan Detroit Digital Music Archive of religious music, chant, and recitation. The Center sponsors lectures and colloquia on campus and is a link between the university and area religious centers and inter-religious organizations. CSRS is located in Room 2038 CB. Contact the Center staff at (313) 583-6329 or csrs rs@umd.umich.edu.

MATHEMATICS LEARNING CENTER (MLC)

The Department of Mathematics and Statistics supports a peer tutoring program for UM-Dearborn students needing assistance with their work in pre-calculus, calculus, differential equations, linear algebra, statistics, and mathematics education courses. Peer tutors, who are carefully vetted, trained, and supervised by the Director of the Center, are available during posted hours throughout the week. Computer tutorials and videos are also available to assist students in their preparation for the Mathematics Placement Exam and in certain mathematics courses. Please call the MLC (313) 583-6351 or visit our website at umd.umich.edu/casl/math for a current list of programs available for student support. The MLC is located in Room 2076 CB. The department provides auxiliary tutorial support for developmental algebra courses (MATH 080 and 090). Instructors for these courses will have information for students regarding the tutoring hours and location at the beginning of each semester.

SCIENCE LEARNING CENTER

The Department of Natural Sciences operates a Science Learning Center (SLC) for students enrolled in a variety of science courses. The SLC program ensures that all science students have adequate preparation for high achievement in science by providing selfpaced, individualized instruction in essential mathematical, conceptual, and laboratory skills. Instructional modules are presented in one of several formats, including printed material and digital or multimedia tutorials that may be accompanied by specific laboratory instruments. All instructional modules are available online at casl.umd.umich.edu/index.php?id=685031. Mastery of the subject matter is assessed by a short post test that is administered in the SLC. Students are encouraged to make advance reservations for post tests for instrument-based modules. Signup sheets are available in the SLC which is located in Room 1126 CW. It is open Monday through Friday during all academic terms. Current hours of operation are listed on the SLC website.

SLC staff also manage a Supplemental Instruction (SI) Program for students in the natural sciences. Supplemental instruction is an academic assistance program that utilizes peer-assisted study sessions. The SI sessions are regularly-scheduled informal review sessions in which students compare their class notes, discuss assigned readings, practice problem solving, develop organizational tools, and predict test items. The participants learn how to integrate course content and study skills while working together. The sessions are facilitated by "SI leaders", students who have previously taken the courses and done well in them. The SI leaders also attend all the lectures, take notes, and are model students. The main purpose of this program is to improve students' grades and increase student retention and graduation rates.

Policies And Procedures

For complete information on current policies and procedures, contact the Office of Advising and Student Records, Room 1039 CB, (313) 593-5293.

Academic Procedures

DECLARING A MAJOR

Students are required to declare a major formally and officially by the time they have earned 60 credit hours. A student who does not comply with this policy is placed on registration hold. As a result, the student will not be allowed to register for the next term until a major has been declared.

SENIOR DEGREE AUDITS

A senior audit gives the student a list of requirements remaining to be fulfilled for graduation. During the term in which a student will complete 85 credit hours, an email will be sent from the Office of Advising and Student Records that a senior audit is about to be prepared. The student will be asked to confirm his or her major and respond to the email for the audit to be completed. When it is done, the student will be notified and instructed to schedule an advising appointment, during which the audit will be reviewed. If a student fails to respond to the email, the senior audit may be requested at a later date. A final audit will be conducted automatically for students who have applied for graduation and are on the Degree Candidate List.

DROPPING AND ADDING COURSES

Changes in course elections, including dropping or adding a course, and substituting another course for one already elected, may be made during the official "drop/add period." To make a change in course election, a student may change open courses on line via UM-Dearborn Connect during regular registration periods and during the first two weeks of a full term or the first week of a half-term.

Students also have the option of obtaining an Add/Drop Form from the CASL Office of Advising and Student Records, Room 1039 CB, with faculty signatures, if required, and submit it to the Enrollment Services Counter (1169 UC) by the established Add or Drop deadline. A limited number of classes require faculty permission to add after one week in a full-term and two days in a half-term.

Courses may be selectively (drop one or more course, but stay enrolled in at least one course) dropped through the ninth week of a full term or the fourth week of a half-term, but a *W* notation will be entered on the transcript. A student may completely withdraw from any semester through the official last day of classes for that particular semester. Consult Enrollment Services (1169 UC; 313-583-6500) for more information about exact dates, signature requirements, and fee assessments.

ELECTING MORE THAN 18 CREDIT HOURS

Students must have written permission from the Office of Advising and Student Records to elect more than 18 credit hours a term. Students whose GPA is below 3.00 are not allowed to elect more than the normal maximum of 18 hours.

COURSEWORK AT OTHER INSTITUTIONS

After a student first enrolls in a degree program at UM-Dearborn, he or she may not ordinarily transfer credits from a course taken at another college or university to apply to the requirements of the UM-Dearborn degree. Exceptions to this policy require written permission from the CASL Office of Advising and Student Records prior to registration for the course. Permission for transfer of credit from a non-UM-Dearborn institution is granted only for demonstrably extraordinary and urgent circumstances. Courses that are in progress at the time of admission and are so reported in writing to the Office of Admissions and Orientation may be transferred.

CASL students are encouraged to study abroad. In order for the credit earned overseas to be transferred back, the student must 1)

receive a pre-approval of coursework from the CASL Office of Advising and Student Records *before* departing for the program, and 2) bring back an official transcript from an accredited institution for the work completed. In general, the pre-approval of coursework can only grant the transferrable credit be counted as either lower level or upper level elective credit. In order for the credit to be counted toward a major/minor, the student needs to bring back a course syllabus and all graded written work for a full assessment by the corresponding discipline representative.

CREDIT FOR CO-OP, INDEPENDENT STUDY AND OTHER EXPERIENTIAL COURSES

In addition to the Cooperative Education Program with its paid work experience, independent studies, independent research, internships, and field experience courses are offered by various departments.

No more than 18 hours of credit may be counted toward graduation for cooperative education, independent/directed research, independent/directed studies, internships, and field experiences. There may be more specific limits on the number of independent study, reading, and research courses that may be applied to a major; see the faculty advisor in the major area for more specifics on this matter. Credit for laboratory/off-campus experiences must be arranged prior to the experiences; credits may not be arranged retroactively, after the experiences are completed.

REGISTERING AFTER WITHDRAWALS

A CASL student who first registers and then totally withdraws from two consecutive terms may be placed on academic probation and may not register without the explicit written permission of the Associate Dean or the Associate Dean's representative.

A student who is required to withdraw from one academic unit may not be admitted to another UM-Dearborn academic unit within the same term that the withdrawal action was taken.

PETITIONS

A petition is an official written request by the student to review information related to the student's academic record or to ask for approval of exceptions to policies or procedures. Petition forms are available in the CASL Office of Advising and Student Records, and must be filed in that office.

Grading System

CASL LETTER GRADES AND QUALITY POINTS

A+ 4.00

A 4.00

A- 3.70

B + 3.40

B 3.00

B- 2.70

C+ 2.40 C 2.00

C- 1.70

D+ 1.40

D 1.00

D- 0.70 (Minimum passing grade)

E 0.00

Grade Notations

The following notations may appear on a transcript to describe special situations in regard to a course.

NC No Credit. No honor points. Not computed in the grade point average. Used only in specially approved courses that are graded A, B, C, No Credit.

I Incomplete. No honor points. A student who cannot complete the work of a course before the end of the term must request permission to receive an incomplete grade. A contract form, obtained from the CASL Office of Advising and Student Records, Room 1039 CB, must be discussed with and approved by the instructor before the end of the term. If the work is not completed within either four months, or an earlier deadline specified by the instructor, the grade will be converted to an E. Incompletes may not be completed after graduation. An I notation will remain on the transcript, followed by the letter grade earned. In cases where an I is granted, but no contract is submitted, an *IE* will appear on the transcript.

X Absent from Final Examination. No honor points. An instructor may assign an X if a student has completed all the required coursework except for the final examination. The final exam must be taken within five weeks of the end of the term. If the exam is not completed in the required time frame, an E grade will be recorded. The X notation will remain on the transcript, followed by the letter grade earned. A course with an X mark may not be completed after graduation.

Y Course extended beyond term end. No credit. No honor points. Used only for courses that have been specially designed and approved to extend beyond the end of one term. A course with a Y mark may not be completed after graduation. If such a course is not completed, the Y will be converted to an E upon graduation.

NR Grade Not Reported. No honor points. Student should consult the Registrar immediately.

W Official Withdrawal. No credit. No honor points. Not computed in the grade point average. Students who selectively drop a course or withdraw from all courses for a term prior to the deadline for selective drops and/or withdrawals will receive for these courses the W notation. This notation may not be removed from the transcript.

S/E. Used only for specially approved courses. If a student passes, an S (satisfactory) is awarded. It is not computed into the grade point average. If a student does not pass, an E is awarded. If a student stops attending, without officially dropping, a UE is awarded. Both the E and the UE are computed in the GPA as failing grades.

P/F Pass/Fail Option. No honor points. A student must elect to take a course under the Pass/Fail option. The instructor reports a letter grade (A through E), except in courses where the notation No Credit is acceptable. Enrollment Services converts the student's letter grade according to the following procedure:

- 1. Grades A through C- are posted on a transcript as P (Pass); counts toward residency requirement and credit hours toward graduation.
- 2. Grades D+ through E are posted on a transcript as F (Fail); no degree credit is earned.
- 3. A grade of UE is not converted to an F and is computed in the GPA the same as an E.

Neither a P nor an F is computed in the grade point average. This grading option applies only to courses offered by CASL. Students enrolled in degree programs in other units should check the pass/fail regulations in those units. The option is subject to the following conditions:

The pass/fail option is open only to students who are not on academic probation.

Courses taken under the pass/fail option may not be used to fulfill requirements for majors, minors, areas of focus, cognates, and/or teacher certification.

Students in the Honors Program must take all Honors Program requirements (including distribution) for a grade.

Courses taken under the pass/fail option must be specified on the registration form or added as such within the usual add period. Such courses may be dropped within the usual drop period.

- 1. Changing from the pass/fail option to a letter grade or vice versa is **not permitted** after the first two weeks of a full term or after the first week of a half term.
- 2. A student is limited to, at most, four courses taken under the pass/fail option. Courses specifically designated as "S/E only" are not counted in this limitation.

UE Unearned Fail. This grade is assigned to any student who has never attended, or stopped attending class during the semester and did not officially drop. It is computed in the GPA the same as an E.

VI Visitor-Official Audit. No credit. No honor points. Not computed into the grade point average. An official audit, or visitor status, allows a student to attend a course but not elect it for credit. The VI notation appears on the transcript. Regular tuition fees are assessed.

CHANGING GRADES

The grade that an instructor records on the final grade sheet which appears on the student's subsequent transcript based on the instructor's official evaluation of all of a student's performance and work completed by the end of the term is considered final. Recognizing grading mistakes is permitted. However, an instructor is only allowed to change a grade within the four month period after the end of the term in which the course was taken. CASL instructors must complete a Supplementary Grade Report form and submit it to the CASL Office of Advising and Student Records, Room 1039 CB. A grade change after the four-month period in which the course was taken is *not* permitted except for extenuating circumstances which requires an approval from the CASL Dean's Office.

TERM AND CUMULATIVE GRADE POINT AVERAGE (GPA)

The cumulative GPA is determined by dividing the total number of credit hours into the total number of quality points earned. The term GPA is determined by dividing the number of credit hours elected during a term into the number of quality points earned during the same term.

The number of credit hours excludes 1) courses in which a student received an NC; 2) courses taken on a pass/fail basis in which a P or an F is recorded; 3) S/E graded courses in which the student receives an S; 4) additive credit courses.

Grades associated with transferred courses are neither recorded nor used in computing the cumulative GPA. Past grades, however, may be reviewed for admission to specific units within UM-Dearborn.

Effective Fall 2005, for any course repeated in Fall 2005, or thereafter, grades earned in all attempts of a course will appear on the transcript, however, only the most recently earned grade will be reflected in the cumulative GPA. Some restrictions apply. For more details, please see a CASL advisor.

Note: Prior to Fall 2005, grades earned in all attempts of a course appeared on the transcript and were reflected in the cumulative GPA.

Academic Honors

DEAN'S LIST

A student is honored by inclusion in the Dean's List if he or she meets two conditions: (1) has completed during the term at least 12 credit hours of graded coursework toward degree, and (2) has achieved a 3.50 or better term GPA. The Dean's List is compiled three times a year, after the Fall, Winter, and Summer terms. Students who have I, X, NC, or Y notations are not eligible to be included. Students with Academic Sanctions against them are not eligible. Upon completion of all courses for the term, eligible students will be contacted via their UM-D email account with an official Dean's List letter by the CASL Office of Advising and Student Records.

A second Dean's List is generated for part-time students who have enrolled and completed 12 or more credit hours of graded (A-E) coursework toward degree in the Fall and Winter semesters (of a given academic year) combined, and earned a minimum 3.50 GPA in each term.

Eligibility is based exclusively upon coursework completed at UM-Dearborn. The list is posted prominently in a display case in the CASL Building.

For information about other institution-wide honors and awards, please consult the General Information section in this *Catalog*.

Academic Performance

The goal of the College is to assist its students in making satisfactory and expeditious progress toward their degrees. In order to be graduated, the student must achieve not only a cumulative GPA of 2.00 or better, but also a 2.00 or better in his/her major, cognates, minor, or each area of focus. Steady achievement at this level is not always possible. From time to time students might perform at a level below 2.00 and still be permitted to register and thus to continue to make progress toward their degrees. The scholastic records of all students are examined at the end of each term during which they took courses.

PROBATION

If a student's cumulative GPA should fall below 2.00 at the end of a term, the student will be placed on "probation. If the student's cumulative GPA reaches 2.00 or better at the end of this probationary term, the student is removed from probation. On the other hand, if the cumulative GPA is even lower at the end of the probationary term, the student would normally move to "required to withdraw" (RW) status and would not be allowed to reregister for the duration of at least one year. A student with a cumulative GPA substantially below 2.00 may be required to demonstrate his or her potential for readmission. Finally, if the cumulative GPA should show significant improvement but not yet reach 2.00 at the end of the probationary term, the student may be placed in "probation continued" status for one term.

PROBATION CONTINUED

A student in "probation continued" status has an academic hold placed on registration. This means that the student may not register again until all grades for the probation continued term have been recorded and reviewed favorably. If the student on probation continued achieves a cumulative GPA of 2.00 or better at the end of this term, the student is removed from the academic hold and from probation. If the student should fail to achieve a cumulative GPA of 2.00 or better, the student would normally be required to withdraw (RW) and would not be permitted to register for the duration of at least one year. A student with a cumulative GPA substantially below 2.00 may be required to demonstrate his or her potential for readmission. Normally, a student may be in the probation-continued category for only one regular term.

Further information may be obtained from the CASL Office of Advising and Student Records, Room 1039 CB.

Code of Academic Conduct

In order to maintain the high academic standards subscribed to by UM-Dearborn, the College has adopted a Code of Academic Conduct that defines academic misconduct and outlines report and appeals procedures.

The College, 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 community. Such dishonesty includes:

PLAGIARISM

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 attributing those same portions to their correct source(s)

CHEATING

Using unauthorized notes, or study aids, or information from another student or student's paper on an examination; altering graded work after it has been returned, then submitting the work for re-grading; and allowing another person to do one's work and to submit the work under one's own name.

FABRICATION

Presenting data in a piece of work which were not gathered in accordance with the guidelines defining the appropriate methods for collecting or generating data and failing to include a substantially accurate account of the method by which the data were gathered or collected.

AIDING AND ABETTING DISHONESTY

Altering documents affecting academic records; forging signatures of authorization or falsifying information on an official document, election form, grade report, letter of permission, petition, or any document designed to meet or exempt a student from an established CASL or University academic regulation.

A faculty member has the responsibility to inform the students that academic dishonesty is not acceptable. Students are responsible for discovering the sort of conduct that would be viewed as unacceptable by reviewing the Code of Academic Conduct and by asking individual instructors for the standards of their respective disciplines.

REPORT

Upon detecting a violation of academic integrity, a CASL faculty member is required to report it under all circumstances. The reports help CASL and the other units on campus to track repeat offenders of academic integrity who should be punished according to guidelines approved in each unit.

To file a report of a violation involving a CASL course, the faculty member needs to fill out a CASL Academic Integrity Violation Report Form (the "Report") and files it with the CASL Associate Dean for Curriculum and Enrollment Management. The faculty member is also required to give a copy of the Report to the involved student.

RIGHTS OF PARTIES

A faculty member shall have the right to assign penalties, including lowered grades for coursework or an entire course, for any violation of the CASL Code of Academic Conduct.

Upon receiving a copy of the Report, the student has seven business days to make a decision on whether to appeal to it or not. If the student decides to appeal, he or she should notify the CASL Associate Dean for Curriculum and Enrollment Management within seven business days after receiving a copy of the Report.

APPEAL

After receiving an official notification for an appeal to a Report, the CASL Associate Dean for Curriculum and Enrollment Management works with the student to follow CASL approved and established appeal procedures to conduct the appeal.

Policy Changes

All policies, procedures, and requirements are subject to change. These changes do not always coincide with the printing of a new *Catalog*. The most current information regarding CASL programs may be obtained from the CASL Office of Advising and Student Records, Room 1039 CB.

Programs and Course Offerings

Directory

CASL offers 32 degree programs and about a thousand courses. To help the reader find the program or course of interest, a directory is provided below. The following symbols are used to indicate the program type: C denotes a Certificate Program; Ma denotes a Major; Mi denotes a Minor and an area of focus; and NM denotes Not a Major or Minor. Changes may occur in the status of a program. Please check with the Office of Advising and Student Records, Room 1039 CB, or the relevant department office.

		_
Program	Type	Department
African and African	Ma, Mi	College wide
American Studies		
American Studies	Ma	College wide
Anthropology	Ma, Mi	Behavioral Sciences
Applied Art	NM	Literature, Philosophy, and the Arts
Applied Music	NM	Literature, Philosophy,
11000	1,1,1	and the Arts
Applied Statistics	Mi	Mathematics
Arabic Studies	Mi	Language, Culture, and
A	NIM	Communication
Armenian	NM	Language, Culture, and Communication
Art History	Ma, Mi	Literature, Philosophy,
		and the Arts
Arts, Applied	NM	Literature, Philosophy,
		and the Arts
Astronomy	Mi	Natural Sciences
Behavioral Sciences	Ma	Behavioral Sciences
Biochemistry	Ma, Mi	Natural Sciences
Biological Sciences	Ma, Mi	Natural Sciences
Chemistry (ACS Approved)	Ma, Mi	Natural Sciences
Chemistry/Instructional Track	Ma	Natural Sciences
Communication	Ma, Mi	Language, Culture, and
Communication	ivia, ivii	Communication
Comparative Literature	Mi	Language, Culture, and
•		Communication
Composition	NM	Language, Culture, and
C	M	Communication
Computer and	Mi	Mathematics
Computational Mathematics		
	NIM	Callaga wida
Cooperative Education Criminal Justice Studies	NM Mo Mi	College wide College wide
Earth Sciences	Ma, Mi Ma, Mi	Natural Sciences
Economics Economics	Ma, Mi	Social Sciences
Leonomics	ivia, ivii	Social Sciences
English	Ma, Mi	Literature, Philosophy,
_		and the Arts
Environmental Science	Ma, Mi	Natural Sciences
Environmental Studies	Ma, Mi	Natural Sciences
Film Studies	Mi	Language, Culture, and
		Communication
French/French Studies	Ma, Mi	Language, Culture, and
C 1 St. 4:	Μ.	Communication
General Studies	Ma	College wide
Geographic Information Systems	С	Natural Sciences
Geography	NM	Behavioral Sciences
Geology	Mi	Natural Sciences
German	Mi	Language, Culture, and
		Communication
Greek	NM	Language, Culture, and
Haald Dalias Ct. His	M. M.	Communication
Health Policy Studies	Ma, Mi	Behavioral Sciences
Hispanic Studies	Ma, Mi	Language, Culture, and Communication
History	Ma, Mi	Social Sciences
Humanities	Ma, Mi	Literature, Philosophy,
	11100, 1711	and the Arts
International Studies	Ma	College wide
Japanese	NM	Language, Culture, and
_		Communication

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Journalism and Screen Studies	NM	Language, Culture, and Communication
Latin	NM	Language, Culture, and Communication
Law and Society	Mi	College wide
Liberal Studies	Ma	College wide
Leadership and	Mi	College-wide
Communication in Organizations		C
Linguistics	Mi	Language, Culture, and Communication
Mathematics	Ma, Mi	Mathematics
Medieval and Renaissance Studies	Mi	College wide
Microbiology	Ma, Mi	Natural Sciences
Modern and Classical	NM	Language, Culture, and
Languages: Armenian, Greek, Swedish		Communication
Music	Mi	Literature, Philosophy, and the Arts
Music, Applied	NM	Literature, Philosophy, and the Arts
Music History	NM	Literature, Philosophy, and the Arts
Music Theory	NM	Literature, Philosophy, and the Arts
Natural Sciences	NM	Natural Sciences
Organizational Change	Mi	College wide
Philosophy	Ma, Mi	Literature, Philosophy, and the Arts
Physics	Ma, Mi	Natural Sciences
Political Science	Ma, Mi	Social Sciences
Psychology	Ma, Mi	Behavioral Sciences
Public Relations	С	Language, Culture, and Communication
Religious Studies	Mi	College wide
Science and Technology Studies	Mi	College wide
Social Science Research Methodology	Mi	College wide
Social Studies	Ma	Social Sciences
Society and Technological Change	Mi	College wide
Sociology	Ma, Mi	Behavioral Sciences
Spanish (see Hispanic	NM	Language, Culture, and
Studies)		Communication
Speech	NM	Language, Culture, and Communication
Swedish	NM	Language, Culture, and Communication
Urban and regional Studies	Ma, Mi	Social Sciences
Women's and Gender Studies	Ma, Mi	College wide
Writing	C	Language, Culture, and Communication

Key to Course Listings

The heading for each course listing contains the following information.

Discipline and Course Number. Courses are numbered in accordance with a University-wide numbering system: courses numbered 100 to 199 and 1000 to 1999 are introductory, courses 200 to 299 and 2000 to 2999 are intermediate, and courses 300

to 499 and 3000 to 4999 are advanced (upper-level)

Course Title. The bold face course title follows the course number.

Credit Hours. The number of credit hours will appear below the course title.

Prerequisites. Prerequisites to the course appear after the credit hours. They should be completed before the course is elected. An asterisk (*) denotes that course may be taken concurrently.

Programs and Courses

African and African American Studies

African and African American Studies (AAAS) is an interdisciplinary program housed in the College of Arts, Sciences, and Letters at the UM-Dearborn. The program offers a flexible, challenging and stimulating course of studies for students who wish to pursue a major that will allow them to:

- Acquire knowledge of the history and cultural legacies of Africans and African Americans throughout the Diaspora.
- Ground themselves in the intellectual contributions of major African and African American scholars, political leaders, and artists.
- Gain informed perspectives on crucial issues confronting African and African American communities throughout the world.
- · Refine their skills in analysis, discourse, and writing.
- Apply their university learning as knowledgeable, engaged members of their home communities.

The Bachelor's Degree in African and African American Studies offers students a working knowledge of the history of African Americans in the United States, the cultural continuities in philosophy, religion and the arts linking African Americans to the African continent, as well as the critical social, political and developmental issues facing African communities on the continent and throughout the diaspora. Students will have a grasp of the critical movements for change in African and African American history, as well as the contributions of outstanding political leaders, intellectuals and artists. Knowledge of the struggles of African and African descendants throughout the diaspora for greater human rights and a higher quality of life is a central feature of the major. These pedagogical objectives are facilitated by a commitment to interdisciplinary scholarship and approaches that emphasize the value of an internationalist perspective. The major will consist of 30 credit hours, 24 of which must be at the upper level. This course of study prepares students to pursue a wide spectrum of professional studies, including law, social work, K-12 education, and civic leadership, or to pursue the doctorate degree for a career in college level teaching and research.

Many of the courses offered in the African and African American Studies Program are cross listed with other disciplines, such as Anthropology, Communications, Economics, English, History, Political Science, Psychology and Sociology.

MAJOR REQUIREMENTS

Please see the Program Director for information regarding requirements for the major.

MINOR OR BGS/LIBS AREA OF FOCUS REQUIREMENTS

To fulfill a minor or BGS/LIBS area of focus in African and African American Studies, a student must complete 18 credit hours of coursework in the program as outlined below.

Required courses

AAAS 275	Introduction to Africana Studies	3 hrs
300/400; 3000/	4000 level courses	15 hrs
AAAS 498	Thesis Project*	3 hrs

*Note: The thesis is optional and can be used to fulfill 3 hrs of the 300/400; 3000/4000 level course requirement.

AAAS 275, taught at least once annually, introduces students to important issues and debates within African and African American Studies. The course will always incorporate both African and African-American themes: however, the emphasis may vary to reflect the specialties of the professor(s) at a given time. (HIST 106 or ENGL 239 may also be used to fulfill this requirement.)

Each term, AAAS offers a wide variety of 300/3000 and 400/4000 level courses that are designed to fulfill the core requirements of the AAAS minor. See the listing of AAAS course offerings below. Successful completion of the program requires that a student complete at least six of the required 15 credit hours in courses that are exclusively African and African-American in content (AAAS 305, 316, 333, 345, 368, 371, 385, 389, 449, 469, 470).

Students pursuing a minor or focus area in AAAS may choose to complete their coursework with a final thesis project (AAAS 498) that reflects particular interests developed during their course of study. The thesis option can be used to fulfill three hours of the required 15 hours of upper-level coursework. The AAAS thesis project will be completed under the direction of a faculty member whose scholarly interests are compatible with the research interests of the student.

Courses from Other Disciplines

Occasionally, other disciplines may offer courses relevant to the AAAS minor. In recent years, such courses have included: ENGL 390 Post-Colonial Literature, HIST 390 New World Cultures, and the SOC 391 Black Church Experience. With the approval of the AAAS advisor, such upper-level courses may be accepted as credit toward the AAAS minor.

For more information about the African and African American Studies program, please contact the CASL College Wide Programs Coordinator in 2036 CB, 313-593-4925.

CERTIFICATE IN AFRICAN AND AFRICAN AMERICAN STUDIES

Students completing the requirements for the minor may also obtain a certificate in AAAS, which provides students with evidence of specialization that can serve to complement other career or personal goals. Students who already have a bachelor's degree may also earn a certificate to complement their undergraduate training. For additional information, contact the Office of the Dean, 2002 CB, (313) 593-5490.

African & African-American **Studies (AAAS) COURSE OFFERINGS**

Intro to the African Past **AAAS 106**

3.000 Credits

Must be enrolled in one of the following Levels: Undergraduate

This course is a survey of the social, economic, political, intellectual and cultural heritage of the African peoples from pre-history to the present. The emphasis is on the internal dynamics of the African society through five millennia, as well as the impact of external forces on African life. Themes of particular interest: the roots of African culture, the trans-Atlantic slave trade and the African Diaspora in the New World, the European Conquest and the character of the colonial order and the ongoing struggle to end the legacy of alien domination. (YR)

AAAS 239 Intro to Lit: African American

3.000 Credits

A study of African-American literature designed to expose students to important periods, works, and authors within historical context. Topics will include slavery, reconstruction. the Great Migration, the Harlem Renaissance, and the contemporary renaissance in Black women's literature. Students will be required to read critically, discuss, analyze, and write their responses to the several literary genres that will be incorporated (fiction, drama, poetry). (YR).

AAAS 275 Intro to Africana Studies

3.000 Credits

Must be enrolled in one of the following Levels: Undergraduate

This gateway course in the AAAS minor will engage the students in the intellectual issues, historical perspectives and cultural debates in African and African American Studies. Using a trans-disciplinary approach, the AAAS faculty teaching this course as a team will draw from the disciplinary strengths of the Humanities, the Social Sciences, and the Behavioral Sciences. Texts will include literature, film, music, art, theater, and other forms of popular and folk culture. This course will routinely invite speakers and performers to the class and engage the campus community in these events. (YR).

AAAS 316 African American History

3.000 Credits

This course will trace the experience of African Americans from their first landing in Virginia in 1619 through slavery and the Civil War. Emphasis will be placed on the origins of racism, the development of the slave system in the United States and the historical developments that led to the Civil War. (YR).

AAAS 320 African-American Music History

3.000 Credits

Must be enrolled in one of the following classes:

Senior

Sophomore

Freshman

Junior

A study of African American Music History from its African origins through the present. An understanding of the broad cultural, political, social, economic and media forces that have affected African Americans, their music and history- and in turn, the many important ways that African American music has influenced culture. Course examines multiple genre of music including classical, spiritual, jazz, blues and rap.

AAAS 322 Psychology of Prejudice

3.000 Credits

Prerequisites: PSYC 170 or 171

A consideration of ethnic (including racial, sexual, and religious) prejudice from the psychological point of view, focusing on the mind of both the oppressor and the oppressed. (AY).

AAAS 325 Econ of Poverty/Discrimination

3.000 Credits

Prerequisites: ECON 201 and ECON 202

An analysis of the economic aspects of poverty and discrimination. Emphasis on the theoretical economic causes of poverty and the economic bases for discriminating behavior, the impact of poverty and discrimination on individuals and society, and the effect of reform policies on the two problems. (AY).

AAAS 333 Intro to Gospel Music

3.000 Credits

This course explores the history and aesthetics of Black sacred music within cultural context. Major figures (Thomas A. Dorsey, Mahalia Jackson, The Winans Family, Kirk Franklin), periods (slavery, Great Migration, Civil Rights movement), and styles (folk and arranged Negro spirituals, congregational songs, and gospel songs - traditional to contemporary) will be studied through recordings, videos, films, and at least one field experience. Underlying the course is the theory (Mellonee Burnim and Pearl Williams-Jones) that gospel music is an expression of African American culture that fuses both African and European elements into a unique whole. (OC).

AAAS 340 Race and Evolution

3.000 Credits

Prerequisites: ANTH 101

An evolutionary survey of the biological differences among human populations in response to such factors as climate, culture, disease, nutrition and urbanization. The meaning of racial variation is discussed in terms of adaptation to environmental stress. "Race" is rejected, racism is discussed. (YR).

AAAS 345 West Africa Since 1800

3.000 Credits

A history of the West African peoples since 1800, which focuses on their unique cultural heritage. Themes include: West Africa before the advent of alien domination, the European Conquest, West Africa under the Colonial regimes, and the liquidation of colonial rule and the reassertion of West African independence. (AY).

AAAS 3634 History of Islam in the US

3 000 Credits

Must be enrolled in one of the following classes:

Senior Sophomore

Freshman

Junior

This course traces the long history of Islam and of Muslims in the Unite d States (1730s-present), paying careful attention to the interaction among Muslims across the dividing lines of race, gender, immigrant generations, sect, political orientation, and class, and between Muslims and other Americans.

AAAS 368 Black Exp in U.S.-1865-Present

3.000 Credits

The history of Blacks in America is traced from the Reconstruction era and the rise of Jim Crow segregation to the Civil Rights movement of the 1960's and the current period. Special attention is paid to the migration of blacks to the north and the social-economic situation which they encountered there. Specific topics to be addressed include formation of the NAACP. (AY).

AAAS 369 Civil Rights Movement in Amer

3.000 Credits

A survey of race relations and civil rights activities from late 19th century to the present. The principal focus, however, is on the period since World War II, especially on the mass-based civil rights movement (1955-1965) and the various policy debates and initiatives of the past thirty years, most notably affirmative action and busing. We also examine critiques of non-violence and integrationism. (AY).

AAAS 371 African Exper in the Americas

3.000 Credits

The course is a survey of African populations and cultures from 1500 to the present throughout the Americas. The focus of the course is on the Caribbean and Latin American contexts of these populations, but comparisons to North America will be made. Topics include the slavery, the relationship between Africans and indigenous populations, religions, politics, music, and questions of race and ethnicity. Readings will include ethnographic description, history, biography and fiction. (YR).

AAAS 385 Black Cinema

3.000 Credits

The course will examine selected films from African American and African film traditions in order to analyze how their cultural production is responsive to the conditions of social oppression, economic under-development, and neo-colonialism. How film traditions define "Black aesthetics" will also be discussed. (AY).

AAAS 388 W. African Music: Trad.&Glob.

3.000 Credits

Prerequisites: MHIS 100 or MHIS 120 or MHIS 130 or MTHY 100 or AAAS 106 or AAAS 275 or HUM 100 or HUM 270

West African popular music contains a unique mixture of African, Cuban, European and American influences. With the advent of radio and recording, music that was once locally based is now part of a national and international popular music industry. This course offers an overview of modern West African music, both traditional and popular. The course begins with an introduction to traditional West African instruments and musical genres. Next, there is an exploration of the fusion of traditional African styles with European, Cuban and American styles during and after the colonial era. The course culminates

with an examination of the contributions of West African musicians to the World Music scene, focusing on issues of representation and Fair Trade.

AAAS 389 Odyssey of Black Men in Amer

3.000 Credits

Prerequisites: (COMP 106 or COMP 220 or COMP 270 or COMP 280 or CPAS 40) and (ENGL 200 or ENGL 230 or ENGL 231 or ENGL 232 or ENGL 233 or ENGL 235 or ENGL 236 or ENGL 237 or ENGL 239)

This course will examine the struggle of African American men for personal, political, and creative expression. This course incorporates several literary genres (narrative, fiction, essay, drama, and poetry) and the literary voices of black men who range from professional writers to politicians, from athletes to actors. Students will be required to critically read, discuss, analyze, and write their own responses to the literature found in the texts. (YR).

AAAS 390 Topics in Af & Af Am Studies

3.000 Credits

Must be enrolled in one of the following Levels:

Undergraduate

Professional Development

This course examines problems and issues in selected areas of African and African American Studies. The specific title of the course will change in the Schedule of Classes according to content. Course may be repeated for credit when specific topic differs. (OC).

AAAS 403 Minority Groups

3.000 Credits

Must be enrolled in one of the following Levels:

Undergraduate

Prerequisites: SOC 200 or 201

The status of racial and ethnic minorities in the United States with particular reference to the social dynamics involved with regard to majority-minority relations. Topics of study include inequality, segregation, pluralism, the nature and causes of prejudice and discrimination and the impact that such patterns have upon American life. Students cannot receive credit for both AAAS 403 and AAAS 503. (YR).

AAAS 404 Dissed: Differ, Power, Discrim

3.000 Credits

Must be enrolled in one of the following Levels:

Undergraduate

Must be enrolled in one of the following classes:

Senior

Sophomore

Freshman

Junior

Have you ever been dissed? Why are some people targets of disrespect? This class examines the unequal distribution of power - social, economic, and political - in the United States and other countries that results in favor for privileged groups. We will examine a variety of institutional practices and individual beliefs that contribute to disrespect. We'll look at ways that beliefs and practices, like viewing inequality as consequence of a 'natural order', obscure the processes that create and sustain social discrimination. We will engage in the intellectual examination of systems, behaviors, and ideologies that maintain discrimination and the unequal distribution of power and

resources. Students will not receive credit for both AAAS 404 and AAAS 504.

AAAS 4401 Seminar: African Diaspora

3.000 Credits

May not be enrolled in one of the following Classes:

Graduate

Sophomore

Freshman

Prerequisites: HIST 300 or AAAS 2755 or HIST 345 or

AAAS 345

Research seminar on the history of the African Diaspora in the Atlantic World. This course covers examples of classic texts in the field, as well as significant new scholarship, with an emphasis on critical reading, analysis, and the development of an independent research project. Students gain a deeper understanding of the significance of the African Diaspora in the New World, derived from lectures and discussions providing an overview of this subject, as well as the micro views gleaned from sharing classroom presentation about students' individual research topics. The graduate version of this course includes weightier readings and assignments, with a research paper for potential publication.

AAAS 449 Black Family in Contemp Amer

3.000 Credits

Prerequisites: SOC 200 or 201

The African-American family is examined in relationship to the historical and contemporary forces that have shaped its characteristic patterns of family life. These forces include the influence of slavery, urbanization, racial discrimination and urban poverty. The patterns of family life include parental roles, family structure, kinship relations, and gender roles. (YR).

AAAS 469 Contemporary African Amer Lit

3.000 Credits

May not be enrolled in one of the following Classes: Graduate

Prerequisites: (COMP 106 or COMP 220 or COMP 270 or COMP 280 or CPAS 40) and (ENGL 200 or ENGL 230 or ENGL 231 or ENGL 232 or ENGL 233 or ENGL 235 or ENGL 236 or ENGL 237 or ENGL 239)

An intensive study of major 20th-century African-American writers. Fiction, poetry, autobiography, and drama will be examined but one genre will be stressed in any given term, e.g., the novel. Lectures will provide historical and biographical context for analysis and discussion of the works. Students cannot receive credit for both AAAS 469 and AAAS 569. (YR).

AAAS 470 Black Women / Lit, Film, Music

3.000 Credits

Must be enrolled in one of the following Levels:

Undergraduate

Must be enrolled in one of the following Colleges:

Coll of Arts, Sciences&Letters

May not be enrolled in one of the following Classes:

Freshman

Prerequisites: FILM 240 or FILM 248 or FILM 385 or AAAS 239 or AAAS 275 or WST 275 or WGST 275 or WST 370 or WGST 370 or HUM 221 or HUM 222 or HUM 223 or ENGL 231 or ENGL 232 or ENGL 233 or ENGL 237 or ENGL 239 or ENGL 248 or ENGL 200 or WGST 303 or HUM 303 or ANTH 303 or PSYC 303 or SOC 303 or WGST 303

This course will examine works produced by Black women authors, activists, filmmakers and musical performers in order to determine the methods they have incorporated in order to challenge and eradicate the prevailing stereotypes about Black women while advancing their own personal and racial agendas. It will also focus on the extent to which race, gender and class have shaped the creative work of Black women. Students will be required to read, discuss, analyze and write their own responses to the works of such firebrands as author Zora Neale Hurston, activist Ida B. Wells, filmmaker Julie Dash, and singer Billie Holliday.

AAAS 473 Race, Crime, and Justice

3.000 Credits

May not be enrolled in one of the following Classes:

Freshman

Prerequisites: SOC 200 or 201

This course is an analysis of race and its relation to crime in the criminal justice system. Students will analyze and interpret the perceived connection between race and crime, while exploring the dynamics of race, crime, and justice in the United States. This course is designed to familiarize students with current research and theories of racial discrimination within America's criminal justice system.

AAAS 477 African American English

3.000 Credits

Must be enrolled in one of the following Levels:

Undergraduate

Prerequisites: LING 280 or LING 281 or LING 480

An examination of the structure, history and use of African-American English. Topics will include the pronunciation, grammar and vocabulary of African-American English, theories of origin, linguistic repertoire and code-switching in African-American communities, the Ebonics controversy, and the role of this variety in education and identity formation. Student cannot receive credit for both AAAS 477 and AAAS 577.

AAAS 491 Topics in African Diaspora

3.000 Credits

This course deals with African Diasporan history from the 19th century to the present. The method is by definition cross-cultural and comparative, requiring that the works or figures under study represent a diversity of Diasporan nationalities and/or cultures. The course may focus on a wide range of topics. Students cannot receive credit for AAAS 491 and AAAS 591 when the topic title is the same.

AAAS 498 Thesis

3.000 Credits

Must be enrolled in one of the following Levels:

Undergraduate

May not be enrolled in one of the following Classes:

Sophomore

Freshman

Prerequisites: AAAS 275 or AAAS 239 or ENGL 239 or

HIST 106 or AAAS 106

Students pursuing the AAAS minor or an area of focus in African and African American Studies may choose to complete their coursework with a final thesis project that reflects research interests developed during their course of study. This thesis, which can be used to fulfill three (3) hours of the required upper-division course work, will be written under the direction

of a faculty member whose scholarly expertise is compatible with the research field(s) of the student. (OC).

AAAS 499 Independent Study

3.000 Credits

Must be enrolled in one of the following Levels:

Undergraduate

May not be enrolled in one of the following Classes:

Sophomore Freshman

Prerequisites: AAAS 275 or AAAS 239 or ENGL 239 or

AAAS 106 or HIST 106

Students pursuing the AAAS minor as well as those interested in focusing on some particular area in African and African American Studies may wish to do research on a topic not covered in the regular AAAS curriculum. This course provides an opportunity for students to conduct such research under the direction of a qualified faculty member. The project must be defined in advance in writing. (OC).

American Studies

American Studies is a field of study which examines the core values and ideas that define American culture, while at the same time emphasizing the diversity of its expressions in past and contemporary times. This scholarly inquiry draws upon the content of several disciplines and capitalizes also on the interdisciplinary content already common in courses offered on campus under English, History, Political Science, Sociology, Anthropology and other disciplines. Students in American Studies will not only come to a deeper understanding of their own culture, but will gain an appreciation for the challenges involved in the understanding of any culture. This course of study thus provides a thorough training in the liberal arts and is an excellent preparation for the job market or graduate study in a variety of fields.

PREREOUISITES TO THE MAJOR

For the American Studies major, students are required to complete 4 prerequisite courses for a total of 12 credit hours from the following:

AAAS 275	Intro to Africana Studies
AAST 3671	Intro to Arab American Studies
COMM 220	Survey of Mass Communication
ENGL 239	Intro to African American Literature
ENGL 313	American Lit: Colonial to 1900
HIST 111	American Past I
HIST 112	American Past II
POL 101	Intro to American Government
WGST 303	Introduction to Women's Studies

MAJOR REQUIREMENTS

Upper Level

At the upper level, students must complete 9 courses (a total of 27 credit hours), beginning with AMST 300, the gateway course, which provides an introduction to the subject matter and methods of American Studies.

The remaining 8 courses must be chosen from the tracks listed below. An American Studies advisor will provide guidance to students in their choice of courses, as there are other courses that may be relevant to the American Studies major. Students may be able to count these courses in the major with approval of the faculty advisor by petition. Students are also strongly encouraged to take an internship or independent study course in their senior year.

Track 1. Comparative American Identities

One of the distinctive features of American culture is the multiplicity of subcultures it includes. This makes the process of finding a personal and social identity a more complex process than in other more homogeneous societies. A number of courses can give a further understanding of the historical development and intersection of the variety of racial, ethnic, gender, or class identities in American life. Some representative courses for this track are:

SOC 423	American Social Classes
ENGL 445	20th / 21st Century Women Authors
ENGL 4705	Black Women in Lit, Film, Music
HIST 368	Black Experience in US 1865-present
HIST 370	American Women's History
HIST 384	Immigration to America

Track 2. Work, Technology and Globalization

This track encourages an understanding of American Studies through the world of work and technological innovation. Students will study how work and technology define and shape American culture - both in historic and in contemporary contexts. Students will explore how technology in America shapes both work identities and work environments. They will also consider how the American workforce is affected by the globalization of labor and other resources. Some representative courses for this track are:

STS 300	Introduction to Science and Technology
ECON 321	Labor in the American Economy
WGST 481	Gender and Globalization
SOC 460	America in Global Society

Track 3. Literature, Arts and Culture

This track provides an interdisciplinary approach to the study of literature, music, the visual and performing arts, popular culture, architecture and the environment, with the objective of understanding the arts in relation to major issues and themes in American social, political and historical development. In this track, exploration of the arts offers opportunities to further engage questions central to the American Studies field, such as, what is "American" about this novel, this school of painting, this music? What has been the role of the arts in the evolution of an American national identity? How has art inspired or reflected various American identities? The courses offered under this rubric feature a variety of historical periods as well as a diversity of gender, racial and ethnic special interests. Some representative courses for this track are:

AK1H 361	American Art
ARTH 375	Urban Design Perspectives
ENGL 452	Major 20th /21st Century American Authors
ENGL 469	20 th Century Atf. Amer. Lit
JASS 457	American Cinema
MHIS 331	Music of America
MHIS 120	History of Jazz
SOC 304	Detroit Culture

Track 4. Society, Religion and Politics

This track examines the ways in which both personal and national identity are shaped through a dynamic process of interaction between American citizens and the broad array of civic, religious, and cultural institutions in American society. Within this framework, students will study competing ideas of citizenship and nationhood as they operate in a variety of historical and contemporary contexts. In addition, this same perspective affords students the opportunity to explore regional topics of interest such as Detroit culture, the history and sociology of the auto industry, and the diversity of religious experience in Southeastern Michigan. Some representative courses for this track are:

SOC 441	Sociology of the Auto Industry
HIST 363	Religion in American History 1607-1865
HIST 3695	The American City
POL 304	American Political Thought
POL 360	American Policy Process

NOTES:

- At least 15 of the 27 upper level hours in the American Studies major must be elected at UM-Dearborn.
- Some upper level courses may require additional prerequisites.
- Other courses may be relevant to the American Studies major. Students may be able to count these courses in the major with approval of the faculty advisor by petition.

Advising

American Studies majors are required to consult with an American Studies advisor. To inquire, contact the CASL College-Wide Programs office, 2036 CB, (313) 593-4925.

American Studies (AMST) COURSE OFFERINGS

AMST 300 Comparat. American Identities

3.000 Credits

Must be enrolled in one of the following Levels:

Undergraduate

Prerequisites: COMP 106 or CPAS 40 or COMP 220 or

COMP 270 or COMP 280

This course will confront and complicate the following key questions: what does it mean to be an American? What is American culture? Participants in this course will respond to the questions central to the American Studies field by reading and discussing historical, sociological, literary, artistic, material culture, political, economic, and other sources. Students will use this interdisciplinary study to examine the multiple identities of Americans - as determined by factors such as gender, race, class, ethnicity, and religion. While emphasizing the diversity of American culture, participants will consider some core values and ideas uniting America both in historical and contemporary society. Students will be invited to seek out and share fresh narratives of the American experience.

AMST 390 Topics in American Studies

3.000 Credits

Examination of problems and issues in selected areas of American Studies. Title in the Schedule of Classes will change according to course content. Course may be repeated for credit when specific topics differ.

AMST 499 Ind. Study in Amer Studies

1.000 TO 3.000 Credits

Must be enrolled in one of the following Major fields of study:

American Studies

Must be enrolled in one of the following classes:

Prerequisites: AMST 300 or HIST 3602 or ENGL 306 or SOC 306 or COMM 306

The independent study is designed for American Studies majors to provide an opportunity for pursuing a significant scholarly project that explores a topic of interest in American Studies while synthesizing insights gained from prior coursework in American Studies. The course can be repeated for up to 6 credits.

Anthropology

Anthropology, the comparative study of humanity and culture, seeks to explain both diversity and similarity in human behavior around the world. It is an academic discipline that integrates a number of specialized fields, including Biological and Physical Anthropology, Archaeology, Social and Cultural Anthropology, Linguistic Anthropology, and Applied Studies of human problems.

The University of Michigan-Dearborn program emphasizes anthropology's unique concern with the inter-dependence of human biology and culture. Anthropology at UM-Dearborn provides the foundation for a broad understanding of human behavior and values for students interested in a truly liberal education.

Anthropology is excellent preparation for all careers dealing with human beings. The holistic approach to culture and biology is especially useful for careers in the medical sciences, while the cross-cultural exposure is essential preparation for students going into professions such as education, business, human services or international development.

An advanced degree in anthropology or archaeology (usually a Ph.D.) ordinarily leads to a career as a university anthropologist or archaeologist. Increasingly, though, professional anthropologists work as independent consultants.

MAJOR REQUIREMENTS

Required courses

ANTH 101	Introduction to Anthropology3	hrs
ANTH 202	World Cultures3	hrs

*Three courses emphasizing the interaction of culture and biology (325, 331, 336, 340, 341, 345, 406, 409, 415, 430, 435, 459 and 482) must be included among these 24 hours. Students are encouraged to take ANTH 331 prior to enrolling in the courses with the strongest biological emphasis (i.e., 336, 340, 341, and 409)

Mentor Program

The anthropology program sponsors a mentor program in which junior and senior majors assist faculty in teaching introductory classes. They help students use the library, guide them through written assignments and exam preparation, and sometimes lecture or do demonstrations before the class. Participants regularly count this among the high points of their undergraduate experience.

Field School

Summer field schools in anthropology provide excellent training and experience for students interested in furthering their anthropological background and understanding. Field schools provide students with training in anthropological methods in archaeology, human paleontology, linguistics, primatology, and socio-cultural anthropology. Students have attended summer field schools in Australia, Jordan, Kenya, Peru, Guatemala, Costa Rica, Mexico, Ireland, the United States and elsewhere. Limited scholarship funds are available to students to help subsidize the cost of attending one of these programs. The scholarship program is competitive, and preference is given to students majoring or minoring in anthropology.

Cognates 6 hrs

Students will elect six hours in upper-level courses from the following disciplines: geography, psychology, sociology, linguistics, biology, economics, philosophy, history, English, art history, and music history. Courses from other disciplines may be considered by petition.

NOTES:

- At least 15 of the 24 upper level hours in ANTH must be elected at UM-Dearborn.
- No more than 6 hours of independent study and no more than 6 hours of independent readings within the Behavioral Sciences may be counted in the 120 hours required for graduation.

MINOR OR BGS/LIBS AREA OF FOCUS

A minor or area of focus consists of ANTH 101 and 12 credit hours of upper- level credit in anthropology.

Anthropology (ANTH) COURSE OFFERINGS

ANTH 101 Introduction to Anthropology

3.000 Credits

A survey of anthropology which introduces the fundamental concepts and perspectives of the field. (F,W).

ANTH 202 World Cultures

3.000 Credits

A comparative study of politics, economics, family and religion in selected cultures--foraging, tribal, peasant, and industrial. Provides a survey of theoretical concepts in social and cultural anthropology through the comparison of ethnographic case studies. ANTH 101 recommended. (YR).

ANTH 303 Intro To Women's & Gender Stud

3.000 Credits

May not be enrolled in one of the following Classes: Freshman

This course provides an interdisciplinary overview of the key theories and topics in Women's and Gender Studies. Special attention is given to how gender intersects with class, race, nationality, religion and sexuality to structure women's and men's lives. Students are also introduced to methods of gender analysis and will begin to apply these methods to topics such as women and health, gender roles in the family, violence against women, and gendered images in the mass media.

ANTH 315 Body Image and Culture

3.000 Credits

Prerequisites: ANTH 101 or WST 275 or WGST 275 or WGST 303 or PSYC 275 or SOC 275 or ANTH 275 or HUM 275 or PSYC 303 or SOC 303 or ANTH 303 or HUM 275

This course examines the biological and sociocultural construction of body image in both men and women. We explore such cultural and social practices as nudity, tattooing, piercing, scarification, dietary habits, physical activity and sports performance and their associated myths and realities. We explore how the human body is a terrain of contested meaning within society. The course provides an examination of the causes and consequences of women's poor body image, contemporary and historically. Course materials include case studies from North America, Europe, Africa, Asia and the Pacific.

ANTH 320 Culture and Int'l Business

3.000 Credits

Lectures, exercises and case studies explore anthropological concepts needed by managers in multinational and multi-ethnic work environments. Topics include the world economy in anthropological perspective, national culture and business culture, implicit values about work and time, and cross-cultural communication. Special emphasis is given to Japan and the Third World. ANTH 101 or SOC 200 recommended. (AY).

ANTH 325 Anth of Health and Environment

3.000 Credits

Cultural conflicts over pollution, disease etiology, development and natural resources often originate and are played out in local ecosystems. Anthropologists are increasingly becoming involved as researchers, developers, and activists in these cultural strifes. This course reviews the work of environmental and medical anthropologists as well as other critical scholars who unravel the values, meanings and ideologies associated with ecological issues in given localities. Drawing on theoretical advances in critical medical anthropology, environmental anthropology and applied anthropology the course seeks to improve the knowledge and abilities of student anthropologists in their environmental health work.

ANTH 331 Human Evolution

3.000 Credits

A survey of biological anthropology. This course is a prerequisite for all other upper-division bioanthropology courses. Topics include the human place in nature, primate biology and behavior, evolution theory, genetics, the fossil evidence for human evolution, human growth, and biocultural adaptation to the environment. (YR).

ANTH 336 Introduction to Primates

3.000 Credits

Introduction to the fundamentals of primate paleontology, evolution, morphology, and behavior with an emphasis on understanding the evolution of primate and human social behavior. (YR).

ANTH 340 Race and Evolution

3.000 Credits

An evolutionary survey of the biological differences among human populations in response to such factors as climate, culture, disease, nutrition, and urbanization. The meaning of racial variation is discussed in terms of adaptation to environmental stress. "Race" is rejected; racism is discussed. (AY).

ANTH 341 Human Paleontology

3.000 Credits

A survey of the evolutionary history of life through the study of fossils and collaborative field and laboratory material. The evolution of humans and the primate order of mammals is emphasized. (AY).

ANTH 345 Cultural Ecology and Evolution

3.000 Credits

An introduction to the study of human ecology. This course employs the case-study method to develop an evolutionary and biocultural perspective on the relationship between human beings and their environments. (YR).

ANTH 350 Prehistoric Archaeology

3.000 Credits

Must be enrolled in one of the following classes:

Sophomore

Senior

Junior

An account of the methods and findings of modern archaeological science in the Old and New World. Methods considered typically include paleontology, dating techniques, stratigraphy, etc. Sophomore standing; ANTH 101 highly recommended. (YR).

ANTH 360 Myth, Magic, and Mind

3.000 Credits

Must be enrolled in one of the following classes:

Sophomore

Senior

Junior

A broadly based introduction to the range of human mythical and magical traditions. Sophomore standing; ANTH 101 highly recommended. (YR).

ANTH 370 Indians of North America

3.000 Credits

Must be enrolled in one of the following classes:

Sophomore

Senior

Junior

The origin and development of cultures north of Mexico. A study of various culture areas and representative tribes at contact, and a political-economic analysis of the fate of American Indians since contact. The perspectives of Native American peoples are taken into account through books, novels, and poetry. Sophomore standing; ANTH 101 highly recommended. (YR).

ANTH 371 African Exper in the Americas

3.000 Credits

This course is a survey of African populations and cultures from 1500 to the present throughout the Americas. The focus is on Caribbean and Latin American contexts of these populations, but comparisons to North America will be made. Topics include slavery, the relationship between Africans and indigenous populations, religions, politics, music, and questions of race and ethnicity. Readings will include ethnographic description, history, biography and fiction. (YR).

ANTH 372 Anthropology of Latin America

3.000 Credits

The course is a survey of Latin American people and cultures from the conquest to the present. It will focus on culture change and sources of conflict by analyzing topics that include the economy, kinship, ethnicity, social stratification, gender, politics, religion, and the arts. Readings will include ethnographic description, history, biography, contemporary fiction. (YR).

ANTH 373 Anth Persp on the Middle East

3.000 Credits

This course examines Middle Eastern society from a cultural perspective. Topics discussed include kinship, gender, popular and orthodox Islam, nationalism, mass media, urbanization, and historical relations with the West. The course ends with an examination of the Arab immigrant experience in Metro Detroit. (AY).

ANTH 374 Anthropology of Europe

3.000 Credits

Introduces anthropological approaches to European culture, emphasizing ethnographies and community studies as well as social history from the classical and medieval to the present. Will include cultural implications of industrialism and urbanization. May focus on Western or Eastern Europe during a given semester. (AY).

ANTH 376 Power & Privilege in SE Mich

3.000 Credits

May not be enrolled in one of the following Classes:

Graduate

Freshman

An examination of the social and cultural systems that lead to power, privilege, and inequality in American culture. This course takes a local perspective, analyzing systems of inequality as related to such factors as race, ethnicity, gender, social class and sexual orientations. Field trips to local sites are included. (YR)

ANTH 390 Topics in Anthropology

3.000 Credits

Prerequisites: ANTH 101

Examination of problems and issues in selected areas of anthropology. Title in Schedule of Classes will change according to content. Course may be repeated for credit when specific topics differ. (OC).

ANTH 391 Topics in Anthropology

3.000 Credits

Examination of problems and issues in selected areas of anthropology. Title in Schedule of Classes will change according to content. Course may be repeated for credit when specific topics differ. Junior standing required. (OC).

ANTH 397 Honors Tutorial

3.000 Credits

Must be enrolled in one of the following classes:

Sophomore

Senior

Junior

Advanced seminar on selected topics offered through honors program. (OC).

ANTH 398 Independent Studies in Anthr

1.000 TO 6.000 Credits

Readings or analytical assignments in anthropology in accordance with the needs and interests of those enrolled and agreed upon by the student and instructor. Permission of instructor required. (F,W).

ANTH 399 Independent Studies in Anthr

1.000 TO 6.000 Credits Prerequisites: ANTH 101

Readings or analytical assignments in anthropology in accordance with the needs and interest of those enrolled and agreed upon by the student and instructor. (F,W).

ANTH 406 Culture and Sexuality

3.000 Credits

Prerequisites: ANTH 101 or WST 275 or WGST 275 or WGST 303 or PSYC 275 or SOC 275 or ANTH 275 or HUM 275 or PSYC 303 or SOC 303 or ANTH 303 or **HUM 303**

The study of women, men, children, socialization practices, and the genesis of sex roles cross-culturally. Students cannot receive credit for both ANTH 406 and ANTH 506. ANTH 101 recommended. (YR).

ANTH 407 Sexual Praxis and Theory

3.000 Credits

Prerequisites: WST 275 or WGST 275 or SOC 443 or PSYC 405 or ANTH 406 or ANTH 101 or WGST 303 or PSYC 303 or SOC 303 or ANTH 303 or HUM 303 or PSYC 275 or SOC 275 or ANTH 275 or HUM 275

This course will offer an overview of sexual differences including: the socio-cultural construction of gender, sexual behavior, and orientation; sex and sexualities in language and literature; and diversity by race, class, and cultural heritage. These topics will enable students to understand human sexuality within and across a continuum removing notions of duality, or polarity, in sexual behaviors and orientations. Examples both from within Western society and from non-Western societies may be used to further this position. Theoretical perspectives may encompass sociological and anthropological work, literary theory and criticism, queer theory, and multi-disciplinary discussions/discourse. Texts may include: Sex and the Machine: Readings in Culture, Gender and Technology, The Anatomy of Love, The Lesbian and Gay Studies Reader, Second Skins: The Body Narratives of Transexuality, and Lesbian and Gay Marriage.

ANTH 409 Human Body, Growth & Health

3.000 Credits

Must be enrolled in one of the following classes:

Senior

Junior

This course provides an advanced undergraduate introduction to the topic of human growth and shows how human growth can be a reliable measure of the psychological, social, economic and moral conditions of a society. A major theme will be the interplay of biology and culture in shaping the patterns of human growth and, consequently, the health of populations and individuals.

ANTH 412 Men and Masculinities

3.000 Credits

Must be enrolled in one of the following Levels:

Undergraduate

May not be enrolled in one of the following Classes:

Sophomore

Freshman

Prerequisites: SOC 200 or SOC 201 or ANTH 101 or WST 275 or WGST 275 or PSYC 275 or SOC 275 or ANTH 275 or HUM 275 or WGST 303 or PSYC 303 or SOC 303 or ANTH 303 or HUM 303

This course addresses the question, "What is a man?", in various historical, cross-cultural, and contemporary contexts. A major focus on the social and cultural factors that underlie and shape conceptions of manhood and masculinity in America as well as in a variety of societies around the globe. (AY).

ANTH 415 Nutrition and Health

3.000 Credits

Must be enrolled in one of the following classes:

Senior

Junior

The influence of nutrition on physical and mental development from conception to adulthood. Topics include: 1) the definition and function of the essential nutrients for people, 2) basic principles of human growth and development, 3) the causes and consequences of under- and overnutrition, 4) feeding practices for infants and children and the development of food habits, 5) nutrient and food problems in the local region and in global perspective. Students cannot receive credit for both ANTH 415 and ANTH 515. (YR).

ANTH 420 Kinship and Marriage

3.000 Credits

Must be enrolled in one of the following Levels:

Undergraduate

Prerequisites: ANTH 101 or ANTH 201

A study of the diversity of kinship and marriage systems, and of the history of kinship theory which has played a seminal role in the development of general anthropological theory. Students cannot receive credit for both ANTH 420 and ANTH 520. (OC).

ANTH 421 Education and Culture

3.000 Credits

Must be enrolled in one of the following Levels:

Undergraduate

How and where do people learn? Why are there schools, and how is schooling culturally organized? Why do school experiences tend to vary by "race", social class, and gender? What insights does anthropology bring to practical problems of learning and teaching? Students cannot receive credit for both ANTH 421 and ANTH 521. ANTH 101 or SOC 200 recommended. (AY).

ANTH 422 Narrative Anthropology

3.000 Credits

Must be enrolled in one of the following classes:

Senior

Junior

A consideration of alternative approaches to gaining ethnographic understandings by reading anthropological novels (Bohannan, LeGuin), fiction and poetry by non-western authors (Silko, Achebe), and travel writing (Chatwin, O'Hanlon). Junior standing; ANTH 101 highly recommended. (YR).

ANTH 425 Language and Society

3.000 Credits

Must be enrolled in one of the following Levels:

Undergraduate

An examination of the social functions of speech through readings and exercises, emphasizing schools and other applied settings. Topics include ethnic and social class dialects, codeswitching, and the organization of conversation. Students cannot receive credit for both ANTH 425 and ANTH 525. (OC).

ANTH 430 Medical Anthropology

3.000 Credits

Must be enrolled in one of the following classes:

Sophomore

Senior

Junior

A comprehensive examination of how culture mediates processes of illness and healing. Comparative materials are examined which provide a context for an anthropological analysis of modern biomedicine. Sophomore standing; ANTH 101 highly recommended. (YR).

ANTH 435 Human Genetics

3.000 Credits

An analysis of human genetic variation in terms of the theory of population genetics considers such polymorphisms as blood groups and variant hemoglobins as well as morphological characters like stature, skin color, and so on. Emphasis is on the genetics of human populations and particular attention is drawn to cultural factors affecting human biology. (OC).

ANTH 440 Religion and Culture

3.000 Credits

An introduction to the comparative study of religious systems. Explores religious beliefs and practices in non-Western cultures; surveys theoretical approaches to the study of religion; and discusses how religions grow, develop, and change. ANTH 101 recommended. (YR).

ANTH 444 Political Anthropology

Must be enrolled in one of the following classes:

Sophomore

Senior

Junior

A consideration of some of the major anthropological views of politics, focusing on the relations of power to kinship, stratification, and religion in both states and stateless societies. Sophomore standing; ANTH 101 highly recommended. (OC).

ANTH 450 Anthropological Theory

3.000 Credits

Must be enrolled in one of the following classes:

Sophomore

Senior

Junior

An historical account of the development of anthropological theory, emphasizing the continuity between consecutive styles of explanation. Substantial consideration of recent theoretical developments in structuralism and ecological analysis. Sophomore standing; ANTH 101 highly recommended. (OC).

ANTH 455 Immigrant Cultures and Gender

3.000 Credits

Must be enrolled in one of the following classes:

Senior

Junior

The history and culture of immigration since 1850, including: (1) formation and perseverance of immigrant communities and interethnic boundaries; (2) relations between the homeland and the immigrant; and (3) impact of migration on family life and gender roles. Students cannot receive credit for both ANTH 455 and ANTH 555. ANTH 101 recommended. (OC).

ANTH 459 Human Osteology

3.000 Credits

May not be enrolled in one of the following Classes:

Sophomore Freshman

Prerequisites: ANTH 331 or BIOL 130

An introduction to the methods and theory of human osteology, bone history, pathology, biomechanics and taphonomy. Osteology lecture topics include age, sex, stature and ancestry estimation, the problems of commingling and differential disease diagnosis. The lab component provides hands-on skills. The course investigates how the forensic anthropologist can apply skills to human rights and police investigations and the nuances distinguishing theoretical approaches of forensic anthropology and bioarchaeology.

ANTH 460 Economic Anthropology

3.000 Credits

Must be enrolled in one of the following classes:

Sophomore

Senior

Junior

A comparative examination of the basis of political economy. Economic problems (the production and distribution of goods and services) will be considered in ecological, evolutionary, and political terms. The primary emphasis will be on traditional economies, on production and exchange at the household level, and on the effect of modern market systems on indigenous cultures. (OC).

ANTH 470 Doing Anthropology

3.000 Credits

Must be enrolled in one of the following Levels:

Undergraduate

A practicum of anthropological theory and method, including ethnographic interview and participant observation. Students will conduct field research and evaluate results with the help of classmates. Students cannot receive credit for both ANTH 470 and ANTH 570. ANTH 101 or SOC 200 highly recommended. (YR).

ANTH 477 Ethnographic Film

3.000 Credits

Prerequisites: FILM 248 or HUM 248 or ANTH 101 or ENGL 248 or JASS 248

This course will analyze ethnographic films as a medium for the construction of meaning in and across cultures. It will teach students to understand how the putatively "real" content of documentary film creates a mixture of fantasy, news and "science." Covering texts as varied as National Geographic photographic layouts, traditional ethnographic films made by anthropologists, and auto-ethnographies of cultural groups such as Native Americans and the Trobriand Islanders of Papua, New Guinea, the course will aim to deconstruct such oppositions as indigene vs. alien, us vs. them, and self-vs. other. Students cannot receive credit for both ANTH 477 and ANTH 577. (AY).

ANTH 481 Gender and Globalization

3.000 Credits

Must be enrolled in one of the following Levels:

Undergraduate

Must be enrolled in one of the following Colleges:

Coll of Arts, Sciences&Letters

May not be enrolled in one of the following Classes:

Sophomore

Freshman

Prerequisites: ANTH 303 or HUM 303 or SOC 303 or

PSYC 303 or WGST 303

Mass media, politics, and academia are full of references to globalization, and a future "world without borders." This interdisciplinary course considers the implication of globalization for women's lives, gender relations, and feminism. Topics covered include the global factory, cross-cultural consumption, human rights, global communications, economic restructuring, nationalism, and environmental challenges. Rather than survey international women's movements, this course explores how globalization reformulates identities and locations and the political possibilities they create. (AY).

ANTH 482 Psychological Anthropology

3.000 Credits

Cross-cultural comparison of theories of human nature, including psychoanalytic anthropology, culture-and-personality, and other theories from Western science, as well as non-Western theories about such concepts as the person, emotions and mental illness. Students cannot receive credit for both ANTH 482 and ANTH 582. ANTH 101 and PSYC 170 or 171 highly recommended. (YR).

ANTH 498 Independent Study

1.000 TO 6.000 Credits

Readings or analytical assignments in anthropology in accordance with the interests and needs of students enrolled and agreed upon by the instructor and student. Written permission of instructor required.

ANTH 499 Readings in Anthropology

1.000 TO 3.000 Credits

For students desiring study not available in the regular course offerings. Students cannot receive credit for both ANTH 499 and ANTH 599. (F,W)

Applied Arts (ART)COURSE OFFERINGS

ART 201 Beginning Painting

3.000 Credits

Lectures on the fundamentals of painting along with work in the studio. Basic ideas of structure, composition, and color are explored through individual and group instruction. Students work from still-life and from the model. This is a broad introductory painting course designed for the student unfamiliar with fundamentals of design and color. Material: acrylics. (YR).

ART 202 Beginning Drawing

3.000 Credits

Lectures alternate with studio work in the investigation of drawing fundamentals. Students receive individual and group instruction as they work from still life setups, nature, and from the model. Emphasis is placed on the development of critical skills and perceptual drawing techniques for students with little or no studio experience. Pastel, charcoal, conte, pencil, and inks will be used. (YR).

ART 204 Beginning Watercolor

3.000 Credits

Through lectures and studio work, students will explore the fundamentals of watercolor painting. To demonstrate the dynamics of the medium, a variety of approaches and techniques will be used, including realistic, abstract, and experimental painting. Subject matter includes still life, the figure, possible outdoor sketching and painting from the imagination. All levels of students are given individual guidance. (YR).

ART 206 Basic Design-Color

3.000 Credits

Students will be introduced to the complex and diverse subject of color. The areas of study include principles and theories of color, practical application and technique, and the phenomenon of color interaction. The art elements (line, shape, value, space, form, and texture) and design principles will be applied within specific assignments. Compositional concerns and creative problem solving will be emphasized. (YR).

ART 220 Intro to Digital Photography

3.000 Credits

This course focuses on the creative use of digital imaging software and hardware. Students are exposed to contemporary artists and professionals working in traditional and digital photography. Students also consider critical issues surrounding the aesthetic, ethical and theoretical aspects of digital imaging technology and current photographic practice. Application of these approaches, processes and concepts are discussed in terms of their relevance within and beyond art practices, including art as personal expression and as a professional field. Each assignment engages students' critical thinking as they explore the artistic possibilities of digital photography while expanding their technological and aesthetic knowledge. During project critiques, students practice articulating their thought processes in relation to their own work and the work of their peers.

ART 306 Intermediate Design-Color

3.000 Credits

Must be enrolled in one of the following Levels:

Undergraduate Prerequisites: ART 206

The design emphasis will be on line and movement, positive/negative space, push/pull dynamics and a study of the nature of grids. The color emphasis will focus on tertiary colors, the effect of variations in color intensity and tonal contrast. There will also be a study of various twentieth century design movements such as the Russian Avant Garde, Constructivisim and the Bauhaus, with some assignments modeled on these styles.

ART 321 Intermediate Painting

3.000 Credits

Prerequisites: ART 201

Various painting approaches, styles and concepts are explored beyond the basic level through lectures and studio work. Students are encouraged to develop their own personal style as they master new techniques and types of subject matter. This course is repeatable once in order for students to develop their skills. When repeating, the content and assignments are determined in consultation with instructor.

ART 322 Intermediate Drawing

3.000 Credits

Prerequisites: ART 202

The fundamentals of drawing are refined beyond the basic level in a variety of media through lectures and studio work. Students are encouraged to develop their own personal style as they master new techniques and types of subject matter. This course is repeatable once in order for students to develop their skills. When repeating, the content and assignments are determined in consultation with instructor.

ART 323 Figure Drawing

3.000 Credits

Prerequisites: ART 202

This course is designed to teach each student about the complex human form through the act of observation, drawing, and memorization of specific anatomical terms. Emphasis will be on proportion, anatomy, composition, and expression. Students will draw from a live model.

ART 324 Intermediate Watercolor

3.000 Credits

Prerequisites: ART 204

Various watercolor painting approaches, styles and concepts are explored beyond the basic level through lectures and studio work. Students are encouraged to develop their own personal style as they master new techniques and types of subject matter (still life, the figure, landscape and painting from the imagination). This course is repeatable once in order for students to develop their skills. When repeating, the content and assignments are determined in consultation with instructor.

ART 332 Creating the Graphic Novel

3.000 Credits

Must be enrolled in one of the following classes:

Senior Sophomore Freshman Junior

Prerequisites: ART 202 or ART 206

This course focuses on the creation of an original graphic novel from inception to fully developed story. Students work on character, plot development, dialogue, drawing style, and layout planning, and are encouraged to introduce any cross-disciplinary techniques such as digital applications when appropriate. Lectures and readings consider contemporary media. This course is repeatable once in order for students to develop their skills. When repeating, the content and assignments are determined in consultation with instructor.

ART 360 Introduction to Printmaking

3.000 Credits

Prerequisites: ART 201 or ART 202 or ART 204 or ART 206

This studio course is an introduction to the fundamentals of printmaking. The basic techniques of intaglio, lino-cut, chine chole, lithography and monotype printing methods are utilized in projects. As a deeply interdisciplinary practice, printmaking engages with other artistic media of drawing, painting, and collage. Each student is encouraged to incorporate other materials based on her/his major, interests or expertise.

ART 390 Topics in Applied Art

3.000 Credits

Must be enrolled in one of the following Levels: Undergraduate

Study of various media and techniques in selected areas of applied art. Title as listed in the Schedule of Classes will change according to content. Course may be repeated for credit when the topics differ.

ART 399 Independent Studies in App Art

1.000 TO 3.000 Credits

Readings or analytical assignments in applied art in accordance with the needs and interests of those enrolled and agreed upon by the student and the instructor. (F,W).

Applied Music (MAPP) COURSE OFFERINGS

MAPP 120 Private Instruct in App Music 1.000 Credits

For students who desire credit for private lessons on a musical instrument of voice. The lessons are taken outside the University from an instructor approved by the music faculty of the University. Interested students should contact the music faculty at the beginning of the term to arrange for a teacher. 8 hours of instruction over 16 weeks are required for 1 hour of credit. This course may be repeated for up to 8 hours of credit. The student pays the instructor's fee and also tuition for university credit. (F,W)

MAPP 125 Class Piano I

2.000 Credits

Development of skills at the keyboard in harmonization, improvisation, sight reading, accompanying, repertoire, and technique. Emphasis on group learning for beginners. (OC).

MAPP 126 Class Piano II

2.000 Credits

Enhancement of skills at the keyboard in harmonization, improvisation, sight reading, accompanying, repertoire, and technique. Emphasis on group learning for beginners. (OC).

MAPP 135 Class Guitar I

2.000 Credits

Development of skills in reading chord tablature, playing basic accompaniments to folk songs using various strumming and fingerpicking techniques, basic theory, reading, playing rhythms and notes. Emphasis on group learning for beginners. (OC).

MAPP 136 Class Guitar II

2.000 Credits

Enhancement of skills in reading chord tablature, playing basic accompaniments to folk songs using various strumming and fingerpicking techniques, basic theory, reading, playing rhythms and notes. Emphasis on group learning for beginners. (OC).

MAPP 138 Symphonic Band

1.000 Credits

Credit may be earned by students who are regular members of approved symphonic bands.

MAPP 145 Choir

1.000 Credits

One hour of credit per semester may be earned by students who are members of the UM-Dearborn choral ensemble. There will be a concert performance every semester which will be open to the general public. (F,W).

MAPP 299 Independent St in Appl Music

1.000 TO 2.000 Credits

Prerequisites: MAPP 126 or MAPP 136

This course assumes a sound knowledge of basic technique and music theory, as covered in MAPP 126 or MAPP 136. Material covered in the course is selected in accordance with the needs and interests of those enrolled and agreed upon by the instructor and the student.

MAPP 320 Adv Private Instr in App Music

1.000 TO 2.000 Credits

For advanced students in applied music. The lessons are taken outside the University from an instructor approved by the music faculty of the University. Interested students should contact the music faculty at the beginning of the term to arrange for a teacher. 8 hours of instruction over 16 weeks are required for 1 hour of credit. This course may be repeated for up to 8 hours of credit. Each student is required to pass a jury exam or perform publicly during each semester. The student pays the instructor's fee and also pays tuition for university credit.

MAPP 399 Independent St in Appl Music

1.000 TO 2.000 Credits Prerequisites: MAPP 299

This course is intended for those students who have taken MAPP 299, or students at an advanced level who have previously studied piano or guitar formally for several years. Material covered in the course is selected in accordance with the needs and interests of those enrolled and agreed upon by the instructor and the student.

Applied Statistics

MINOR OR BGS/LIBS AREA OF FOCUS ONLY

A minor consists of 12 hours of upper-division credit or graduate credit (300 or above level courses) in Applied Statistics. Only one of STAT 301, STAT 325 and STAT 363 can be used to satisfy this requirement. Students with majors in mathematics, the natural sciences, or the social sciences may find the minor in Applied Statistics to be a valuable supplement to their major.

Applied Statistics (STAT) COURSE OFFERINGS

STAT 301 Biostatistics I

3.000 Credits

Prerequisites: MATH 113 or MATH 115

Samples and populations, quantitative vs. categorical data; clinical vs. epidemiological studies; comparative displays and analysis; linear regression. Estimation of effect size is emphasized along with the P-value for a statistical test: difference of means in simple comparative data together with a confidence interval and t-test; relative risk for appropriate categorical data; slope of a regression line together with a confidence interval and t-test. Study design is emphasized: clinical trials in experimental settings; case-control and cohort studies in epidemiological settings. Students are expected to make presentations interpreting and reporting the results of research from the literature. Students can receive credit for only one of MATH 301, MATH 363, STAT 301, CRJ 383, SOC 383, STAT 325.

STAT 325 Applied Statistics I

3.000 Credits

Prerequisites: MATH 113 or MATH 115 or MPLS 116

A study of the fundamental concepts and methods of probability and statistics. Topics include counting problems, discrete probability, random variables and probability distributions, special distributions, sampling distributions, the central limit theorem, introduction to hypothesis testing, and the use of statistical computer packages for data analysis. Students can receive credit for only one of MATH 363, STAT 363, SOC 383 and STAT 325. (F,W).

STAT 363 Introduction to Statistics

3.000 Credits

Frequency distribution and descriptive measures. Populations, sampling and statistical inference. Elementary probability and linear regression. Use of statistical computer packages to analyze data. Students can receive credit for only one of STAT 325, STAT 363, MATH 363, and SOC 383. Students intending to elect this course should have had at least one year of high school algebra. (F,W,S).

STAT 390 Topics in Applied Statistics

Undergraduate

3.000 Credits

Must be enrolled in one of the following Levels:

A course designed to offer selected topics in applied statistics. The specific topic or topics will be announced together with the prerequisites when offered. Course may be repeated for credit when specific topics differ. (OC)

STAT 425 Applied Statistics II

3.000 Credits

Prerequisites: STAT 325 or STAT 363 or MATH 363 or SOC 383

A continuation of STAT 325. This course treats both the principles and applications of statistics. Elementary theory of estimation and hypothesis testing, the use of the normal, chisquare, F and t distributions in statistics problems will be covered. Other topics are selected from regression and correlation, the design of experiments, analysis of variance, analysis of categorized data, nonparametric inference, and sample surveys. (W).

STAT 430 Applied Regression Analysis

3.000 Credits

Prerequisites: STAT 425

Topics include single variable linear regression, multiple linear regression and polynomial regression. Model checking techniques based on analysis of residuals will be emphasized. Remedies to model inadequacies such as transformations will be covered. Basic time series analysis and forecasting using moving averages and autoregressive models with prediction errors are covered. Statistical packages will be used. Students cannot receive credit for both STAT 430 and STAT 530.

STAT 440 Design and Analysis of Expermt

3.000 Credits

Prerequisites: STAT 425

An introduction to the basic methods of designed experimentation. Fixed and random effects models together with the analysis of variance techniques will be developed. Specialized designs including randomized blocks, latin squares, nested, full and fractional factorials will be studied. A statistical computer package will be used. (W).

Arab American Studies

MINOR OR BGS/LIBS AREA OF FOCUS ONLY

Dearborn and its neighbors are home to one of the largest-- and most diverse-- communities of people of Arab descent outside of the Middle East. The Center for Arab American Studies at UM-Dearborn encourages students to develop a coherent understanding of the unique circumstances surrounding the incorporation of Arab immigrants into American society; the broad range of diversity found within Arab American communities; how the Arab American experience is shaped by local, national and international conditions; and the contributions of Arab Americans to American culture and history.

A minor or area of focus requires 15 credit hours of upper level coursework including AAST 3150 and 12 additional credits of any 300/400; 3000/4000 level AAST courses. Other disciplines offer courses relevant to the AAST minor. Students will be able to count one such course toward the minor with approval of the AAST faculty advisor by petition.

Arab American Studies (AAST) COURSE OFFERINGS

AAST 238 Intro to Lit: Arab American

3.000 Credits

Prerequisites: COMP 106 or COMP 220 or COMP 270 or

COMP 280 or CPAS 40

This course in an introduction to Arab American literature, its historical and cultural contexts and contemporary relevance. Topics will include the literary and cultural productions of Arab immigrants, their transnational vision, and explorations of such concepts as home, memory and identity; the literary, dramatic and poetic responses of Arab American writers to 9/11 and the ongoing the war on terror; the role Arab American literature in offering different versions of Arab and Arab American lives and experiences from the one circulated in mainstream media, Hollywood cinema and culture.

AAST 267 Arab & Arab American Workshop

3.000 Credits

Prerequisites: COMP 106 or COMP 220 or COMP 270 or

COMP 280 or CPAS 40

The Arab and Arab American Writers Workshop is a creative writing workshop focusing on poetry and fiction. Students will explore Arab American literature, writers, and themes. Students are expected to work on their own manuscripts as well as critique outside readings. The workshop will be conducted under the guidance of Arab and Arab American faculty and is open to all students.

AAST 3150 Intro to Arab American Studies

3.000 Credits

Must be enrolled in one of the following classes:

Senior

Sophomore

Freshman

Junior

This course explores the local, national, and global conditions through which Arab American identity and its alternatives take shape. It introduces students to humanities and social science approaches to the field of Arab American Studies.

AAST 3634 History of Islam in the US

3.000 Credits

Must be enrolled in one of the following classes:

Senior

Sophomore

Freshman

Junior

This course traces the long history of Islam and of Muslims in the United States (1730s-present), paying careful attention to the interaction among Muslims across the dividing lines of race, gender, immigrant generations, sect, political orientation, and class, and between Muslims and other Americans.

AAST 3676 Arab Americans Since 1890

3.000 Credits

This is a survey of immigration from the Arab Middle East from 1890 to the present. Readings from available scholarship, discussions, and reports facilitate exploring the Arabic-speaking

immigrants early and recent experiences as art of U.S. society, including settlement, work, worship, military service, leisure, intellectual life, and primary and formal affiliations across the U.S.

AAST 381 Intro to Postcolonial Studies

3.000 Credits

Prerequisites: (COMP 106 or CPAS 40 or COMP 220 or COMP 280 or COMP 270) and ENGL 200 or ENGL 230 or ENGL 231 or ENGL 232 or ENGL 233 or ENGL 235 or ENGL 236 or ENGL 237 or ENGL 239 or ENGL 240 or ENGL 250

This course offers a general introduction to Postcolonial Studies - a field of cultural inquiry that questions how personal identity (specifically race, language, and ethnicity) shapes, and is shaped by, the politics of colonization and nationalism. Students will clarify the subject of Postcolonial Studies by examining a variety of cultural and linguistic objects (literature, film, TV-journalism, slave- and middle-passage-narrative, and political manifesto) from a variety of cultural perspectives (Arab American, Anglo-Indian, West African, and Caribbean).

AAST 390 Topics in Arab American Study

3.000 Credits

Examination of various topics dealing with Arab American Studies. Titles will change according to content and schedule of classes. Course may be repeated for credit when specific topic differs. (OC).

AAST 4677 Arab American Identity

3.000 Credits

Must be enrolled in one of the following Levels:

Undergraduate

Prerequisites: HIST 300

Extensive discussions and critical analysis of the main markers of Arab American identity formation from late nineteenth century to present. This seminar provides in-depth assessments of immigrant narratives from various sources and disciplinary approaches on specific racial, ethnic, and gender experiences within the larger U.S. context. Additional assignments distinguish the graduate version of this course from the undergraduate version.

AAST 4678 Middle Eastern Diasporas

3.000 Credits

May not be enrolled in one of the following Classes:

Sophomore

Freshman

Prerequisites: AAST 3150 or HIST 300

This course explores the diasporas of Arabs, Turks, Assyrians, and Iranians living in Europe and the Americas that have occurred since the 1880s. It pays careful attention to how "aspects of diaspora" shape, mimic, transect, and undermine the political and economic regimes of which they are part. The reception of Middle Eastern communities in different national contexts and historical periods receive special attention as do their adaptive strategies as religious, ethnic, gendered, and racialized minorities. Those enrolled in the graduate level of the course pursue additional readings and assignments.

AAST 473 Arab American Women Writers

3.000 Credits

May not be enrolled in one of the following Classes: Freshman This course examines the literary and cultural contributions of Arab and Arab American women novelists, poets, filmmakers and artists to the development and consolidation of cultures of understanding and coexistence; explores the relations between, among others, citizenship and belonging, race and national security, gender and geographical mobility, and ethnic minorities and mainstream consciousness; stresses how literary and artistic productions of Arab and Arab American women writers and artists fosters alternative visions of socio-cultural coexistence, dialogue, and hospitality by means of technical and stylistic experimental and renovation. For graduate credit take AAST 573. Students cannot receive credit for both AAST 473 and AAST 573.

AAST 490 Topics in Arab Amer Studies

3.000 Credits

The content of this course will vary. All courses which will run under this number will cover Arab American issues.

Arabic Studies

MINOR OR BGS/LIBS AREA OF FOCUS ONLY

A minor consists of 12 hours of upper-level credit (four courses at the 300/3000; 400/4000 level) in Arabic (ARBC) (excluding ARBC 350).

Prerequisites to the Minor

Non-native speakers of Arabic must successfully complete Arabic 202: Intermediate Arabic II (at or outside UM-Dearborn) or demonstrate equivalent Arabic Proficiency Exam offered by LCC Department.

Arabic (ARBC) COURSE OFFERINGS

ARBC 101 Beginning Arabic I

4.000 Credits

First course in the two-course elementary Arabic sequence. Listening comprehension, speaking, reading, writing, and culture are emphasized. Course materials promote the use of language to communicate with others and function in Arabic culture. (F,W,S).

ARBC 102 Beginning Arabic II

4.000 Credits

Prerequisites: ARBC 101 or MCL 101 or APL 102 or APL 201 or APL 202 or APL 301 or APL 302

Second course in the two-course elementary sequence. Continued emphasis on culture and the four skills of listening, speaking, reading, and writing. (F,W,S).

ARBC 201 Intermediate Arabic I

4.000 Credits

Prerequisites: ARBC 102 or MCL 102 or APL 201 or APL 202 or APL 301 or APL 302

An intermediate-level course designed to increase proficiency in listening, speaking, reading, and writing in a cultural context. Emphasis is placed on acquiring new vocabulary and expanding the use of grammar structures. (YR).

ARBC 202 Intermediate Arabic II

4.000 Credits

Prerequisites: ARBC 201 or MCL 201 or APL 202 or APL 301 or APL 302

Second course in the two-course intermediate Arabic sequence. Continued emphasis on the development of the four skills of listening, speaking, reading, and writing.

ARBC 301 Higher Intermediate Arabic I

3.000 Credits

Prerequisites: ARBC 202 or APL 301 or APL 302

This course is designed for students who have already had the equivalent of four semesters of Arabic instruction. The course emphasizes the four language skills with specific attention to the productive skills, oral and written. The course introduces authentic reading materials drawn from different disciplines such as religion, literature, history, and politics, reflecting different styles of Arabic and different periods. (F)

ARBC 302 Higher Intermediate Arabic II

3.000 Credits

Prerequisites: ARBC 301 or APL 301 or APL 302

A continuation of ARBC 301. It continues to develop the four language skills with specific attention to the productive skills, oral and written. The course introduces authentic reading materials drawn from different disciplines such as religion, literature, science, politics, reflecting different styles of Arabic and different periods. (W, YR)

ARBC 303 Advanced Arabic

3.000 Credits

Must be enrolled in one of the following Classes:

Senior Sophomore Freshman Junior

Prerequisites: ARBC 302

This course is an introduction to narrative traditions in Arabic through the close readings of a variety of essays. It is designed to give students experience in reading specialized short texts including modern Arabic literature and the social sciences. Each session will be organized around a particular author, genre, theme, or period, including the novel, political essay, the short story, historical prose, drama, and film, with special emphasis on the Arabic literature of Egypt and the Levant.

ARBC 305 Language of Business

3.000 Credits

Prerequisites: ARBC 301

An introduction to the language and cultural practices of the Arab world of business. Particular emphasis will be placed on learning the terminology used in typical business correspondence and documents related to the world of finance, investment, import, and export, and commerce. A variety of businesses will be examined and opportunities for practice in reading and composing business letters will be provided. (W, AY)

ARBC 331 Survey of Arabic Literature

3.000 Credits

Prerequisites: ARBC 301

Arabic 331 surveys selections from writings in Arabic prose literature (maqama, novel, short story) and poetry that reflect the intellectual, literary and cultural development of the Arabs from pre-Islamic times, up to the present. The course will also explore the social, political, and cultural changes in the Middle East and the development of modern Arabic literary forms.

ARBC 332 Arabic Cinema

3.000 Credits

Prerequisites: ARBC 301

The course examines the development of Arabic cinema in its socio-cultural contexts through a range of selected films. It covers the different cinematic genres, prevalent themes and diverse trends and schools across the spectrum of Arab countries including Egypt, Tunisia, Lebanon, Morocco, and Palestine. The course elaborates on the careers of film directors and their approaches to film making and to the cultural issues of their time. The course will be conducted in Arabic.

ARBC 335 Arabic Civilization

3.000 Credits

Must be enrolled in one of the following classes:

Sophomore

Senior Junior

Prerequisites: ARBC 302

This course gives students an appreciation of Arabic civilization through the study of excerpts from the masterworks of the literary and intellectual Arabic heritage. It provides practice in reading pre-modern and modern classical Arabic texts drawn from a variety of intellectual disciplines.

ARBC 350 Arabic Literature and Culture

3.000 Credits

An introduction to the literature and other art forms of the modern Arab world in cultural and historical context. Topics include the Arab world-view, religious attitudes and self-expression, and ethnicity and gender. The course assumes no prior knowledge of the region. All readings will be English translation. (YR).

ARBC 351 Contemporary Arabic Literature

3.000 Credits

Prerequisites: ARBC 301

This course will explore the literary works of contemporary Arab writers from countries such as Iraq, Lebanon, Palestine, Algeria, France, and the U.S. Although the course covers a variety of literary genres such as the short story, memoirs, and poetry, it puts special emphasis on the Arab contemporary novel. It also provides an in-depth critical analysis of major themes dealt with by authors in their works such as identity, minority, gender, nationality, war, family, ethnicity, religion, homeland and home, politics, society and culture. Major historical, political, social, cultural, artistic and literary factors shaping and driving contemporary Arabic literary writings today also will be thoroughly examined. The course will feature films and documentaries in addition to internet-based activities.

ARBC 390 Topics in Arabic

3.000 Credits

Examination of problems and issues in selected areas of Arabic. Title as listed in Schedule of Classes will change according to content. Course may be repeated when specific topics differ. (OC).

Art, Applied

(not a major or field of concentration, see Applied Art)

Art History

Art History may be elected as a major program within the Department of Literature, Philosophy, and the Arts. The art history program offers the student practical, critical, and historical studies in architecture, sculpture, painting, the decorative arts, printmaking, and photography. Each art is considered a creative process which, like language, has developed as an expression of human ideas, emotions, and life conditions. The history of these arts is presented as a visual record of the evolution of human societies, which can give the student a valuable introduction to the various world civilizations.

Students may elect one of two major tracks in Art History: Track A-Art History, or Track B-Museum Studies. The major programs offer the student a broad humanistic education within the context of an undergraduate degree and prepare the student for graduate work in academic, museum, or commercial fields.

PREREQUISITES TO THE MAJOR 9 hrs

Students majoring in Art History (Track A) or Museum Studies (Track B) are required to take the following prerequisites:

ARTH 101 Western Art to 1400

ARTH 102 Western Art since 1400

ARTH 103 Arts of Asia

MAJOR REQUIREMENTS 27 hrs

Ancient/Classical (ARTH 319, 321, 322, 327, 425, 426, 427, 428)

Medieval (331, 332, 333, 334, 335)

Renaissance/Baroque (341, 342, 343, 344 351, 352, 434, 454)

Modern (360, 361, 362, 363, 364, 365, 366, 367, 368, 375, 469)

Also required 6 hrs

ARTH 400 Senior Seminar

ARTH 410 Museum Practice Seminar

Art History Electives 6 hrs

Any two upper-level Art History courses (except ARTH 398 and 399) $\,$

Medieval/Classical (ARTH 319, 321, 322, 327, 331, 332, 333, 334, 335, 425, 426, 427, 428)

Renaissance/Baroque (ARTH 341, 342, 343, 344, 346, 351, 352, 434, 454)

Modern (ARTH 360, 361, 362, 363, 364, 365, 366, 367, 368, 375, 469)

Also required	
ARTH 400	Methods Seminar
ARTH 410	Museum Practice Seminar I
ARTH 411	Museum Practice Seminar II
•	ives
AND	
One upper-level co	ourse selected from the following 3 hrs
OB 354	Behavior in Organizations
JASS 330	Feature Writing
COMM 360	Social Media for Public Relations
COMM 420	Critical Media Studies
COMM 440	Writing for the Organization
COMM 460	Public Relations Campaigns
PSYC 4305	Organizational Psychology

Portfolio Requirement: A portfolio is required for Art History (Track A) or Museum Studies (Track B). The portfolio must be approved by the faculty advisor and will consist of one paper from ARTH 400, one paper from ARTH 410, and one additional paper from another upper level ARTH course taken at UM-Dearborn. There is also an exit interview questionnaire. See the faculty advisor for more details.

Foreign Languages

Although competency in a foreign language is not required for the major, a reading proficiency in French and/or German is extremely important for anyone planning to pursue the study of Art History. Most graduate programs in Art History require at least two foreign languages.

NOTES:

- 1. A maximum of 44 hrs. in ARTH courses may count in the 120 credits required for graduation.
- 2. At least 15 of the 27 upper level hours in ARTH must be elected at UM-Dearborn.
- 3. ARTH 398 and 399 cannot be used in the major.

MINOR OR BGS/LIBS AREA OF FOCUS

A minor or area of focus consists of 12 hours of upper-level credit in art history.

Art History (ARTH) COURSE OFFERINGS

ARTH 101 Western Art to 1400

3.000 Credits

An introduction to the history of art from the prehistoric era to the end of the middle ages. Using a broadly chronological structure, the course surveys changes in the style and substance of western (European) art in this period. The course also explores the connection between art and culture, and notes the many interrelationships between the cultures that have formed the western tradition. (F,W).

ARTH 102 Western Art from 1400

3.000 Credits

A historical survey of western painting and sculpture from the Renaissance through the twentieth century. (F,W).

ARTH 103 Arts of Asia

3.000 Credits

An introduction to the visual arts of three Asian civilizations: India, China, and Japan. Since this is a survey, the focus will be placed on major monuments that are characteristic of these artistic traditions. In order to better understand the works of art, the cultural milieu including religion, philosophy, and parallel arts will be considered. (YR).

ARTH 104 Arts of the Middle East

3.000 Credits

From the eighth century, a new religious community with no developed artistic heritage spread rapidly over the ancient empires of the near and middle east and as far west as Spain and Hungary. Appropriating established forms and traditions, Muslim cultures created a brilliant system of religious and secular art that reveals national diversity and an underlying unity of purpose. This course provides an introduction to the visual traditions of Muslim cultures. (YR).

ARTH 105 Creation of Art

2.000 Credits

An art appreciation course based on videotapes. Great art does not completely yield its secrets. The course helps the student to understand the subject, the message or content of the creation and the method that the artist used in making it. This course does not fulfill the Art History concentration requirement. (F,W).

ARTH 106 History of Western Architect

3.000 Credits

An introduction to the place of architecture in western culture. The course treats architecture as the "mother of the arts" and explores how buildings are perceived today and in the past, and why enormous amounts of money and time were spent on them. Structure and aesthetics will also be discussed, both in relation to individual buildings and to their broader urban context. (YR).

ARTH 304 Detroit Study

3.000 Credits

This course is an attempt to define a modern cultural history of Detroit. Taught by two faculty members, the emphasis of the course will vary but the following aspects of the city's cultural history will be covered is some detail: its literature, arts, music and architecture; its social conditions and broader American cultural context.

ARTH 311 Art of China

3.000 Credits

Prerequisites: ARTH 101 or ARTH 102 or ARTH 103 or ARTH 104 or ARTH 106

An introduction to representative works of art produced in China from the Neolithic era down to modern times. Examination of the artifact's cultural context will be emphasized, including the study of philosophy (Confucianism and Daoism) and religion (Buddhism).

ARTH 312 Art of Japan

3.000 Credits

Prerequisites: ARTH 101 or ARTH 102 or ARTH 103 or ARTH 104 or ARTH 106

An introduction to representative works of art produced in Japan from the Neolithic era down to modern times. The artifact's cultural context will be examined including religious practice (Shinto and Buddhism), influence from abroad, and other artistic developments in literature, music, and theatre.

ARTH 313 Chinese Painting

3.000 Credits

Prerequisites: ARTH 101 or ARTH 102 or ARTH 103 or ARTH 104 or ARTH 106

This course is a survey of the painting of China from the earliest examples found in tombs through works influenced by the West during the modern period. The course focuses on selected artists who serve as representatives of major traditions of China's cultural and artistic heritage. Students will be introduced to Chinese philosophy and relevant literary genres that provide a context for the development of Chinese painting.

ARTH 315 Early Chinese Art and Archaeol

3.000 Credits

Prerequisites: ARTH 101 or ARTH 102 or ARTH 103 or ARTH 104 or ARTH 106 $\,$

An examination of the art and architecture of early China (Neolithic through Eastern Han). Recent excavations that have significantly changed our view of the early period will be given emphasis. Students will analyze relevant literary and philosophical texts in translation to enhance understanding of the cultural context. (OC).

ARTH 319 Egyptian Art

3.000 Credits

Prerequisites: ARTH 101 or ARTH 102 or ARTH 103 or ARTH 104 or ARTH 106

The art of the Ancient world is examined through an intensive review of the visual traditions of Egypt: its monumental architecture, sculpture, painting and decorative artifacts. (AY).

ARTH 321 Greek Art

3.000 Credits

Prerequisites: ARTH 101 or ARTH 102 or ARTH 103 or ARTH 104 or ARTH 106

This course surveys the history and art of Crete, the Cyclades, and Greece from the third millennium through the first century B.C. In the prehistoric period, the course will focus on both architectural and ceramic developments, as well as on the trade and economic contacts between Asia Minor and Greece. In the historic period, the course considers the major artistic developments in architecture, sculpture, and painting, focusing on how social, political or historical events caused these art forms to evolve and change over the centuries. (AY).

ARTH 322 Roman Art

3.000 Credits

Prerequisites: ARTH 101 or ARTH 102 or ARTH 103 or ARTH 104 or ARTH 106

This course surveys the major art forms produced by both the Romans and Etruscans. The course begins with the Roman Republic (late sixth century B.C.) and concludes with the rule of Constantine in the fourth century A.D.). We will discuss the development of the urban, government complex (the Roman Forum), the evolution of domestic architecture, and the major artistic achievements in sculpture, painting, and the minor arts. We will focus on how social, economic, religious, political and/or historical events caused these art forms to evolve and change over the centuries. (AY).

ARTH 327 Myth & Ritual in Classical Art

3.000 Credits

Prerequisites: ARTH 101 or ARTH 102 or ARTH 103 or ARTH 104 or ARTH 105

Polytheistic, multicultural religious practices shaped Greek and Roman culture and society. This course examines the main deities, myths, rituals and sanctuaries of the ancient Mediterranean through the study of art, architecture, texts and archaeology. Freestanding sculptures, relief sculptures, vase paintings, wall paintings, mosaics, coinage, altars and temples will be analyzed.

ARTH 331 Erly Christian Byzan Art

3.000 Credits

Prerequisites: ARTH 101 or ARTH 102 or ARTH 103 or ARTH 104 or ARTH 106

Borrowing its formal language from late antiquity and its symbolism from other mystery cults, the art of early Christianity emerged from the Roman catacombs to monumental expression under emperors Constantine and Justinian. (AY).

ARTH 332 Early Med and Romanesque Art

3.000 Credits

Prerequisites: ARTH 101 or ARTH 102 or ARTH 103 or ARTH 104 or ARTH 106 $\,$

A study of the dynamic interplay between barbarian, Christian and classical Mediterranean influences in the early Medieval period with a consideration of the art and architecture of the pilgrimage routes to Santiago de Compostela and of the crusader kingdoms in the Holy Land. (AY).

ARTH 333 Gothic Art and Architecture

3.000 Credits

Prerequisites: ARTH 101 or ARTH 102 or ARTH 103 or ARTH 104 or ARTH 106

A survey of the architecture, sculpture and stained glass of the great cathedrals of Europe, focusing on Chartres, Amiens, Reims, and Bourges. A study of the patrons, builders, the new technology they employed and the cities in which they worked as well as an analysis of the emergence of naturalism in medieval manuscript illumination and panel painting. (AY).

ARTH 334 The 14th Century

3.000 Credits

Prerequisites: ARTH 101 or ARTH 102 or ARTH 103 or ARTH 104 or ARTH 106

This is a course that examines the art and architecture of Europe in the 14th century: one of the great transitional periods in the history of western art. Beginning with the new developments in 13th-century Italian art by such artists as Giovanni Pisano and Giotto, the course charts the pattern of these developments in northern European countries as well. (OC).

ARTH 335 Women in Medieval Art

3.000 Credits

Prerequisites: ARTH 101 or ARTH 102 or ARTH 103 or ARTH 104 or ARTH 106 or WGST 275 or WGST 303 or HUM 275 or HUM 303 or PSYC 275 or PSYC 303 or ANTH 275 or ANTH 303 or SOC 275 or SOC 303 or WST 275

Women have often been regarded as the second sex of the middle ages due to the misogynistic attitudes of that era. Recent scholarship, however, has unearthed a significantly more complex picture. Through a study of visual representations of women in medieval art, this course will examine women's roles in the creation and patronage of art and literature, economic and family issues, and women's participation in new and innovative forms of religious piety.

ARTH 341 Art&Arch in Early Ren Florence

3.000 Credits

Prerequisites: ARTH 101 or ARTH 102 or ARTH 103

This course examines the city of Florence as a work of art, as well as masterpieces of Florentine sculpture, painting and architecture of the Early Renaissance (fifteenth century). Among the masters studied are the sculptors Nanni di Banco, Donatello, Ghiberti, Luca della Robbia, Pollaiuolo, and Verrocchio; the painters Masaccio, Fra Angelico, Fra Filippo Lippi, and Botticelli; and the architects Brunellschi, and Alberti. Statuary, reliefs and tombs; altarpieces, fresco cycles and mythological pictures: churches and palaces are all studied within the context of the technical, philosophical, political and cultural developments of the quattrocento. The ideals of the Florentine Republic, Humanism, Neo-Platonism, and Millenarianism provide the historical and intellectual background for the study of these works of art and architecture. Issues of patronage, placement, restoration, art criticism, women's roles in society and reception will also be explored. (OC).

ARTH 342 High Renaissance and Mannerism

3.000 Credits

Prerequisites: ARTH 101 or ARTH 102 or ARTH 103 or ARTH 104 or ARTH 106

A study of the works of Leonardo, Michelangelo and Raphael, masters of the High Renaissance in Florence and Rome, and an examination of the Mannerists, a new generation whose art displayed a modern accent on self-expression and abstraction. (AY).

ARTH 343 Northern Renaissance Art

3.000 Credits

Prerequisites: ARTH 101 or ARTH 102 or ARTH 103 or ARTH 104 or ARTH 106 $\,$

A survey of the art which arose amid the conflicts of late medieval mysticism and Renaissance humanism in 15th- and 16th-century Germany and the Netherlands with emphasis on the works of Van Eyck, Durer, Grunewald, Bosch, and Bruegel. (AY).

ARTH 344 Italian Renaissance Sculpture

3.000 Credits

Prerequisites: ARTH 101 or ARTH 102 or ARTH 103 or ARTH 104 or ARTH 106 $\,$

A study of freestanding and relief sculpture during the Italian Renaissance, with particular attention to major artistic centers like Florence, Rome, and Venice in the 15th and 16th centuries. By examining such forms as colossal statuary, equestrian sculpture, tomb monuments, garden sculpture, and portrait busts, the course will address the function of art within the public sphere, the relationship between civic sculpture and political ideology, the reelevation of sculpture from a mechanical art to a liberal art, and the role artistic individuality and technical proficiency. Artists addressed will include Donatello, Ghiberti, Verrocchio, Antico, Riccio, Bertoldo, Michelangelo, Cellini, and Giambologna.

ARTH 351 Southern Baroque Art

3.000 Credits

Prerequisites: ARTH 101 or ARTH 102 or ARTH 103 or ARTH 104 or ARTH 106

A study of the art of the seventeenth century in Italy and Spain, focusing upon Caravaggio, Annibale Carracci, Guercino, Reni, Cortona, Gaulli, Murillo, Zurbaran, and Velasquez, among others. (OC).

ARTH 352 Northern Baroque Art

3.000 Credits

Prerequisites: ARTH 101 or ARTH 102 or ARTH 103 or ARTH 104 or ARTH 106

Study of the art of the seventeenth century in France, Flanders and Holland, with emphasis on Poussin, Georges de la Tour, the Le Nain brothers, Lebrun, Rubens, Van Dyck, Van Ruisdael, Vermeer, and Rembrandt. (OC).

ARTH 360 Art of Glass

3.000 Credits

Prerequisites: ARTH 101 or ARTH 102 or ARTH 103 or ARTH 104 or ARTH 106

This course focuses on glass as a medium and an art form. From Roman times to the present day, the unique qualities of glass have excited artists and craftsmen to make vessels, sculptures, and architectural ornamentation. The course traces the form and function of glassworks, focusing particularly on the historical trajectory of glass from ancient vessels and medieval stained glass, to the development of "art glass" in the nineteenth century, to contemporary objects. The course is based on lectures, discussion, and readings. Students are required to attend several fieldtrips for "hands-on" work with objects. Enrollment is limited to 15 students.

ARTH 361 American Art

3.000 Credits

Prerequisites: ARTH 101 or ARTH 102 or ARTH 103 or ARTH 104 or ARTH 106

A study of American painting, sculpture, and architecture from the colonial period to the present. In this survey of an arts tradition that has greatly depended upon developments in Europe, efforts will be made to identify what is American about American art. (AY).

ARTH 362 Impressionism and Post-Impress

3.000 Credits

Prerequisites: ARTH 101 or ARTH 102 or ARTH 103 or ARTH 104 or ARTH 106

An examination of the origins of modern painting and sculpture in the art of the major Impressionists (Manet, Monet, Degas, Renoir) and Post-Impressionists (Cezanne, Seurat, Gauguin, Van Gogh). (OC).

ARTH 363 Arts of the Twentieth Century

3.000 Credits

Prerequisites: ARTH 101 or ARTH 102 or ARTH 103 or ARTH 104 or ARTH 106

A contextual study of twentieth-century art that seeks to define the relationships between western art and society. In addition to a consideration of painting, sculpture, and architecture, the emergence of new media- including altered and fabricated photography, video, and installation art - will be examined. Although a broad survey of a century rich in artistic achievements, the course will emphasize the dominance and influence of Pablo Picasso, Henri Matisse, and Frank Lloyd Wright. (AY).

ARTH 364 Picasso

3.000 Credits

Prerequisites: ARTH 101 or ARTH 102 or ARTH 103 or ARTH 104 or ARTH 106

A critical examination of Pablo Picasso's art that chronicles the artist's achievements as a painter, sculptor, draftsman, printmaker, and ceramist. Lectures and readings are directed to positioning Picasso's masterworks in relationship to his art as a whole and in the context of twentieth-century art. (AY).

ARTH 365 Modern Architecture

3.000 Credits

Prerequisites: ARTH 101 or ARTH 102 or ARTH 103 or

ARTH 104 or ARTH 106

A survey of European and American architecture from the Chicago School to Post-Modernism. The course will trace the stylistic history of modern architecture while considering parallel issues of theory, social context, and building technology. Major architects studied will be Sullivan, Wright, Mies van der Rohe, Le Corbusier, and Johnson. (AY).

ARTH 366 The Modern Print

3.000 Credits

Prerequisites: ARTH 101 or ARTH 102 or ARTH 103 or ARTH 104 or ARTH 106

A history of western printmaking from Post-Impressionism to the present. The course will examine the relationship of printmaking to major movements of the day, the impact of modern technology on traditional print processes, and the developing notion of printmaking as an integral form of expression for the modern painter and sculptor. Special emphasis will be placed on the contributions of Gauguin, Munch, Picasso, Johns, and Stella. (OC).

ARTH 367 Contemporary Art

3.000 Credits

Prerequisites: ARTH 101 or ARTH 102 or ARTH 103 or ARTH 104 or ARTH 106

An examination of the most recent developments in modern art. In addition to painting and sculpture, consideration will be given to related forms of expression in performance art, photography, and video. (OC).

ARTH 368 American Photography

3.000 Credits

Prerequisites: ARTH 101 or ARTH 102 or ARTH 103 or ARTH 104 or ARTH 106

This course explores the history of photography, its aesthetics, and social functions in the United States, beginning with the medium's emergence in the 1830s and concluding with contemporary practices. Lectures and discussions will attend to several threads of inquiry: the history and theory of the medium and its interpretation; the diverse functions of photographs in American society; the relationship between photography and American identity formation; and the status of the photograph in a post-photographic, digital age.

ARTH 375 Urban Design Perspectives

3.000 Credits

Prerequisites: ARTH 101 or ARTH 102 or ARTH 103 or ARTH 104 or ARTH 106

This course explores the ways in which urban design both creates and reflects past and present urban conditions, cultures, and spatial relationships. The course will look at the built environment architecturally, aesthetically, and anthropologically in order to highlight the ever changing complexities of urban spheres. The placement and design of buildings and public spaces, and the resulting human interactions in those spaces, will be explored in comparative contexts.

ARTH 384 Islamic Architecture

3.000 Credits

Must be enrolled in one of the following Levels:

Undergraduate

Prerequisites: ARTH 101 or ARTH 102 or ARTH 103 or

ARTH 104 or ARTH 105

This course is a comprehensive study of history and development of Islamic architecture from its birth in the seventh century to the present time. The course is designed to explain major characteristics of Islamic architecture through the study and analysis of major monumental buildings both religious and secular: Mosques, Madrasas (schools), Mausoleums, Palaces, and other buildings. Detailed analysis also will be applied to different types of art associated with these buildings, such as wall painting, stucco work, wood carving, sculpture, mosaic, and calligraphy.

ARTH 385 Islamic Decorative Arts

3.000 Credits

Prerequisites: ARTH 101 or ARTH 102 or ARTH 103 or ARTH 104 or ARTH 106 or RELS 201

This course in an in-depth investigation of the decorative arts of the Islamic Middle East from the seventh through the eighteenth century including the lands of Islamic Spain and North Africa and extending east to Afghanistan. The course traces the development of decorative styles in objects of daily and courtly life, particularly ceramics, metal work, glass, wood and ivory carving, textiles and rugs. The central role played by calligraphy in all of the arts in emphasized as well as in manuscript production and the Arts of the Book. As a religion, but also a way of life, Islam fostered a distinctive artistic production reflected in these decorative arts.

ARTH 390 Topics in Art History

3.000 Credits

Examination of problems and issues in selected areas of art history. Title as listed in the Schedule of Classes will change according to content. Course may be repeated for credit when topics differ. (OC).

ARTH 399 Independent Studies

1.000 TO 3.000 Credits

Readings and research assignments in history of art selected in accordance with the special needs and interests of art history concentrators. May be repeated for a maximum of 6 credit hours. (F,W).

ARTH 400 Senior Seminar

3.000 Credits

Prerequisites: (ARTH 304 or ARTH 305 or ARTH 310 or ARTH 311 or ARTH 312 or ARTH 313 or ARTH 315 or ARTH 319 or ARTH 321 or ARTH 322 or ARTH 331 or ARTH 332 or ARTH 333 or ARTH 334 or ARTH 342 or ARTH 343 or ARTH 346 or ARTH 351 or ARTH 352 or ARTH 361 or ARTH 362 or ARTH 363 or ARTH 364 or ARTH 365 or ARTH 366 or ARTH 367 or ARTH 370 or ARTH 390 or ARTH 392 or ARTH 410 or ARTH 411 or ARTH 416 or ARTH 425 or ARTH 426 or ARTH 454) and (ARTH 304 or ARTH 305 or ARTH 310 or ARTH 311 or ARTH 312 or ARTH 313 or ARTH 315 or ARTH 319 or ARTH 321 or ARTH 322 or ARTH 331 or ARTH 332 or ARTH 333 or ARTH 334 or ARTH 342 or ARTH 343 or ARTH 346 or ARTH 351 or ARTH 352 or ARTH 361 or ARTH 362 or ARTH 363 or ARTH 364 or ARTH 365 or ARTH 366 or ARTH 367 or ARTH 370 or ARTH 390 or ARTH 392 or ARTH 410 or ARTH 411 or ARTH 425 or ARTH 426 or ARTH 454)

An introduction to art-historical research methods. The art historian's central task of interpretation is explored by considering the critical perspectives of connoisseurship, iconography, formal analysis, iconology, and modern literary theory. (OC).

ARTH 410 Museum Practice Seminar I

3.000 Credits

Prerequisites: (ARTH 304 or ARTH 305 or ARTH 310 or ARTH 311 or ARTH 312 or ARTH 313 or ARTH 315 or ARTH 319 or ARTH 321 or ARTH 322 or ARTH 331 or ARTH 332 or ARTH 333 or ARTH 334 or ARTH 342 or ARTH 343 or ARTH 346 or ARTH 351 or ARTH 352 or ARTH 361 or ARTH 362 or ARTH 363 or ARTH 364 or ARTH 365 or ARTH 366 or ARTH 367 or ARTH 370 or ARTH 390 or ARTH 392 or ARTH 400 or ARTH 411 or ARTH 425) and (ARTH 304 or ARTH 305 or ARTH 310 or ARTH 311 or ARTH 312 or ARTH 313 or ARTH 315 or ARTH 319 or ARTH 321 or ARTH 322 or ARTH 331 or ARTH 332 or ARTH 333 or ARTH 334 or ARTH 342 or ARTH 343 or ARTH 346 or ARTH 351 or ARTH 352 or ARTH 361 or ARTH 362 or ARTH 363 or ARTH 364 or ARTH 365 or ARTH 366 or ARTH 367 or ARTH 370 or ARTH 390 or ARTH 392 or ARTH 400 or ARTH 411 or ARTH 425)

The course explores problems encountered in the field of art administration. Students will attend lectures given by art administrators and curators of local institutions and will be involved in the planning, organization, and presentation of an actual exhibition. (YR).

ARTH 411 Museum Practice Seminar II

3.000 Credits

Prerequisites: ARTH 101 or ARTH 102 or ARTH 103 or ARTH 104 or ARTH 106

This course is an introduction to museum studies. Students explore the history and missions of museums, and the role of museums in shaping public discourses on art. They also study current issues related to museum practice, including collection development, repatriation of cultural property, conservation, administration, research, exhibition and interpretation. Field trips to area institutions are scheduled so students can meet museum and gallery professionals in order to consider career opportunities available in this context.

ARTH 416 Earl Mod Jpn Paint&Wood Prnts

3.000 Credits

May not be enrolled in one of the following Classes: Graduate

Prerequisites: ARTH 101 or ARTH 102 or ARTH 103

Paintings and woodblock prints of the Edo/Tokugawa (1600-1868) and Meiji (1868-1912) periods are considered in light of competing developments that on the one hand looked to Japan's classical tradition and on the other to the influence of art and artists from China and the West. Special attention is given to female artists and images of women. Students cannot receive credit for both ARTH 416 and ARTH 516. (OC).

ARTH 425 Women in Classical Antiquity

3.000 Credits

May not be enrolled in one of the following Classes:

Prerequisites: ARTH 101 or ARTH 102 or ARTH 103 or ARTH 104 or ARTH 106

This course examines the evidence for the lives of women in Greek, Etruscan and Roman Antiquity, from the Bronze Age through the Imperial Period. Special emphasis will be placed on the archaeological evidence, especially works of art which illustrate women's lives and their relationships with men. Documents such as dedicatory and funerary inscriptions, the poetry of Sappho and Sulpicia, and selections from the writings of Homer, Hesiod, Aristotle, Pliny, Juvenal, and other ancient authors, will also be examined critically, particularly in relationship to the works of art. Students cannot receive credit for both ARTH 425 and ARTH 525. (YR).

ARTH 426 City of Ancient Rome

3.000 Credits

Prerequisites: ARTH 101 or ARTH 102 or ARTH 103

This course will focus on the ancient city of Rome, from its foundation to its precipitous decline in the fifth century AD. It will explore the public art and architecture of the city, emphasizing the different types of evidence available (topography, architecture, sculpture, texts) for understanding the history, politics, religion, and urban development of Rome, as well as the various art historical and archaeological techniques used to analyze the evidence. (OC)

ARTH 427 Greek Architecture

3.000 Credits

Must be enrolled in one of the following Levels:

Undergraduate

Prerequisites: ARTH 101 or ARTH 102 or ARTH 103 or ARTH 104 or ARTH 106

The architectural vocabulary established during the centuries of classical Greek civilization influences our culture to the present day. This course explores the history and development of this fundamental architectural tradition, focusing on the Greek temple, sanctuaries and holy sites, urban planning and public works, and domestic space. Students discuss the philosophical underpinnings of Greek architectural design, the engineering practices of Greek builders, as well as the cultural and social influences on Greek buildings and cities. This course begins with the emergence of humble mudbrick and timber buildings from the Dark Ages and continues through the height of cosmopolitan urban luxury in the 2nd century AD.

ARTH 428 Roman Art and Memory

3.000 Credits

Must be enrolled in one of the following Levels:

Undergraduate

Prerequisites: ARTH 101 or ARTH 102 or ARTH 103 or

ARTH 104 or ARTH 106

In this course, we examine Roman art closely associated with personal commemoration and cultural memory, including portraiture, funerary monuments, imperial monuments, and public architecture. We explore these objects relationship to Roman literary cultures theories of mnemotechnics, and in the social context of the Roman obsession with memory perpetuation. We also examine how art historians apply modern theories of collective and social memory in their scholarship on Roman art, creating new ways of understanding Roman sculpture, painting,

and architecture. Finally, we investigate Roman spectacle and performance as a vehicle of cultural memory. Students cannot earn credit for both ARTH 428 and ARTH/LIBS 528.

ARTH 434 Renaissance and Baroque Rome

3.000 Credits

Prerequisites: ARTH 101 or ARTH 102 or ARTH 103 or

ARTH 104 or ARTH 106

The return of the papacy in 1420 initiated the reemergence of Rome as a major cultural center. This course examines painting, sculpture, architecture, and urban planning in Rome from the 15th to the 17th century, including the work of Raphael, Michelangelo, Bernini, Borromini, and Caravaggio. Topics to be explored include the birth of Renaissance archaeology and antiquarianism; humanism and the papal curia; urban renewal and conservation; pilgrimage and sacred topography; the myth of Rome; architecture of churches, villas, and palaces; tourism and the city as spectacle. This course is structured as a seminar that is writing and research-intensive.

ARTH 454 Rembrandt

3.000 Credits

May not be enrolled in one of the following Classes:

Graduate

Prerequisites: ARTH 101 or ARTH 102 or ARTH 103 or

ARTH 104 or ARTH 106

Rembrandt's paintings, drawings, and prints are considered in the full historical and cultural context of the Golden Age of the Northern Netherlands, a period of unprecedented wealth and cultural diversity. Special attention will be given to issues of style, iconography, biography, art criticism, gender, patronage and artistic technique. Students cannot receive credit for both ARTH 454 and ARTH 554. (YR).

ARTH 469 Collage, Montage, Assemblage

3.000 Credits

Prerequisites: ARTH 101 or ARTH 102 or ARTH 103 or

ARTH 104 or ARTH 106

Different conceptions of collage, montage, and assemblage have vitally shaped artistic practice in the twentieth century, perhaps even more so than the advent of modernist abstraction. The modern phenomenon of collecting, mixing, and sampling that permeates the last century up to and including the contemporary moment will be traced in the class across the thresholds of painting, sculpture, architecture, photography, and film. We will discuss a wide range of movements, genres, and styles (Cubism, Futurism, Surrealism, Dada, Weimar and Russian photomontage, Soviet film, found footage film, French decollage, postwar assemblage) and their relation to the ever-changing mass media, the urban, and the modernized – in short, the everyday. The last segment of the class addressed more recent interpretations of the collage paradigm, including installation art and digital applications. Student cannot receive credit for both ARTH 469 and ARTH 569.

Astronomy

MINOR OR BGS/LIBS AREA OF FOCUS ONLY

A minor or area of focus consists of the following: Prerequisite of ASTR 130 and 131 and 12 hours of upper-level credit consisting of PHYS 305 (3 hours) plus 9 hours of upper-level credit in astronomy (ASTR). Up to 3 credit hours in ASTR 495, 498 and/or 499 may be applied to the completion of the minor or area of focus.

Astronomy (ASTR) COURSE OFFERINGS

ASTR 130 Introduction to Astronomy

3.000 Credits

A one-term introduction for those interested in learning about the present state of knowledge of the Universe, its origin, evolution, organization, and ultimate fate. Exciting new discoveries concerning extrasolar planets, star birth, supermassive black holes, dark matter/dark energy, and cosmology are discussed. Two years of high school math or its equivalent recommended.

ASTR 131 Introductory Astronomy Lab

1.000 Credits

Prerequisites: ASTR 130 * or PHYS 130

An introduction to some of the important observational techniques and analytical methods used by astronomers. Ground-based and satellite data will be used to reveal physical and chemical properties of the moon, planets, stars, and the Milky Way. Outdoor exercises involving telescopic observation of the sun, variable stars, nebulae, and external galaxies are also included. Constellation identification will be taught using off-campus planetarium facilities.

ASTR 330 The Cosmic Distance Scale

3.000 Credits

Prerequisites: (ASTR 130 or PHYS 130) and (PHYS 126 or

PHYS 151)

An exploration of the cosmic distance ladder focusing on the systems and techniques that astronomers use in establishing the distances to celestial objects. Direct measures using radar ranging and trigonometric parallax will be discussed for objects in the solar system and for stars within about 3000 light-years of the Sun, respectively. For more remote systems in or just outside the Milky Way, methods based spectroscopic parallax and the period-luminosity relation for various types of variable stars will be introduced. For the extra-galactic objects, use of the Hubble relation and the light curves of Type Ia supernovae will be made to assess the distances. At each rung of the ladder, emphasis will be placed on the astrophysical principles and processes underlying the methodology being applied. 3 hours lecture.

ASTR 361 Observational Techniques

3.000 Credits

Prerequisites: (ASTR 130 or PHYS 130) and (ASTR 131 or PHYS 131) and (PHYS 126 or PHYS 151)

This course is designed to provide students with an understanding of some of the basic observational techniques use by astronomers in gathering and analyzing data from celestial objects. Practical experience in acquiring, displaying, and interpreting optical and radio observations using the University's 0.4-m telescope and 2.3-m radio dish will be emphasized. Topics will include astronomical coordinate system and timekeeping, telescope optics, the design and use of CCD detectors, fundamentals of multi-color photometry, an introduction to astronomical spectroscopy, and radio measurements of the Sun and interstellar hydrogen clouds at 21-cm wavelengths. (2 hours lecture, 3 hours laboratory)

ASTR 390 Topics in Astronomy

3.000 Credits

Prerequisites: ASTR 130 or PHYS 130

A lecture in a topic of current interest in astronomy. Topics vary and are announced in the current Schedule of Classes. Three hours lecture.

ASTR 421 Stellar Astrophysics

3.000 Credits

Prerequisites: PHYS 305 and (MATH 205 or MATH 215)

An application of important physical principles to stars and star clusters. Topics will include gravitational collapse and star formation, radiative transfer and stellar atmospheres, nucleosynthesis and the structure of normal stars, degeneracy and the endpoints of stellar evolution, and general relativistic effects in the vicinity of black holes. 3 hour lecture.

Behavioral Sciences

The major in Behavioral Sciences is an interdisciplinary program encompassing the disciplines of anthropology, psychology, and sociology. It is designed as a general preparation for a career in human services such as social work, counseling, criminology, or prevention/treatment programs in mental health. The idea for combining the three fields is based on the belief that it is important for an individual who plans to work with people to understand human beings as individuals (psychologically) who function in groups (social psychologically) within a social context (sociologically) which varies across cultures (anthropologically). These disciplinary perspectives offer different but complementary views of people. In order to understand, predict, or influence human behavior, one needs some comprehension of how humans develop, the problems they confront, the organization or structure in which they function, and how and why these go awry. It is also critical to have some exposure to the methods employed by behavioral scientists and some actual experience in the working world of the human services.

To enroll in this program, a student must develop a list of courses which are appropriate for her/his career goals or interests and which satisfy the requirements listed below. This list should be prepared in consultation with, and approved by, the Behavioral Sciences advisor, Roger Loeb. The major encourages specific vocational tracks shaped to the student's career goals. Specific career and appropriate course selection advice is available as follows: Administrative/Management (McKenna, Radine, Waung), Adulthood and Aging (Aronson, Sethuramen, Whitehead), Children and Families (Aronson, Forsythe-Brown, Sethuramen, Sheldon), Community Orgainizations (Draus, Hymes, McKenna), Clinical/Counseling (Chatkoff, Leonard, Loeb, Siefert, Wrobel), Health (Chatkoff, Draus, McAuslan, Martin, Straub), Individuals in Society (Draus, Forsythe-Brown, Gruber, Lempert).

PREREQUISITES TO THE MAJOR

The major requires the student to take introductory-courses in:

ANTH 101	Introduction to Anthropology
PSYC 170	Introduction to Psychology as a Natural
	Science
OR	
PSYC 171	Introduction to Psychology as a Social
	Science
SOC 200	Understanding Society
OR	
SOC 201	Contemporary Social Problems

MAJOR REQUIREMENTS

The major also requires a minimum of 39 upper-level (300/400; 3000/4000 level) credits in the Behavioral Sciences <u>including at least three courses in psychology</u>, three in sociology, and two in <u>anthropology</u>. These courses must also include one course from each of the following categories:

Methods

ANTH 470; PSYC 415, 425, 4445; SOC 410, 411, 413

Normal/Abnormal Personality

ANTH 482; PSYC 440, 441, 442, 450; SOC 436, 465.

Human Development

ANTH 415; PSYC 300, 302, 315, 407, 412; SOC 426, 445.

Health/Biological

ANTH 325, 409, 430, 435, 459; HPS 336, 430; PSYC 446, 455; SOC 440.

Gender

ANTH 303, 412, 481; HPS 336; PSYC 405; SOC 409, 461.

Social Class/Economics

ANTH 376; SOC 350, 423, 435, 450, 477.

Race/Ethnicity/Culture

ANTH 340, 370, 371, 372, 373, 420, 421, 425, 440; PSYC 322, 3955; SOC 403, 449, 455, 4045.

Groups and Interpersonal Relationships

PSYC 320, 322, 325, 421, 3955; SOC 446, 447, 4045.

Societal Issues

ANTH 421; PSYC 4305; SOC 350, 445, 446, 447, 466, 469.

Social Structure

ANTH 376, 420; CRJ 468; SOC 423, 426, 457, 460, 467, 473, 477, 483.

Internship

PSYC 485; CRJ 478.

Six credits of additional upper level courses from ANTH, PSYC and SOC to complete a total of 39 credit hours for the major.

NOTES:

- PSYC 485 or CRJ 478 must be elected at UM-Dearborn.
- At least 24 of the 39 upper level hours in ANTH, PSYC, and SOC for the Behavioral Science major must be elected at UM-Dearborn.
- Many courses are cross listed between the ANTH, PSYC and SOC disciplines. Be sure to consult the Schedule of Classes for cross listed classes.
- 4. Any one course may be used to satisfy only one requirement within the major.
- A maximum of 48 credit hours in any one discipline (ANTH, PSYC, SOC) is allowed toward degree.

HONORS PROGRAM IN BEHAVIORAL SCIENCES

Behavioral Science students are eligible for the Honors Program which provides special opportunities for outstanding students, including a research training seminar, followed by independent research conducted in collaboration with faculty members. Students are accepted into the Honors Program early in their junior year. Prospective students should plan on completing the

statistics and methods requirements by their junior year. Requirements for entrance are 1) GPA of 3.2 or higher in behavioral science courses and overall UM-Dearborn courses, and 2) informal evidence of being a superior student, such as high motivation and ability to work independently. Requirements for graduation with honors in behavioral science are the successful completion of the following:

- fulfillment of all requirements for behavioral sciences major
- PSYC 381 Principles of Statistics and Experimental Design or SOC/MATH/STAT 363 Introduction to Statistics
- PSYC 481 Computers in Psychology, normally taken Fall term, senior year
- PSYC 498 (Honors Seminars) normally taken Winter Term, junior year
- PSYC 499 (Honors Research) normally completed during senior year
- Research Proposal meeting, normally completed early in senior year
- Final Oral Defense, completed at least one month prior to graduation

Behavioral Sciences (BSCI) COURSE OFFERINGS

BSCI 325 Nonviolence and Violence

3, 000 Credits

Prerequisites: PSYC 170 or PSYC 171

A study of the origins and consequences of violent and nonviolent behavior, and the application of violence to personal, social, national and international issues.

Biochemistry

Biochemistry bridges the biological sciences and chemistry. This degree program is thus designed to provide the student with an understanding of the structural and functional relationships between the chemical constituents of cells and their role in life processes. The requirements for the major include courses in biological sciences and chemistry, and appropriate courses in mathematics and physics. The degree in biochemistry prepares a student for careers in teaching, medicine, and research in industry or academia.

PREREQUISITES TO THE MAJOR

A solid background in mathematics is essential to success in any of the scientific disciplines. Incoming students who intend to choose a major in Biochemistry should have completed at least three years of high school mathematics. First year students should plan to enroll in MATH 105, MATH 115 or MATH 116 based on the results of their math placement tests. The CHEM 134 and CHEM 136 or CHEM 144 and CHEM 146 sequence is a prerequisite to many other courses in the Natural Sciences Department; students should complete this sequence as soon as possible.

BIOL 130 and 140	hrs
CHEM 134 and 136 General Chemistry OR	
CHEM 144 and 146 General Chemistry	hrs

AND		
CHEM 225, 226 and 227 Organic Chemistry		8 hrs
MATH 115 and 116		
PHYS 150 an	d 151 or *PHYS 125 and 126	8 hrs
	dents should elect PHYS 125 and 126.	
MAJOR REQU	JIREMENTS	30 hrs
Biochemistry		13 hrs
BCHM 470	Biochemistry I	3 hrs
BCHM 471	Biochemistry II	3 hrs
BCHM 472	Biochemistry Lab I	
BCHM 473	Biochemistry Lab II	1 hr
BCHM 474	Molecular Biology	
BCHM 497	Seminar in Biochemistry	1 hr
Chemistry		7 hrs
CHEM 344	Quantitative Analysis	4 hrs
CHEM 368	Physical Chemistry I	3 hrs
Related sciences		10 hrs
or Chemistry. A lecture or lab,	redit hours in upper level Biochemistry at least one credit must be a laborator stand-alone lab course, or one credit 99; or, CHEM 495 or 499)	ry (either

Computational Skills (minimum of 3 credit hours)
An upper level course or MATH (excluding MATH 385, 386, 387), STAT or CIS.

NOTES:

- 1. A maximum of 65 hrs. in BCHM, BIOL, CHEM may count towards the 120 hours for degree.
- At least 12 of the 30 upper level hours must be elected at UM-Dearborn.
- A maximum of 6 hrs. of independent study/research in any Dept. of Natural Sciences discipline may count towards the 120 hours required to graduate.

HONORS DEGREE IN BIOCHEMISTRY

To qualify for this honor, a student must maintain an overall grade point average of 3.5. The honors degree candidate must take six credit hours of independent study under BCHM 495, 498 or 499. Such a study will culminate in an oral and/or written presentation of the results. The Biochemistry Program Committee will evaluate the student's presentation.

MINOR OR BGS/LIBS AREA OF FOCUS

A minor or area of focus consists of 12 hours of upper-level credit in biochemistry.

Biochemistry (BCHM) COURSE OFFERINGS

BCHM 352 Introduction to Toxicology

3.000 Credits

Prerequisites: CHEM 225

An introduction to the principles of toxicology with an emphasis on environmental toxicology. Major topics include toxic agents, toxicological mechanisms, and use of toxicological reference literature. Discussion of chemical carcinogenesis, genetic toxicology, immunotoxicology, teratology, and toxic responses of the skin, eyes, and nervous system. Three hours lecture. (AY).

BCHM 370 Principles of Biochemistry

3.000 Credits

Prerequisites: BIOL 140 and CHEM 226

A concise but comprehensive survey of various areas of biochemistry designed for non-biochemistry majors. The course follows the standard approach to the subject including a description of cells, their structure and constituent macromolecules (proteins, nucleic acids, carbohydrates and lipids), enzymology, bioenergetics, intermediary metabolism, and gene regulation. Students cannot take both Biochemistry 370 and 470 or 471 for any combination of concentration, cognate or minor requirement. Three hours lecture. (F).

BCHM 390 Current Topics in Biochemistry

1.000 TO 3.000 Credits

Prerequisites: (BCHM 370 * or BIOL 370 * or CHEM 370 *) or (BCHM 470 * or BIOL 470 * or CHEM 470 *)

Special topics current to the field of biochemistry. Topics and format for the course may vary. See Schedule of Classes for current topic. Permission of instructor. (OC).

BCHM 430 Bioinorganic Chemistry

3.000 Credits

Prerequisites: BIOL 370 or BCHM 370 or CHEM 370

Introduces the roles that metals play in biological systems. Explores the chemical principles that make metals particularly well-suited for these roles. Introduces physical and experimental techniques used to explore the structure and function of metals in natural systems. Explores case studies from the literature to synthesize results of various experiments to develop a final understanding of the systems. Includes critical analysis of published primary literature in the field.

BCHM 470 Biochemistry I

3.000 Credits

Prerequisites: BIOL 130 and BIOL 140 and CHEM 226

Life processes from a chemical viewpoint: structure/function relationships of biomolecules with emphasis on proteins, enzyme kinetics, and mechanisms of action. Three hours lecture. (F).

BCHM 471 Biochemistry II

3.000 Credits

Prerequisites: BCHM 470 or CHEM 470 or BIOL 470

Intermediary metabolism, bioenergetics, energy transformation, metabolic interrelationships, biochemical regulation, highly structured subcellular biochemical systems. Three hours lecture. (W).

BCHM 472 Biochemistry Laboratory I

1.000 Credits

Prerequisites: CHEM 344 * and (BCHM 470 * or BIOL 470 * or CHEM 470 *) and CHEM 227

The techniques of preparative and analytical biochemistry. Preparation and characterization of proteins and nucleic acids. Physical and chemical properties of proteins and nucleic acids. Four hours laboratory. (F).

BCHM 473 Biochemistry Laboratory II

1.000 Credits

Prerequisites: (BCHM 471 * or BIOL 471 * or CHEM 471 *) and (BCHM 472 * or BIOL 472 * or CHEM 472 *)

The techniques of preparative and analytical biochemistry. Preparation and characterization of lipids and carbohydrates. Methods in metabolism. Four hours laboratory. (W).

BCHM 474 Molecular Biology

4.000 Credits

Prerequisites: (BCHM 470 or CHEM 470 or BIOL 470) or (BCHM 370 or BIOL 370 or CHEM 370) and CHEM 227 Co-requisites: BCHM 474L

This course will emphasize the molecular biology of eukaryotes, and topics will include genome organization and complexity, chromatin structure and function, gene expression, DNA replication and repair, genetic rearrangements, and the molecular biology of development. The laboratory will emphasize the application of recombinant DNA technology to the study of biological problems. Three hours lecture, four hours

BCHM 480 Biochemical Pharmacology

3.000 Credits

laboratory. (W).

Prerequisites: CHEM 370 or BCHM 370 or BIOL 370 or BCHM 470 or CHEM 470 or BIOL 470

Pharmacology is a study of drugs. In this course, the biochemical and molecular basis of drug action will be emphasized. Different categories of drugs, their use, abuse, and side effects will be presented. Three hours lecture. Permission of instructor. (OC).

BCHM 490 Topics in Biochemistry

1.000 TO 3.000 Credits

A course in special topics that examines research problems of current interest in biochemistry. Topics and format may vary. See current Schedule of Classes. One to three hours seminar. (W).

BCHM 495 Off-Campus Research in Biochem

1.000 TO 3.000 Credits

Participation in ongoing research at an off-campus laboratory. No more than 6 hours combined from any Natural Science courses numbered 495, 498, and 499 may be credited toward the 120 hours required for a degree. Four to twelve hours laboratory. Permission of concentration advisor. (F,W,S).

BCHM 497 Seminar in Biochemistry

1.000 Credits

Prerequisites: BCHM 470 or BIOL 470 or CHEM 470

A seminar course that examines research problems of current interest in biochemistry. The course format may include training students to read and present scientific papers, guest lecturers, and lectures by the instructor on a selected topic. One hour seminar. Permission of instructor. (W).

BCHM 498 Directed Reading in Biochem

1.000 TO 3.000 Credits

Library research in a specific area of biochemistry performed under the direction of a faculty member. No more than six hours combined from departmental courses numbered 495, 498, and 499 may be credited toward the 120 hours required for a degree. Four to twelve hours readings. Permission of instructor. (F,W,S).

BCHM 499 Laboratory Research in Biochem

1.000 TO 3.000 Credits

Directed laboratory research performed under the supervision of a faculty member. Research training is encouraged. No more than six hours combined from departmental courses numbered 495, 498, and 499 may be credited toward the 120 hours required for graduation. Four to twelve hours laboratory. Permission of instructor. (F,W,S).

Biological Sciences

Biology is an extensive field that covers biochemistry, molecular biology, cell biology, microbiology, genetics, anatomy, physiology, embryology, ecology, evolution, field biology, and animal behavior. The program is recommended for students who wish to study biology as part of an undergraduate liberal arts degree, to prepare for graduate study in biology or any of the health professions, or to study for a secondary teaching certificate in biology.

BIOL 130 and 140 are prerequisites for almost all upper-level biology courses and should be completed by students who intend to continue in biology. Other students should consider BIOL 100 or NSCI 120.

MAJOR PREREQUISITE REQUIREMENTS:

BIOL 130 and BIOL 140

CHEM 134 or CHEM 144 General Chemistry I

CHEM 136 or CHEM 146 General Chemistry II

CHEM 225, 226 and 227 Organic Chemistry

PHYS 125 and 126 (or PHYS 150 and 151)

MATH 113 or MATH 115 Calculus I

MATH 114 or MATH 116 Calculus II, *or* MATH/STAT 363 Intro to Statistics

Mathematics and chemistry are essential to success in biology and should be taken as early as possible. Chemistry and mathematics course serve as prerequisites for many biology courses.

sciences courses.

Foundation courses:

Physiology: One course from:

BIOL 303 or 305 or 335......4hrs

Cell & Molecular: One course from:

BIOL 301 or 370 or 385......3-4 h hrs

Capstone Experience consisting of one of the following:

ipstone Experience consisting of one of the following.	
BIOL 491 Capstone Course in Biology	hrs
or	
BIOL 492 Capstone Research Experience	hrs
or	
BIOL 493 Capstone Teaching Experience	hrs
or	
One of the following courses: BIOL 390K, 405, 419, 452	,
490D, 508, 514	hrs

Students with interests in specific areas of biology are encouraged to consider the following options as they select the additional upper level (300+) biology courses needed to complete the major:

Animal Biology and Behavior: BIOL 303, 312, 320, 324, 353, 419, 424, 456.

Ecology and Evolution: BIOL 315, 320, 361, 337, 405, 414, 419, 490D.

Microbiology: BIOL 381, 385, 405, 406, 430, 440, 450, 459, 485

Molecular Biology: BIOL 301, 370, 381, 470, 471, 472, 473, 474

Plant Biology: BIOL 320, 333, 335, 337.

Pharmacy: BIOL 305, 357, 370, 385.

Pre-Medicine: BIOL 301, 303, 305, 310, 311, 312, 357, 370, 385, 390K, 430, 450, 452, 455, 459.

NOTES:

- A maximum of 6 credit hours in BIOL 492, 493, 495, 497, 498 and 499 can be applied toward the 30 credit major requirement.
- A maximum of 50 hours in biological sciences courses may be applied toward the 120-credit-hour total required for graduation.
- In the 30 credit hours required for the major, students may use either BIOL/BCHM/CHEM 370 or BIOL/BCHM/CHEM 470 and/or 471.
- At least 15 of the 30 upper level hours required in the BIOL major must be elected at UM-Dearborn.

MINOR OR BGS/LIBS AREA OF FOCUS

A minor or area of focus consists of 12 hours of upper-level credits in biological sciences. Note that all these courses include prerequisites in biology and some include prerequisites in chemistry or mathematics.

CERTIFICATE IN MEDICAL SCIENCES (MEDS)

The Medical Sciences (MEDS) certificate complements existing Baccalaureate degrees and acknowledges a student's interest and education in human medical sciences.

Most biology majors pursuing the certificate complete 3 classes beyond a BS degree. Upon completion, the MEDS certificate is posted on the student's transcript.

The major advantage of the MEDS certificate is to serve students seeking a medical sciences focus. The MEDS certificate may be particularly desirable to students who wish to extend their educational experience without a long-term commitment to graduate study.

PROGRAM ENTRY

For the degree-seeking student, admission to the certificate program requires a cumulative grade point average (GPA) of 3.0 or better and a minimum of 12 earned credits completed at UM-Dearborn. Applications should be submitted through CASL Advising and Records Office, 1039 CB.

Post-graduates (non-degree-seeking) must apply using the Campus Options Program application and submit the application directly to the program director for approval. Up to 2 courses (6-8 crdits) may be transferred into the MEDS certificate. Once approved, the student will receive an acceptance letter from the Office of Admissions and Orientation. The Campus Options Program application is available online at umd.umich.edu/ddc.

REQUIREMENTS FOR A CERTIFICATE

The student must be working toward a University of Michigan-Dearborn bachelor degree or the student must have received a bachelor degree from an accredited institution.

A minimum GPA of 2.8, both overall and in MEDS courses is required for graduation.

Students must complete Anatomy and Physiology (BIOL 103 and 105 or 305) and 3 courses, one each from the Biochemistry, Human Biology, and Medicine and Society categories.

Required core (2 courses) 8 hrs			
BIOL 103	Anatomy and Physiology		
BIOL 105	Anatomy and Physiology IIA		
OR	y y		
BIOL 305	Anatomy and Physiology IIB	4 hrs	
Biochemistry (Che	oose one course from)		
BCHM 480	Pharmacology	3 hrs	
BIOL 370	Principles of Biochemistry	3 hrs	
BIOL 328	Endocrinology	3 hrs	
BIOL 470	Biochemistry	3 hrs	
Human Biology (C	Choose one course from)		
BIOL 310	Histology	4 hrs	
BIOL 350	Introduction to Neurobiology.	4 hrs	
BIOL 380	Epidemiology	2 hrs	
BIOL 357	Human Physiology	3 hrs	
BIOL 452	Medical and Env Toxicology.	3 hrs	
BIOL 455	Immunology		
BIOL 459	Pathogenic Microbiology	4 hrs	
BIOL/MICR 43	30 Medical Virology	3 hrs	
Medicine and Society (Choose one course from)			
BIOL 410	Diversity and Health Issues	3 hrs	
ANTH 430	Medical Anthropology	3 hrs	
PSYC 433	Health Psychology	3 hrs	
HPS 440	Medical Sociology		
HPS 442	Medical Ethics		
HPS 456	Health Care and the Law	3 hrs	

Biological Science (BIOL)COURSE OFFERINGS

BIOL 100 Principles of Biology

3.000 Credits

A lecture course introducing non-science concentrators to major areas of biology, including cell biology, genetics, human physiology, plant biology, ecology, and evolution. Topics of current interest are discussed. Students cannot use both BIOL 100 and NSCI 120 to satisfy the Natural Sciences distribution requirements. Three hours lecture. (F,W).

BIOL 103 Anatomy and Physiology I

4.000 Credits

Co-requisites: BIOL 103L

The structural and functional relationships of the human body at the cellular, tissue, organ, and system levels are analyzed. Students identify the major anatomical parts and relate these to the physiological activities of the circulatory, skeletal, nervous, muscular, and digestive systems. The homeostatic effects of fluids, electrolytes, and acids and bases throughout the integrated human body are analyzed. Four hours lecture, three hours laboratory. (F).

BIOL 105 Anatomy and Physiology IIA

4.000 Credits

Prerequisites: BIOL 103 Co-requisites: BIOL 105L

The major anatomical parts of the cardiovascular, respiratory, reproductive, endocrine, nervous, and urinary systems of the human body are identified and related to the physiological activities of these systems. Emphasis is placed on the homeostatic effects of fluids, electrolytes, acids, and bases throughout the integrated human body. Four hours lecture, three hours laboratory. (W)

BIOL 130 Intro Org and Environ Biology

.000 OR 4.000 Credits Co-requisites: BIOL 130L

An introduction to organismal and environmental biology, with emphasis on plant and animal diversity, structure, physiology, and development; ecology; and evolution. This course complements BIOL 140, which need not be taken as a prerequisite; together they constitute an introduction to biology. This course is intended for science concentrators. Three hours lecture, four hours laboratory/recitation. (F,W,S).

BIOL 140 Intro Molec & Cellular Biology

4.000 Credits

Prerequisites: CHEM 134 * or CHEM 144*

Co-requisites: BIOL 140L

An introduction to molecular and cellular aspects of biology with emphasis on cell structure and function, biochemistry, genetics, cell growth, and the origin of life. This course complements BIOL 130; together they constitute an introduction to biology. This course is intended for science concentrators. Three hours lecture, four hours laboratory/recitation.

BIOL 240 Great Experiments in Biology

3.000 Credits

An individualized-learning course that portrays the development of modern biological science. The course does not require attendance in classes since it can be completed at home and in the library by means of study guides, audio cassettes, slide/tape presentations, and computer-assisted instruction. (F,W,S).

BIOL 242 Great Experiments Laboratory

1.000 Credits

Prerequisites: BIOL 240 *

An individualized-learning laboratory science course that can be completed at home. Historically important and model experiments are performed in order to demonstrate how hypotheses are drawn and tested. Data are analyzed at a computer terminal. (F,W,S).

BIOL 290 Topics in Biology and Society

3.000 Credits

An introduction to themes of biology reflecting the interaction between biology and society. Topics vary and are announced in the current Schedule of Classes. The course may be repeated no more than once under a different topic. Three hours lecture. (OC).

BIOL 291 Biology and Society Laboratory

1.000 Credits

Co-requisites: BIOL 290

A laboratory course to accompany BIOL 290. Three hours laboratory. (OC).

BIOL 301 Cell Biology

4.000 Credits

Prerequisites: BIOL 140 Co-requisites: BIOL 301L

Functional and structural features of cells, organelles, and macromolecules. Topics in biochemistry, and physical chemistry of cellular processes are considered. Three hours lecture, four hours laboratory. CHEM 226 is recommended. (W).

BIOL 303 Comparative Animal Physiology

4.000 Credits

Prerequisites: BIOL 130 and BIOL 140 and (CHEM 124 or

CHEM 134 or CHEM 144) Co-requisites: BIOL 303L

Physiological processes and their control in higher animals. Emphasis ranges from the cellular mechanisms and systemic patterns of regulation of body functions to the evolutionary and environmental adaptations determining body form and function in diverse animal types. Three hours lecture, four hours laboratory. MATH 114 is recommended. (F).

BIOL 304 Ecology

4.000 Credits

Prerequisites: BIOL 130 and (MATH 115 or MATH 113 or

MPLS 116)

Co-requisites: BIOL 304L

Relationships between organisms and their environments. Patterns in the physical environment, physiological and behavioral adaptations, population dynamics, energy flow, nutrient cycling; succession. Three hours lecture, four hours laboratory (with field trips). (F, S).

BIOL 305 Anatomy and Physiology IIB

4.000 Credits

Prerequisites: BIOL 103 Co-requisites: BIOL 305L

The major anatomical parts of the cardiovascular, respiratory, reproductive, endocrine, nervous, and urinary systems of the human body are identified and related to the physiological activities of these systems. Emphasis is placed on the homeostatic effects of fluids, electrolytes, acids, and bases throughout the integrated human body. Students complete additional work beyond what is required in BIOL 105. Four hours lecture, three hours laboratory.

BIOL 306 General Genetics

3.000 Credits

Prerequisites: BIOL 130 and BIOL 140

Co-requisites: BIOL 306R

An intermediate course in classical, molecular and evolutionary genetics. The structure, function, and inheritance of genetic material in prokaryotes, eukaryotes and viruses are discussed. Topics include DNA and chromosome structure, genetic linkage and mapping, gene expression and its regulation, human genetic disease, and population genetics. Three hours lecture, one hour recitation. (F).

BIOL 307 General Genetics Laboratory

1.000 Credits

Prerequisites: BIOL 306 *

A semester-long laboratory course dealing with investigation and analysis in genetics. Laboratory sessions will include genetic crosses of plants and animals and the subsequent analysis to determine linkage and gene mapping location. Computer exercises will also be used to establish genetic tools for modern molecular analysis. Four hours laboratory. (W).

BIOL 309 Introduction to Mycology

4.000 Credits

Prerequisites: BIOL 130 and BIOL 140

An introduction to the biology of the fungi. Classification, structure, industrial use, gastronomic qualities, and disease-producing ability of macroscopic and microscopic forms are studied. Laboratories include microscopic and macroscopic examinations of fungi and their growth and field studies on the occurrence and classification of edible and poisonous varieties. Three hours lecture, four hours laboratory. (OC).

BIOL 310 Histology

4.000 Credits

Prerequisites: BIOL 130 and BIOL 140

Descriptive approaches to the study of the microscopic anatomy of animal tissue. The course emphasizes the study of cell and tissue types, selected organs and the interpretation of electron micrographs. Three hours lecture, four hours laboratory. (AY, F).

BIOL 311 Embryology

4.000 Credits

Prerequisites: BIOL 130 and BIOL 140

Co-requisites: BIOL 311L

Descriptive and experimental approaches to a comparative study of reproduction, morphogenesis, and growth. Emphasis is placed on the vertebrates, but some attention is focused on the development of invertebrates and plants. Three hours lecture, four hours laboratory. (AY, W).

BIOL 312 Compare Anat of Vertebrates

5.000 Credits

Prerequisites: BIOL 130

A comparative study of the morphology of living organisms, including an analysis of functional features, an introduction to the principles of systematics, and a study of the broad outlines of classification. The major emphasis is on the comparative functional anatomy of vertebrates. Three hours lecture, eight hours laboratory. (AY, W).

BIOL 313 Plant Taxonomy and Systematics

4.000 Credits

Prerequisites: BIOL 130

Characteristics, distribution, and relationships of plants with special reference to the local Michigan flora. Three hours lecture, four hours laboratory (including field work) per week. (OC).

BIOL 315 Aquatic Ecosystems

4.000 Credits

Prerequisites: BIOL 130 and (CHEM 124 or GEOL 118)

An introduction to the physical, chemical, and biological characteristics of lakes, rivers, and wetlands emphasizing a comparison of ecosystem structure and function. Laboratory emphasizes data collection and analysis to characterize a representative lake, river, and wetland. Lecture and laboratory. (AY, F).

BIOL 320 Field Biology

4.000 Credits

Prerequisites: BIOL 130 or BIOL 100 or NSCI 120 or

NSCI 233

Adaptations, taxonomy, systematics, ecology, and behavior of southeastern Michigan flora and fauna. Techniques of field observation and recording are emphasized. Skills in the use of identification keys and guides are developed. The campus Environmental Study Area is used intensively. Three hours lecture, four hours laboratory (with field trips). (S).

BIOL 324 Invertebrate Zoology

4.000 Credits

Prerequisites: BIOL 130

This course introduces students to the diversity of invertebrate animals from a functional evolutionary perspective. The lecture will focus on the unique aspects of the morphology, physiology, and ecology of major phyla in light of the selective forces that have favored their evolution, as well as consider the intersection of invertebrates and humans. Through dissection, prepared slides and field observations, the laboratory will introduce the diversity of invertebrate phyla and subgroups, with emphasis on form and function.

BIOL 333 Plant Biology

4.000 Credits

Prerequisites: BIOL 130 Co-requisites: BIOL 333L

A thorough survey of the evolutionary trends in plant reproduction and morphology will be considered. This survey will extend into the field of plant anatomy, but not plant physiology, which is covered in a separate course. Major groups to be studied include: bacteria, algae, fungi, liverworts, lichens, mosses, ferns, and seed plants. Certain less familiar groups will also be emphasized. Plant diversity will be examined from the perspective of its import to civilizations of the past and future. Three hours lecture, four hours laboratory. (F, S).

BIOL 335 Plant Physiology

4.000 Credits

Prerequisites: BIOL 130 and BIOL 140

Co-requisites: BIOL 335L

Physiological principles as they apply to the major plant groups. Topics include cellular metabolism, water balance, translocation, photosynthesis, mineral nutrition, growth and development and production of secondary substances. Three hours lecture, four hours laboratory. (W).

BIOL 337 Plant Ecology

3.000 Credits

Prerequisites: BIOL 130

This course focuses on different aspects of the relationship between plants and their environment. Topics include: a) interactions of plants with the physical environment; b) ways in which the environment acts to shape plant populations through evolution; c) intra- and interspecific interactions among individuals; and d) large-scale patterns and processes at the landscape-level. Three hours lecture.

BIOL 350 Introduction to Neurobiology

4.000 Credits

Prerequisites: BIOL 130 and BIOL 140

Co-requisites: BIOL 350L

An introduction to nervous systems and how they function. This course includes the cellular physiology and anatomy of nervous systems in vertebrates and invertebrates, and how these cellular activities are integrated into systems to produce complex, coordinated behavior. Three hours lecture. (W).

BIOL 352 Endocrinology

3.000 Credits

Prerequisites: BIOL 140 and BIOL 130 and CHEM 134

This class will provide intermediate and advanced undergraduates with a basic understanding of the function of the endocrine system. The course will progress from a consideration of basic concepts and mechanisms to the physiology (function) of specific endocrine systems. Interactions between organ systems will also be emphasized. Specific sections of the course will focus on function of the endocrine system during stress, fluid balance, metabolism (including calcium, glucose, lipid, and proteins), reproductive growth, development, and aging.

BIOL 353 Ornithology

3.000 Credits

Prerequisites: BIOL 130

A study of the unique features of birds as representatives of vertebrates, including their morphology, anatomy, physiology, physics of flight, mating systems, social structure, vocalizations, orientation and migration, origin and evolution, growth and development, and issues in avian conservation. Students learn about the current research on bird migration at the Rouge River Bird Observatory on campus. Students develop individual species analysis of life and natural histories. Three hours lecture.

BIOL 357 Human Physiology

3.000 Credits

Prerequisites: (BIOL 130 and BIOL 140) or (BIOL 103 and

BIOL 105)

Systems of the human body and their function are investigated individually and as part of an integrated natural living system. Topics include cell structure and function of nerves, muscles, the lungs, heart, blood vessels, kidneys, digestive tract, endocrine glands, brain, and reproductive organs.

BIOL 360 Population Genetics & Evolutn

3.000 Credits

Prerequisites: BIOL 130 and BIOL 140 and (MATH 104 or MATH 105 or MATH 113 or MATH 115 or MPLS 116)

Processes which change the genetic composition of populations: mutation, gene flow, genetic drift, and natural selection. The origin of races, species, and higher taxa. Evidence of evolution from the geological record, comparative anatomy, comparative biochemistry and other sources. Three hours lecture. (W).

BIOL 361 Population Genetics & Evol Lab

1.000 Credits

Prerequisites: BIOL 360 *

A laboratory course to accompany BIOL 360. Four hours laboratory, (OC).

BIOL 370 Principles of Biochemistry

3.000 Credits

Prerequisites: BIOL 140 and CHEM 226

A concise but comprehensive survey of various areas of biochemistry designed for non-biochemistry majors. The course follows the standard approach to the subject including a description of cells, their structure and constituent macromolecules (proteins, nucleic acids, carbohydrates and lipids), enzymology, bioenergetics, intermediary metabolism and gene regulation. Students cannot take both BCHM 370 and 470 or 471 for any combination of concentration, cognate or minor requirement. Three hours lecture. (F).

BIOL 380 Epidemiology

2.000 Credits

Prerequisites: BIOL 140

A study of disease occurrence and spread in human populations. The primary concern is with groups of persons, rather than individuals. Emphasizes methods of study that would contribute to understanding disease etiology. Two hours lecture. BIOL 301 and 385 are recommended. (OC).

BIOL 381 Biotechnology & Bioprocessing

4.000 Credits

Prerequisites: BIOL 140

Biotechnology and Bioprocessing class is centered on the study of bioengineering applications found today in the medical and agricultural industries. Students use microorganisms, plant and animal tissue culture, and enzymes during the laboratory period, practicing the fundamentals of hands-on genetic engineering and material processing. Students establish and purify proteins from recombinant organisms. Besides technology, ethical and environmental concerns are discussed in the lecture. Three hours lecture, four hours laboratory.

BIOL 385 Microbiology

4.000 Credits

Prerequisites: BIOL 130 and BIOL 140

Co-requisites: BIOL 385L

The biology of microorganisms is considered through study of the properties of bacteria, fungi, algae, protozoa, and viruses. Microbial structures are discussed and correlated with their function. Aspects of cellular metabolism pertinent to microorganisms are emphasized. The interaction of microorganisms and their environment, animate and inanimate, is discussed with respect to the beneficial or harmful effects of the different microbial groups. Laboratory exercises introduce the student to basic, practical microbiological techniques and illustrate various principles of microbial life. Three hours lecture, four hours laboratory. (F,S).

BIOL 390 Topics in Biology

1.000 TO 4.000 Credits

Examination of problems and issues in selected areas of biology. Title in Schedule of Classes changes according to content. This course may be repeated for credit when specific topics differ. Permission of Instructor. (OC).

BIOL 405 Applied & Environ Microbiology

4.000 Credits

Prerequisites: BIOL 385 or MICR 385

Co-requisites: BIOL 405L

The study of the diversity, structure and function of microorganisms as they interact with their environment. Emphasis will be placed on soil microbiolgy (fungi, bacteria, microalgae) and plant-microbe interactions (pathogens, symbioses). Ecological topics include decomposition, nutrient cycling, bioremediation and agroecosystems. Three hours lecture, four hours laboratory. (W).

BIOL 406 Microbial Genetics

3.000 Credits

Prerequisites: MICR 385 or BIOL 385

This molecular genetics course emphasizes bacteria and viruses. Topics include chromosome structure and replication, recombination, DNA repair, genetic mapping, mechanisms of gene transfer, regulation of gene expression, and mutagenesis. Three hours lecture, four hours laboratory. (AY,F).

BIOL 410 Diversity Issues Health Care

3.000 Credits

Must be enrolled in one of the following classes:

Senior Junior

Prerequisites: BIOL 130 and BIOL 140

This course will address the effect of race, age, gender, religion, and economic status on medical research and health care. Through an examination of clinical trials and case studies, students will learn how medical research is performed in the United States, and what health care treatments and options for patients are available. Medical treatment and disease topics will be selected and will be evaluated as to how they are influenced by the criteria listed. The examples will focus on both cultural differences and inequity, in national and global settings. (AY).

BIOL 414 Limnology

4.000 Credits

Prerequisites: BIOL 130 and (CHEM 136 or CHEM 146)

Co-requisites: BIOL 414L

The study of the structural and functional relationships and productivity of organisms in lakes and streams as they are regulated by their physical, chemical and biotic environments. Laboratories will emphasize field study of area lakes and streams. Three hours lecture, four hours laboratory. BIOL/ESCI 304 or ESCI 275 recommended.

BIOL 416 Stream Ecology

4.000 Credits

Prerequisites: BIOL 304

A study of the physical, chemical and biological characteristics of streams and rivers. Three hours lecture, four hours laboratory. (OC).

BIOL 419 Behavior and Evolution

3.000 Credits

Must be enrolled in one of the following Levels:

Undergraduate

Prerequisites: BIOL 140 and BIOL 130

An in depth examination of how evolutionary processes shape behavior, focusing on the influence of natural, sexual, and kin selection. Topics include behavioral genetics, natural selection, sexual selection, kin selection, optimality, game theory, evolutionary stable strategies, phylogenetics, and the comparative method.

BIOL 420 Advanced Field Ecology

4.000 Credits

Prerequisites: BIOL 304 or BIOL 320

An intense study of behavioral ecology and field-oriented research at an advanced level, utilizing ecological habitats on campus and in surrounding urban areas. Focus will be on plant/animal interactions and will include pollination ecology, reproduction and distribution ecology, optimal foraging theory, as well as hypothesis testing of animal migration and distribution of species in extreme urban environments. Three hours lecture, four hours laboratory. (OC).

BIOL 424 Biology of Spiders

4.000 Credits

May not be enrolled in one of the following Classes:

Graduate

Prerequisites: BIOL 130

An introduction to the biology of spiders and related arachnids. Lectures include spider anatomy, natural history, ecology, and evolution. Laboratory work includes specimen preparation, use of dichotomous keys, spider behavior, field methods, rearing and collecting techniques, and identification of spiders and their webs. Three hours lecture, four hours laboratory. Students cannot receive credit for both Biology 424 and Biology 524.

BIOL 430 Medical Virology

3.000 Credits

Prerequisites: BIOL 385 or MICR 385

A general description of the history and nature of animal virus disease. Emphasis is placed on the pathogenesis and clinical description of specific diseases.

BIOL 440 Micro Genetics & Physi Lab

1.000 Credits

Must be enrolled in one of the following Levels:

Undergraduate

May not be enrolled in one of the following Classes:

Freshman

Prerequisites: BIOL 385 * or MICR 385 * or BIOL 301 * or BIOL 406 * or MICR 406 * or BIOL 485 * or MICR 485 *

This course emphasizes the use of advanced microbiological techniques for understanding the genetics and physiology of microorganisms. Experiments focus on the understanding of general microbial phenomena, such as nutrition, metabolism and biochemistry; protein and nucleic acid synthesis; energy generation, enzyme regulation, membrane transport, motility, differentiation, cellular communication and the behavior of populations.

BIOL 450 Virology

4.000 Credits

Prerequisites: CHEM 226 and (MICR 385 or BIOL 385)

The first half of this course deals with bacterial viruses, with emphasis on classical events in this field. The second half surveys the field of animal viruses, with emphasis on recent discoveries, including replication, pathogenesis, and viral association with cancers. Three hours lecture, four hours laboratory. (AY,W).

BIOL 452 Med & Env Toxicology

4.000 Credits

Must be enrolled in one of the following Levels:

Undergraduate

Must be enrolled in one of the following classes:

Senior

Junior

Prerequisites: BIOL 140 and CHEM 225 and (BIOL 370 or BIOL 470 or BIOL 301)

Emphasis is on the toxicity, toxicokinetics and toxicodynamics of environmental toxicants to human pathophysiology. Examples are based on toxicant exposure and subsequent diseases in humans and other biological systems. Three hours lecture, four hours laboratory. (W)

BIOL 455 Immunology

4.000 Credits

Prerequisites: BIOL 385 or BIOL 301 or MICR 385

A detailed study of the field of immunology. Among the topics covered are various aspects of the immunological response, such as humoral or cell-mediated immunity, cell-cell interactions, and immunology as related to the cause and prevention of disease. Three hours lecture, four hours laboratory. (AY,F).

BIOL 456 Behavioral Biology

4.000 Credits

May not be enrolled in one of the following Classes:

Graduate Specialist Doctorate

Prerequisites: BIOL 130 Co-requisites: BIOL 456L

This course uses evolutionary and ecological theory to evaluate behavioral adaptations of organisms to their environment. Topics discussed include game theory, kin selection, sexual selection, eusociality, orientation and navigation, and signal evolution. Laboratory sessions include: observations of animal behavior, required manipulations of live animals, and field trips. Three hours of lecture, one four-hour laboratory. Students cannot receive credit for both BIOL 456 and BIOL 556. Student seeking graduate credit should elect BIOL 556.

BIOL 459 Pathogenic Microbiology

4.000 Credits

Prerequisites: BIOL 385 or MICR 385

An introduction to pathogenic microorganisms and mechanisms of microbial pathogenicity. Disease-causing bacteria, fungi, viruses, and protozoa are studied. Laboratories emphasize clinical approaches to isolation, identification, and treatment. Three hours lecture, four hours laboratory. (AY,F).

BIOL 470 Biochemistry I

3.000 Credits

Prerequisites: BIOL 130 and BIOL 140 and CHEM 226

Life processes from a chemical viewpoint: structure/function relationships of biomolecules with emphasis on proteins, enzyme kinetics, and mechanisms of action. Three hours lecture. (F).

BIOL 471 Biochemistry II

3.000 Credits

Prerequisites: BCHM 470 or BIOL 470 or CHEM 470

Intermediary metabolism, bioenergetics, energy transformation, metabolic interrelationships, biochemical regulation, highly structured subcellular biochemical systems. Three hours lecture. (W).

BIOL 472 Biochemistry Lab I

1.000 Credits

Prerequisites: CHEM 344 * and (BCHM 470 * or BIOL 470 * or CHEM 470 *) and CHEM 227

The techniques of preparative and analytical biochemistry. Preparation and characterization of proteins and nucleic acids. Physical and chemical properties of proteins and nucleic acids. Four hours laboratory. (F).

BIOL 473 Biochemistry Laboratory II

1.000 Credits

Prerequisites: (BCHM 471 * or BIOL 471 * or CHEM 471 *) and (BCHM 472 or BIOL 472 or CHEM 472)

The techniques of preparative and analytical biochemistry. Preparation and characterization of lipids and carbohydrates. Methods in metabolism. Four hours laboratory. (W).

BIOL 474 Molecular Biology

4.000 Credits

Prerequisites: (BCHM 470 or BIOL 470 or CHEM 470) or (BCHM 370 or BIOL 370 or CHEM 370) and CHEM 227 Co-requisites: BIOL 474L

This course will emphasize the molecular biology of eukaryotes, and topics will include genome organization and complexity, chromatin structure and function, gene expression, DNA replication and repair, genetic rearrangements, and the molecular biology of development. The laboratory will emphasize the application of recombinant DNA technology to the study of biological problems. Three hours lecture, four hours laboratory. (W).

BIOL 485 Physiology of Micro-organisms

3.000 Credits

Prerequisites: (BIOL 385 or MICR 385) and CHEM 225 *

An in-depth examination of the physiology of microorganisms. Areas of emphasis include the growth and nutrition of microorganisms, the development of viruses, the microbial degradation of organic compounds, the regulation of degradation reactions, and the biosynthesis of uniquely microbial compounds and secondary metabolites, such as antibiotics and toxins. Consideration is given to the natural environments of specific microorganisms. Three hours lecture, four hours laboratory. (AY,W).

BIOL 489 Origins of Biological Sciences

3.000 TO 4.000 Credits

A study of the development of the science of biology as revealed in the writing and experiments of major biologists of the past and present. (OC).

BIOL 490 Sem in Biology/Microbiology

1.000 TO 6.000 Credits

Directed research on a problem culminating in the preparation of a paper and presentation of a public seminar. Tutorials, lectures and student seminars are given on selection and formulation of research problems, experimental design, and statistical treatment of data. May be repeated for credit with permission of advisor. (OC).

BIOL 491 Capstone Course in Biology

3.000 Credits

Must be enrolled in one of the following Major fields of study:

Biological Sciences

Must be enrolled in one of the following classes:

Senior

A culminating course for biology majors which focuses on an area of current biological research and integrates material from different subdisciplines of biology. Topic varies and is announced in the Schedule of Classes. Three hours lecture.

BIOL 492 Capstone Research Experience

3.000 Credits

Must be enrolled in one of the following Major fields of study:

Biological Sciences

Must be enrolled in one of the following classes:

Senior

An approved research experience with a UM-D biology faculty member which integrates material from different subdisciplines of biology. Research results are reported in a poster or seminar presentation or in a manuscript submitted for publication.

BIOL 493 Capstone Teaching Experience

3.000 Credits

Must be enrolled in one of the following Major fields of study:

Biological Sciences

Must be enrolled in one of the following classes:

Senior

An approved teaching experience which integrates material from different subdisciplines of biology. Students work as a student teaching assistant/student mentor in the laboratory portion of a biology course.

BIOL 495 Off-Campus Research Participat

1.000 TO 3.000 Credits

Participation in ongoing experimental research at an off-campus laboratory (or in the field). Arrangements made between the off-campus researcher, the student, and the Biology concentration advisor. No more than six credit hours combined from BIOL 490, 495, 498, and 499 may be counted toward the 120 hours required for a degree. Four to twelve hours laboratory. Permission of instructor. (F,S).

BIOL 497 Seminar in Biology

1.000 Credits

Topics of current interest in Biology will be presented by guest lecturers, faculty members or students. Topics chosen will vary from term to term. Can be elected up to three times. One hour seminar. (W).

BIOL 498 Independent Study in Biology

1.000 TO 3.000 Credits

Library research and independent study performed under the guidance of a faculty member. Four to twelve hours readings. Permission of instructor. (F,S).

BIOL 499 Laboratory in Biological Resrh

1.000 TO 3.000 Credits

Directed laboratory research performed under the guidance of faculty member. Four to twelve hours laboratory. Permission of Instructor. (F,S).

Chemistry (ACS Approved)

The major program in chemistry at the UM-Dearborn is certified by the American Chemical Society. This program is designed primarily for students who intend to go into Chemistry as a profession or who plan to continue their studies at the graduate level. A student may earn a BS degree in chemistry by completing the prerequisite, major, and cognate courses listed below and by fulfilling the CASL distribution and graduation requirements.

PREREQUISITES TO THE MAJOR

A solid background in mathematics is essential to success in any of the scientific disciplines. Incoming students who intend to choose a major in Chemistry should have completed at least three years of high school mathematics. First year students should plan to enroll in MATH 105, MATH 115, or MATH 116 based on the results of their math placement tests. The CHEM 134-136 or 144-146 sequence is a prerequisite to many other courses in the Natural Sciences Department; students should complete this sequence as soon as possible.

Chemistry majors must complete the following 39-40 credit hours of prerequisite courses. These courses should be completed early in the student's four-year curriculum.

CHEM 134 and 136 or 144 and 146 CHEM 225, 226 and 227 BIOL 140 PHYS 150 and 151** MATH 115, 116 and 205 or 215

**The physics prerequisite may also be satisfied by completing PHYS 125 and 126 <u>and</u> an upper-level physics course, such as PHYS 305.The upper level PHYS course used in this substitution <u>cannot</u> be used toward the cognate requirement.

MAJOR REQUIREMENTS

Required courses.		
CHEM 303	Inorganic Chemistry I	3 hrs
CHEM 344	Quantitative Analysis	4 hrs
CHEM 368	Physical Chemistry I	3 hrs
CHEM 370	Principles of Biochemistry	3 hrs
CHEM 403	Inorganic Chemistry II	3 hrs
CHEM 447	Instrumental Methods of Analysis	4 hrs
CHEM 450	Advanced Organic Synthesis and	
	Characterization Laboratory	1 hr
CHEM 452	Advanced Inorganic Synthesis and	
	Characterization Laboratory	1 hr
CHEM 469	Physical Chemistry II	3 hrs
CHEM 481	Physicochemical Measurements	
CHEM 493	Presentations in Chemistry	1 hr
One course from		
CHEM 348	Environmental Chemistry	3 hrs
CHEM 349	Environmental Chemistry Laborator	
CHEM 352	Introduction to Toxicology	
CHEM 390	Current Topics in Chemistry	
CHEM 426	Advanced Organic Chemistry	3 hrs
CHEM 430	Bioorganic Chemistry	3 hrs
CHEM 436	Polymer Chemistry	3 hrs
CHEM 437	Nano-Biotechnology	
CHEM 472	Biochemistry Laboratory I	1 hr
CHEM 473	Biochemistry Laboratory II	
CHEM 490	Topics in Chemistry	1-3 hrs
CHEM 497	Seminar in Chemistry	

ognates

Students must complete at least six credit hours from courses numbered 300 and above in Biology, Biochemistry, Environmental Science, Geology, Mathematics (excluding MATH 385, 386, 387, 391, 442, 443, 444, 445, 446, 447, 449, 486), Microbiology, Statistics, or Physics. The six credit hours need not be from a single discipline.

NOTES:

- A maximum of 44 hrs. in CHEM (excluding CHEM 134, 136, 144, 146) may count in the 120 required for graduation.
- At least 12 of the 29 upper level hours in CHEM must be elected at UM-Dearborn.
- CHEM 470 and 471 can be used in place of CHEM 370, however, CHEM 470 alone cannot be used for this substitution. Students cannot take both CHEM 370 and 470 or 471 or any combination to fulfill major, cognate or minor requirements.
- A maximum of 6 hrs. of independent study/research in any Dept. of Natural Sciences discipline may count towards the 120 hours required to graduate.

MINOR OR AREA OF FOCUS

A minor or area of focus consists of 12 hours of upper-level credit in chemistry.

Chemistry (Instructional Track)

The Chemistry/Instructional Track major is an interdisciplinary program for students who wish to teach chemistry and other science courses at the secondary school level. The program meets State of Michigan requirements as well as American Chemical Society recommendations for teaching chemistry in high school. A student may earn a BS degree in Chemistry and qualify for a Michigan Provisional Secondary Teaching Certificate by completing the professional sequence of education courses including one semester of directed teaching; by completing the prerequisite, major, and cognate requirements listed below; and by fulfilling the CASL distribution and graduation requirements. Students must also complete at least 100 credit hours of noneducation courses; have a minimum 2.75 overall GPA; have a 2.75 or better GPA in their teaching major and in education courses; and have a 2.75 in their teaching minor. Students must take the Michigan Test for Teacher Certification (MTTC) prior to being recommended for a Michigan teaching certificate.

PREREQUISITES TO THE MAJOR

Chemistry/Instructional Track majors must complete 40 credit hours of prerequisite courses. These courses should be completed early in the student's curriculum.

CHEM 134/136 or 144/146 General Chemistry	8 hrs
CHEM 225, 226 and 227 Organic Chemistry	8 hrs
BIOL 130 or BIOL 140*	4 hrs
MATH 115, 116 and 205 or 215	11-12 hrs
PHYS 150/151 General Physics**	8 hrs

*Note: Students interested in biochemistry should elect BIOL 140; students interested in environmental chemistry should elect BIOL 130.

**Note: The physics prerequisite may also be satisfied by completing PHYS 125 and 126 <u>and</u> an upper-level physics course, such as PHYS 305. The upper level PHYS course used in this substitution <u>cannot</u> be used toward the cognate requirement.

Students must complete 20 credit hours of upper-level chemistry courses as indicated:

Required courses				
CHEM 303	Inorganic Chemistry I			
CHEM 344	Quantitative Analysis			
CHEM 368	Physical Chemistry I			
One course from the	One course from the following			
CHEM 403	Inorganic Chemistry II			
CHEM 447	Instrumental Methods of Analysis 4 hrs			
CHEM 469	Physical Chemistry II			
One laboratory course from the following				
CHEM 450	Advanced Organic Synthesis and			
	Characterization Laboratory1 hr			
CHEM 452	Advanced Inorganic Synthesis and			
	Characterization Laboratory1 hr			
CHEM 481	Physicochemical Measurements2 hrs			

Electives

Additional courses to bring the upper-level chemistry total to 20 hours, from the following

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CHEM 348	Environmental Chemistry	3 hrs
CHEM 349	Environmental Chemistry Laborator	y1 hr
CHEM 352	Introduction to Toxicology	3 hrs
CHEM 370	Principles of Biochemistry	3 hrs
CHEM 390	Current Topics in Chemistry	1-3 hrs
CHEM 403	Inorganic Chemistry II	3 hrs
CHEM 426	Advanced Organic Chemistry	3 hrs
CHEM 436	Polymer Chemistry	3 hrs
CHEM 447	Instrumental Methods of Analysis	4 hrs
CHEM 450	Advanced Organic Synthesis and	
	Characterization Laboratory	1 hr
CHEM 452	Advanced Inorganic Synthesis and	
	Characterization Laboratory	1 hr
CHEM 469	Physical Chemistry II	3 hrs
CHEM 481	Physicochemical Measurements	2 hrs
CHEM 497	Seminar in Chemistry	1 hr

NOTES

- A maximum of 44 hrs. in CHEM (excluding CHEM 134, 136, 144, 146) may count in the 120 required for graduation.
- 2. At least 12 of the 29 upper level hours in CHEM must be elected at UM-Dearborn.
- CHEM 470 and 471 can be used in place of CHEM 370, however, CHEM 470 alone cannot be used for this substitution. Students cannot take both CHEM 370 and 470 or 471 or any combination to fulfill major, cognate or minor requirements.
- The Chemistry Instructional major is open only to students who have been admitted to the College of Education, Health, and Human Services Secondary Certification Program.

 A maximum of 6 hrs. of independent study/research in any Dept. of Natural Sciences discipline may count towards the 120 hours required to graduate.

REQUIREMENTS FOR THE TEACHING MINOR

In order to obtain teaching certification, a student must complete the requirements for a teaching minor. Courses used to satisfy requirements for the minor and prerequisite may not be used to satisfy cognate or major requirements.

Teaching minors are available in mathematics, physical science, physics, and biology. Students should consult the College of Education, Health, and Human Services section in this *Catalog* for coursework requirements to complete the teaching minor.

EDUCATION REQUIREMENTS

Chemistry/Instructional majors must complete the following courses offered by the College of Education, Health, and Human Services: EDA 340 or EDA 440, EDC 300, EDC 301, EDC 302, EDC 460, EDD 301, EDD 304, EDD 469, EDD 480 or EDD 481, EDT 211, EXPS 410. Course descriptions for the above courses will be found under the College of Education, Health, and Human Services section of this *Catalog*. Chemistry/Instructional majors must also complete PSYC 171.

Chemistry (CHEM) COURSE OFFERINGS

CHEM 090 Introduction to Chemistry

3.000 Credits

An introductory course in chemistry stressing fundamental principles of chemistry and the application of mathematics to chemistry and problem-solving. Topics will include chemical formulas and equations, stoichiometry, descriptive inorganic chemistry, behavior of gases and atomic structure. Students with high school chemistry and three years of high school mathematics should elect CHEM 114. Three hours lecture. (F).

CHEM 091 Introduction to Chemistry II

3.000 Credits

The course is designed for the Chemistry 134/144 student whose background in chemistry is inadequate for success in 134/144. This course will be offered concurrently with Chem 090 (Introduction to Chemistry). It will begin after the first Chem 134/144 exam and will encompass the final nine weeks of the term. Topics will include chemical formulas and equations, stoichiometry, descriptive inorganic chemistry, behavior of gases, and atomic structure.

CHEM 100 Chemistry and Society

.000 OR 4.000 Credits

An introductory course for nonscientists that examines the way chemistry impacts our world. The course will focus not only on what modern chemistry has accomplished, but more generally on the way scientists think and how they function. Selected topics include (a) air and water pollution, ozone layer, global warming, acid rain, and other environmental chemistry; (b) the chemistry of plastics and polymers; (c) the chemistry of drugs and medicines; and (d) biotechnology and genetic chemistry. Other topics include the influence of the media on scientific issues and the decision-making process in science. Three hours lecture, three hours lab. (YR).

CHEM 124 General Chemistry I

4.000 Credits

Prerequisites: MATH 104 * or MATH 105 * or MPLS 113

Co-requisites: CHEM 124L

An introduction to phenomena and principles of chemistry with emphasis on developing an understanding of the fundamentals of chemical processes. Concepts to be explored are chemical reactions, thermodynamics, equilibria, and kinetics. For students considering careers in life sciences, physical sciences and engineering. Three hours lecture, one hour recitation, three hours laboratory. Prerequisites are one year of high school chemistry and previous or concurrent enrollment in MATH 104 or 105. (F, W,S).

CHEM 134 General Chemistry IA

4.000 Credits

Prerequisites: MATH 105 * or MPLS 113 or MPLS 115

Co-requisites: CHEM 134L

An introduction to chemical phenomena and principles with an emphasis on developing both an understanding of chemistry and an appreciation of what chemists do. Students will investigate the fundamentals of chemistry in the context of real-world problems and will utilize systems of biological and environmental importance. Core concepts include stoichiometry, aqueous chemistry, gas laws, thermochemistry, atomic structure, molecular structure and bonding. Three hours lecture, one hour recitation, three hours laboratory. Primarily designed for students considering careers in life sciences or physical sciences. (F,W,S)

CHEM 136 General Chemistry IIA

4.000 Credits

Prerequisites: CHEM 124 or CHEM 134 or CHEM 144

Co-requisites: CHEM 136L

Continuation of CHEM 134. Concepts explored include conceptual and quantitative treatments of intermolecular forces, physical properties of solutions, chemical kinetics, chemical equilibria, acid-base equilibrium, thermodynamics, and electrochemistry. Primarily designed for students majoring in the physical sciences and the life sciences. (F,W,S)

CHEM 144 Gen Chemistry IB

.000 OR 4.000 Credits

Prerequisites: MATH 105 * or MPLS 113 or MPLS 115

Co-requisites: CHEM 144L

This course consists of an introduction to chemistry, its phenomena, and principles explored in the context of real-world examples (e.g. the automobile). Core concepts include states of matter, atomic and electronic structure, types of reactions (acid-base and reduction-oxidation), structure and bonding, gas laws, stoichiometry, thermodynamics, chemical equilibrium, and the chemical composition of the atmosphere and air pollution problems. Three hour lecture, one hour recitation, three hours laboratory. Primarily designed for students considering careers in engineering. (F)

CHEM 146 General Chemistry IIB

.000 OR 4.000 Credits

Prerequisites: CHEM 124 or CHEM 134 or CHEM 144

Continuation of CHEM 144. This course consists of an introduction to chemistry, its phenomena, and principles explored in the context of real-world examples (e.g. the automobile). Core concepts to be explored include the solid state, chemical kinetics, electrochemistry and its applications (e.g. batteries, fuel cells, and corrosion), an introduction to organic functional groups, their reactions, and spectroscopic identification, and the preparation and properties of synthetic polymers. Primarily designed for students considering careers in engineering. (W)

CHEM 225 Organic Chemistry I

3.000 Credits

Prerequisites: CHEM 136 or CHEM 146

Co-requisites: CHEM 225R

The initial course in organic chemistry. A general introduction to organic chemistry with emphasis on the development of structure theory and functional group chemistry. Three hours lecture, one hour recitation. (F,S).

CHEM 226 Organic Chemistry II

3.000 Credits

Prerequisites: CHEM 225 Co-requisites: CHEM 226R

A continuation of CHEM 225. Topics include functional group chemistry and properties of carbohydrates, amino acids, and aromatic compounds. Three hours lecture, one hour recitation. CHEM 225 and 226 constitute a two-semester sequence in organic chemistry, suitable for students in the basic sciences or engineering or with interests in one of the health professions. (W,S).

CHEM 227 Organic Chemistry Laboratory

2.000 Credits

Prerequisites: CHEM 226 *

Development of the basic laboratory techniques of organic chemistry. The chemistry of functional groups is studied and various organic compounds are synthesized and purified. Eight hours laboratory. (F,W,S).

CHEM 285 Introduction to Glass Blowing

1.000 Credits

A study of the nature, properties, and manufacture of glass. Laboratory experience in the manipulation of glass and the construction of scientific apparatus. Discussions, laboratory, and field trips. (AY).

CHEM 303 Inorganic Chemistry I

3.000 Credits

Prerequisites: CHEM 136 or CHEM 146

A study of the chemistry of the elements and their periodic relationship. Bonding theories and structures as well as descriptive chemistry of the representative elements will be emphasized. Three hours lecture. (F).

CHEM 325 Principles of Organic Chem

3.000 Credits

May not be enrolled in one of the following Major fields of study:

Biochemistry Biological Sciences

Chemistry (ACS Certified) Chemistry (Instructional)

Microbiology

Prerequisites: CHEM 124 and (CHEM 136 or CHEM 146)

A one-semester introduction to the compounds of carbon, with an emphasis on structure, preparation, reactivity and characterization of different functional groups. Both aliphatic and aromatic compounds will be examined. The important role of organic compounds in modern society will be highlighted with real world examples including fuels, detergents, plastics, medicines, biomolecules, environmental pollutants and additives. This course may not be used to satisfy the organic chemistry prerequisite for the Biochemistry, Biology, Chemistry, or Microbiology degree programs. Students may not receive credit for both CHEM 225 and 325. CHEM 325 may not be used as a prerequisite for Chemistry 226.

CHEM 344 Quantitative Analysis

4.000 Credits

Prerequisites: CHEM 136 or CHEM 146

Co-requisites: CHEM 344L

A survey of theory and practice of volumetric, gravimetric, electrometric and colorimetric analysis. Systematic analysis of complex materials. Two hours lecture, eight hours laboratory. (F)

CHEM 348 Environmental Chemistry

3.000 Credits

Prerequisites: CHEM 344 and (CHEM 225 or CHEM 325)

Description of the concepts, principles, practices, and current problems in the chemistry of natural waters, the soil, and the atmosphere. Three hours lecture. (AY).

CHEM 349 Environmental Chem Laboratory

1.000 Credits

Prerequisites: CHEM 348 * or ESCI 348 *

Collection and analysis of air, water, soil, and organisms for pollutants such as noxious gases, heavy metals, and trace organics. EPA-approved methods are emphasized. Four hours laboratory. (AY).

CHEM 352 Introduction to Toxicology

3.000 Credits

Prerequisites: CHEM 225

An introduction to the principles of toxicology with an emphasis on environmental toxicology. Major topics include toxic agents, toxicological mechanisms, and use of toxicological reference literature. Discussion of chemical carcinogenesis, genetic toxicology, immunotoxicology, teratology, and toxic responses of the skin, eyes and nervous system. Three hours lecture. (AY).

CHEM 368 Physical Chemistry I

3.000 Credits

Prerequisites: CHEM 225 and CHEM 344 and MATH 116 and (PHYS 125 or PHYS 150)

Nature of the gaseous state, chemical thermodynamics, biochemical and chemical equilibria and kinetics. Three hours lecture, one hour discussion. (W).

CHEM 370 Principles of Biochemistry

3.000 Credits

Prerequisites: BIOL 140 and CHEM 226

A concise but comprehensive survey of various areas of biochemistry designed for non-biochemistry majors. The course follows the standard approach to the subject including a description of cells, their structure and constituent macromolecules (proteins, nucleic acids, carbohydrates and lipids), enzymology, bioenergetics, intermediary metabolism and gene regulation. Students cannot take both BCHM 370 and 470 or 471 for any combination of concentration, cognate or minor requirement. Three hours lecture. (F).

CHEM 390 Current Topics in Chemistry

1.000 TO 3.000 Credits

A course in special topics current to the field of chemistry. Topics and format for the course may vary. See current Schedule of Classes. One to three hours seminar. Permission of instructor. (OC).

CHEM 397 Current Topics in Chemistry

3.000 Credits

A course for non-science majors which focuses on the interaction of chemistry and society. Sufficient chemical knowledge will be introduced so that the issues can be discussed and competing statements evaluated. Topics covered will include air and water pollution, fuels, designing drugs, etc. (OC).

CHEM 403 Inorganic Chemistry II

3.000 Credits

Prerequisites: CHEM 303 and (CHEM 368 * or CHEM 468)

A study of coordination and organometallic compounds through the use of current theories. The structure, reactivity, and descriptive chemistry of transition metal complexes will be examined. Three hours lecture. (W).

CHEM 426 Advanced Organic Chemistry

3.000 Credits

Prerequisites: CHEM 226 and CHEM 227

Spectral analysis, structure determination, reaction mechanisms, synthesis, stereochemistry, and other selected topics are discussed. Three hours lecture. (AY).

CHEM 430 Bioinorganic Chemistry

3.000 Credits

Prerequisites: BCHM 370 or CHEM 370 or BIOL 370

Introduces the roles that metals play in biological systems. Explores the chemical principles that make metals particularly well-suited for these roles. Introduces physical and experimental techniques used to explore the structure and function of metals in natural systems. Explores case studies from the literature to synthesize results of various experiments to develop a final understanding of the systems. Includes critical analysis of published primary literature in the field.

CHEM 436 Polymer Chemistry

3.000 Credits

Prerequisites: CHEM 226 and (CHEM 368 * or CHEM 468)

The macromolecular concept is introduced and polymerization mechanisms are discussed. The chemistry and physical properties of representative polymeric materials are presented. Topics include the determination and distribution of molecular weights, polymer morphology, mechanical properties of polymers, relaxation phenomena in polymers, and methods of polymer characterization. Three hours lecture. (AY).

CHEM 437 Nano-Biotechnology

3.000 Credits

Must be enrolled in one of the following classes:

Senior

Junior

Prerequisites: (CHEM 136 or CHEM 146) and (PHYS 126 or PHYS 151) and BIOL 140

An introduction to the fundamentals of nanotechnology, nanofabrication processes and its application in different fields with special attention to the life sciences. This course introduces different tools used in nontechnology and investigates how one can borrow the idea of self-assembly from nature to design structures at the nanometer scale. The course also focuses on different contemporary application areas of nanotechnology like biosensor development, cancer research and drug delivery. The

research areas of selected companies that are applying nanotechnology to develop new products will also be explored. This course showcases the interchange of ideas between chemistry, materials science and engineering insolving complex biological problems.

CHEM 447 Instrumental Methods of Analys

.000 OR 4.000 Credits

Prerequisites: CHEM 368 * or CHEM 468

A study of the theory, operation, and application of instrumental methods of chemical analysis including optical, magnetic, electrochemical, and separation techniques. Two hours lecture, eight hours laboratory. (W).

CHEM 450 Adv Org Syn & Character Lab

1.000 Credits

Prerequisites: CHEM 227 and CHEM 226 and CHEM 447

and CHEM 468

Co-requisites: CHEM 452

Concepts and techniques from previous laboratory courses as well as advanced techniques are applied to synthesis and characterization of organic compounds. Spectroscopic and chromatographic data collection and interpretation are critical to success in the course. Formal writing and data presentation is emphasized. Oral presentation and a poster presentation is required. Crossover experiments with CHEM 452 are likely. Four hours laboratory (W).

CHEM 452 Adv Inorg Synth & Char Lab

1.000 Credits

Prerequisites: CHEM 226 and CHEM 227 and CHEM 136

and CHEM 403 and CHEM 447 and CHEM 481

Co-requisites: CHEM 450

Concepts and techniques from previous laboratory courses as well as advanced techniques are applied to the synthesis and characterization of inorganic compounds. The ability to collect and interpret spectroscopic data is an important aspect of the course. Technical writing and data presentation is emphasized. Oral presentation and a poster presentation is required. Crossover experiments with CHEM 450 are likely, Four hours laboratory. (W)

CHEM 469 Physical Chemistry II

3.000 Credits

Prerequisites: CHEM 368

Nature of the liquid state, simple mixtures, heterogeneous equilibria; quantum theory, atomic and molecular structure, spectroscopy; statistical thermodynamics. Three hours lecture, one hour discussion. (F).

CHEM 470 Biochemistry I

3.000 Credits

Prerequisites: BIOL 140 and BIOL 130 and CHEM 226

Life processes from a chemical viewpoint: structure/function relationships of biomolecules, with emphasis on proteins, enzyme kinetics, and mechanisms of action. Three hours lecture. (F).

CHEM 471 Biochemistry II

3.000 Credits

Prerequisites: BCHM 470 or CHEM 470 or BIOL 470

Intermediary metabolism, bioenergetics, energy transformation, metabolic interrelationships, biochemical regulation, highly structured subcellular biochemical systems. Three hours lecture. (W).

CHEM 472 Biochemistry Laboratory I

1.000 Credits

Prerequisites: CHEM 344 * and (CHEM 470 * or BCHM 470 * or BIOL 470 *) and CHEM 227

The techniques of preparative and analytical biochemistry. Preparation and characterization of proteins and nucleic acids. Physical and chemical properties of proteins and nucleic acids. Four hours laboratory. (F).

CHEM 473 Biochemistry Laboratory II

1.000 Credits

Prerequisites: (BCHM 471 * or BIOL 471 * or CHEM 471 *) and (BCHM 472* or BIOL 472 * or CHEM 472 *)

The techniques of preparative and analytical biochemistry. Preparation and characterization of lipids and carbohydrates. Methods in metabolism. Four hours laboratory. (W).

CHEM 481 Physicochemical Measurements

2.000 Credits

Prerequisites: CHEM 469 *

Laboratory work including the determination of molecular weights, measurements of properties of pure liquids and solutions, studies of phase equilibria, thermochemical measurements, and analysis of atomic and molecular spectra. Eight hours laboratory. (W).

CHEM 490 Topics in Chemistry

1.000 TO 3.000 Credits

Must be enrolled in one of the following classes:

Junior Senior

Graduate
Prerequisites: CHEM 226

Examination of problems and issues in selected areas of chemistry. Title as listed in Schedule of Classes will change according to content. Course may be repeated for credit when specific topics differ. One to three hours lecture. (YR).

CHEM 493 Presentations in Chemistry

1.000 Credits

Must be enrolled in one of the following classes:

Senior

Employment or graduate studies in chemistry involve integration of experiences and knowledge from one's undergraduate courses. This course is designed to help prepare students for their professional endeavors beyond UM-Dearborn. Students will submit a proposal for a senior project, present the completed project in an appropriate forum, and submit a written report on the project. Students will assemble and present a professional portfolio, and complete an exit interview. The experimental work on the project may be done in an advanced laboratory course or an independent study. (F, W).

CHEM 495 Off-Campus Research Participat

1.000 TO 3.000 Credits

Participation in ongoing experimental research at an off-campus laboratory. Arrangements made between the research laboratory, the student and the chemistry concentration advisor. No more than six hours combined from CHEM 495, 498, and 499 may be credited toward the 120 hours required for a degree. Four to twelve hours laboratory. Permission of concentration advisor. (F,W,S).

CHEM 497 Seminar in Chemistry

1.000 Credits

May not be enrolled in one of the following Major fields of study:

Chemistry (ACS Certified)

Chemistry (Instructional)

Must be enrolled in one of the following classes:

Junior

Senior

Graduate

Weekly seminars on topics of current chemical interest presented by faculty members, guest lecturers or students. The subject will vary from term to term. The course may be elected up to three times. One hour seminar. (W).

CHEM 498 Readings in Chemistry

1.000 TO 3.000 Credits

Library research in a specific area of chemistry performed under the guidance of a faculty member. No more than six hours combined from CHEM 495, 498 and 499 may be credited toward the 120 hours required for a degree. Four to twelve hours of readings. Permission of instructor, (F,W,S).

CHEM 499 Laboratory Research in Chem

1.000 TO 3.000 Credits

Directed laboratory research performed under the guidance of a faculty member. No more than six hours combined from CHEM 495, 498 and 499 may be credited towards the 120 hours required for a degree. Four to twelve hours laboratory. Permission of instructor. (F,W,S).

Communication

The communication major emphasizes three interrelated areas of public relations and organizational cultures, public advocacy and democratic and intercultural/international cultures, communication and global cultures. Each area has a practical focus in which written and oral communication skills and interpersonal awareness are developed; in addition the communication degree is designed to emphasize the intellectual, historical, and critical perspectives emerging from the intersections between and among these larger areas of communication inquiry. This "triadic" approach presents communication as a challenging, creative skill to be mastered, and, moreover, as an integral process through which democratic and professional possibilities are shaped and social realities constructed.

A prominent emphasis on culture and community connects disciplinary work in communication with the integrative understanding of people's needs and interests that characterizes the best work in anthropology, sociology, psychology, economics, and political science. The program combines this strong theoretical foundation with the practical skills training to prepare students for any number of opportunities in our globalized multicultural and highly technological environment.

COMMUNICATION MAJOR REQUIREMENTS:

Prerequisites:	6 hrs
SPEE 101	Principles of Speech Communication
COMM 220	Survey of Mass Communication

Required Core A	rea I: 3 hrs
COMM 366	
D 1 C A	Culture Studies
-	rea II:
Select 2 courses i	from each of the following focus areas:
Public Relations a	nd Organizational Culture Focus
COMM 260	Public Relations Principles
COMM 300	Communication Research Methods
COMM 360	Social Media for Public Relations
COMM 390	Special Topics
COMM 450	Organizational Communication and
	Organizational Cultures
COMM 460	Public Relations Campaigns
COMM 477	Professional Communication Ethics
ESCI 572	Environmental Communications
International/Inter	cultural Communication and Global Culture
Focus	
COMM 300	Communication Research Methods
COMM 390	Special Topics
COMM 420	Critical Media Studies
COMM 430	International Communication
COMM 455	Gender and Media Studies
COMM 481	Gender and Globalization
SPEE 310	Interpersonal Communication
Public Advocacy a	and Democratic Culture Focus
COMM 306	Comparative American Identities
COMM 420	Critical Media Studies
COMM 455	Gender and Media Studies
JASS 380	History of American Journalism
SPEE 320	Public Argument and Advocacy
SPEE 330	Argumentation and Debate
SPEE 340	Theories of Persuasion
SPEE 400	Speech Skills for Professionals
SPEE 430	Small Group Communication
SPEE 442	20th Century Public Argument

Focus Area Specialization/Production Specialization 6 hrs The remaining hours can be taken in either Option A <u>or</u> Option B below

Option A – Focus Area Specialization

Select **two** <u>additional courses</u> from any of the focus areas above (i.e., Public Relations and Organizational Culture; International/Intercultural Communication and Global Culture; Public Advocacy and Democratic Culture). These can be taken in a particular focus area or distributed across focus areas.

OR

Option B - Media Production Specialization

Select **two** courses in the area of media production:

JASS 303: Communication Design

JASS 315: Writing and Producing for Digital Media

JASS 345: Audio Production

JASS 350: TV Production

JASS 405: Web Design

JASS 410: Advanced Media Production

Required Experiential Education

Humanities Internship, Co-Op, or Senior Thesis: 3 hrs On-the-job experience gained through an internship or-co-op is invaluable for students of any major. Because of this, all Communications students are required to participate in an internship, co-op or senior thesis. Many new college graduates lack the "soft skills" that employers seek. Communications graduates at the University of Michigan-Dearborn will have a distinct advantage. There is a seminar component to both the internship and the co-op.

The senior thesis is for students who have prior communications industry experience and would like to relate their experience to the theory and practice of communications without having to spend time in the field.

Notes:

- A maximum of 63 hrs of COMM and SPEE may count toward the 120 hrs required for graduation.
- At least 15 of the 27 upper level hours in the COMM major must be elected at UM-D.

MINOR OR BGS/LIBS AREA OF FOCUS

A minor or area of focus in Communication consists of fifteen hours of approved upper-level courses in COMM/SPEE. Of the fifteen hours, three hours must be in a Speech course. In addition, students must complete the two prerequisites listed below to obtain a minor or area of focus in Communication.

Prerequisites

COMM 220 Survey of Mass Communication SPEE 101 Principles of Speech Communication

Public Relations Certificate:

The public relations certificate requires the following courses:

COMM 260: Public Relations Principles JASS 2015: Fundamentals of Journalism

COMM 300: Communication Research Methods

COMM 360: Social Media for Public Relations

COMM 460: Public Relations Campaigns

COMM 477: Professional Communication Ethics

Notes Regarding PR Certificate Program:

- A minimum 2.0 cumulative GPA and a minimum of twelve earned hours completed at UM-Dearborn are required for admission to the program.
- 2. A maximum of nine credit hours may simultaneously count toward the PR certificate and toward the Communication major.
- 3. A maximum of two transfer courses (six credit hours) may count toward the PR program.
- A minimum 2.0 GPA in the courses counting toward the PR certificate and minimum 2.0 cumulative GPA are required at the time of graduation and/or posting of the certificate.

Communication (COMM) COURSE OFFERINGS

COMM 220 Survey of Mass Communication

3.000 Credits

Prerequisites: COMP 106 or CPAS 40 or COMP 220 or COMP 270 or COMP 280

Course covers historical, economic, theoretical and research foundations of various mass media of communication: newspapers, magazines, radio, television and others. Includes study of the functions of media, and their creative and destructive potential in society. Textbook study and critical analyses of media products: advertisements, news stories, TV programs. (F,W).

COMM 260 Public Relations Principles

3.000 Credits

Explores how public relations, as an area of communications management and production, can contribute to an organization's success. Provides a comprehensive introduction to the field of public relations, including: history and contemporary professional status of the public relations practitioner; role of public relations as a management discipline; major areas of public relations work, including media relations, public affairs, issues management, lobbying, organizational relations, development; techniques of public relations production planning and presentation - with attention to the uses of specific tools available to practitioners, i.e., news releases, brochures, multimedia, Internet communications, special events. (YR).

COMM 290 Communications Practicum

3.000 Credits

Prerequisites: COMP 106 or CPAS 40 or COMP 220 or COMP 270 or COMP 280

COMM 290 (Practicum) provides introductory instruction and practice in a number of practical communications skills, with the field and focus changing each time the course is offered. (AY).

COMM 300 Communication Research Methods

3.000 Credits

Prerequisites: COMP 106 or COMP 220 or COMP 270 or COMP 280 or CPAS 40

Gives detailed view of landmark research studies in the field. Acquaints students with logic of research inquiry, design and analysis, including questions of validity, reliability, causation, etc. Imparts basics of various research methods used in the communication field, such as survey interviews, depth interviews, focus groups, content analysis, and rhetorical analysis. Students design and conduct at least one study in communication, individually or in groups. (F,W).

COMM 306 Comparat. American Identities

3 000 Credits

Must be enrolled in one of the following Levels: Undergraduate

Prerequisites: COMP 106 or CPAS 40 or COMP 220 or COMP 270 or COMP 280

This course will confront and complicate the following key questions: what does it mean to be an American? What is American culture? Participants in this course will respond to the questions central to the American Studies field by reading and discussing historical, sociological, literary, artistic, material culture, political, economic, and other sources. Students will use this interdisciplinary study to examine the multiple identities of Americans - as determined by factors such as gender, race, class, ethnicity, and religion. While emphasizing the diversity of American culture, participants will consider some core values and ideas uniting America both in historical and contemporary society. Students will be invited to seek out and share fresh narratives of the American experience.

COMM 317 Case Studies in Tech Writing

3.000 Credits

Must be enrolled in one of the following classes:

Junior Senior Graduate

Prerequisites: COMP 106 or COMP 220 or COMP 270 or

CPAS 40 or COMP 280

COMM 317 offers both practical and conceptual studies in technical writing and is open to non-technical as well as technical students. The course offers in-depth treatment of the communication problems and various document designs common to technical writing professionals. Instructional format includes lectures and discussions based on case material derived from actual events, followed up by preparation of written documents. Topics include document design, language barriers, and the role of the technical documents in product liability. (F,W,S).

COMM 340 Professional Communication

3.000 Credits

Must be enrolled in one of the following classes:

Junior Senior

Graduate

Prerequisites: COMP 106 or COMP 220 or COMP 270 or CPAS 40 or COMP 280

Course covers essential skills of professional written and oral communication within the organization; the purpose, process, and problems of professional communication; the influence of organizational structure; audience analysis; the writing and editing of reports (formal and informal, including memo reports) and of professional correspondence; the preparation of graphics; and the planning and delivery of oral presentations. May count toward Communications minor. (F,W,S).

COMM 360 Social Media for PR

3.000 Credits

May not be enrolled in one of the following Classes:

Freshman

Prerequisites: COMM 260

This course explores the emerging social media technologies and studies their application in contemporary PR practice. It examines the nature and role of social media in organizations and explores technologies including blogs, Microblogs, collaboration tools, podcasts, viral video, social bookmarking, mobile platforms, and other evolving technologies.

COMM 364 Writing for Civic Literacy

3.000 Credits

Prerequisites: COMP 106 or COMP 220 or COMP 270 or CPAS 40 as COMP 280

CPAS 40 or COMP 280

In Writing for Civic Literacy, students will study how politicians, the media and critical citizens use language to engage with the broader community. Students themselves will learn to use language to become more active, well-informed citizens. They will study rhetorical awareness, audience analysis and persuasive writing techniques and put those lessons to use in community settings. They will perform community service at agencies of their choosing and use those experiences as objects of analysis, researching the social context in which those agencies operate and writing analytically about the agencies. Further, students will synthesize classroom lessons and real-world experience by executing writing tasks for and with the agencies (these tasks might include editorials for the local press, informational webpages and fundraising materials).

COMM 366 Public Comm and Culture Stdies

3.000 Credits

This gateway course provides the theoretical and methodological foundation to embark on the study of three key interrelated spheres of communication: Public and Organizational Culture, Public Advocacy and Democratic Culture, and Intercultural Communication and Global Culture. Students will have the opportunity to examine salient societal issues within each of the major areas, and explore connections between the different areas. Through a variety of class exercises and both individual and collaborative projects, the course will help students to acquire an analytical and practical "toolkit" enabling them to function effectively as communicators in culturally diverse organizations and civic contexts.

COMM 381 Postwar European Cinema

3.000 Credits

Must be enrolled in one of the following classes:

Senior Sophomore Freshman Junior

The course will concentrate on a series of films from various European countries with a focus on the socio-political issues, historical events and cultural preoccupations that have defined and also challenged European societies from WWII to the present. Zeroing in on the construction of European identities, the course will analyze and compare modes of narrating national, class, racial, sexual and social differences in different European nations. Themes such as memories of war and the Holocaust, new conflicts, class, immigration, women's rights, gender, and East-West relations will be addressed. The course will thus privilege a cinema that offers a "rcit," a story. Particular attention will be given to discourses on otherness and on the ways in which film culture has reflected, reinforced, reshaped and, in some instances, contested Europe's past and current dominant ideologies, and identities. Readings by cultural historians and analysts will provide the context for an understanding of the films. The course will conclude with a discussion of the possible existence of a specific postwar European Cinema.

COMM 390 Topics in Communication

3.000 Credits

A course in nonfiction narrative that focuses on memoir writing, emphasizing technique. Students will read book-length examples by Azar Nafizi, Nelson Mandela, Frank Conroy, Mar Karr, Susanna Kaysen, Frank McCourt, Ann Patchett and Joan Didion, examining these books as models for writing.

COMM 397 Communications Thesis

3.000 Credits

Must be enrolled in one of the following classes:

Senior

Junior

A thesis project that is the culmination of the Communications major. Students will choose the project area and write a thesis (40-50 pages) under the direction of a Communications faculty member. The thesis option is available only to students with substantial practical experience in the communication field, and requires the approval of Communications faculty.

COMM 398 Independent Studies-Comm

1.000 TO 3.000 Credits

Readings, supervised practice, or analytical assignments in Communications, determined in accordance with the needs and interests of those enrolled. May count toward Communications minor. (F,W).

COMM 420 Critical Media Studies

3.000 Credits

Must be enrolled in one of the following classes:

Senior Junior

Prerequisites: COMP 106 or COMP 220 or COMP 270 or CPAS 40 or COMP 280

Course presents various critical approaches to the study of the media. Perspectives include political economy, cultural studies, critical theory of the Frankfurt school and feminism. Through readings and first hand analysis of the media students will delve deeply into the institutional underpinnings, content, use and reception of media. There will be special emphasis on how broader economic, cultural and technological changes influence our experience of media in everyday life as creators, citizens, audiences and consumers.

COMM 430 International Communications

3.000 Credits

Must be enrolled in one of the following classes:

Senior Junior

Prerequisites: COMP 106 or COMP 220 or COMP 270 or

CPAS 40 or COMP 280

Course examines the relationship between globalization and communication from various vantage points such as cultural imperialism, global media flows, and hybridity theory. Students use these theoretical approaches to understand how people in particular locations experience, adapt, resist and modify globally circulating aspects of media, popular culture, news and information. Through critical responses to readings, class exercises, individual and team projects, students also explore how global pressures and changes influence the way people understand and project their identities, buy and sell communication as a commodity, negotiate borders, and create social change.

COMM 442 20th Centry Public Argument

3.000 Credits

Prerequisites: SPEE 101

This class is a survey of American public address in the 20th Century. Students will examine and critically analyze several of the most significant speeches and rhetorical movements of the last one hundred years. Through lectures, discussions, and analysis of speeches and other artifacts, we will focus on the relationship between rhetoric and history, and how theories of rhetorical action help us appreciate the role of discourse in the effective functioning of a democratic system. Students will learn to utilize several critical perspectives as a means of understanding both historical and contemporary political discourse. (W).

COMM 450 Principle of Organization Comm

3.000 Credits

Must be enrolled in one of the following classes:

Senior Junior

Prerequisites: COMM 340 or COMM 440

Course examines how communication networks function in organizations. Purpose: to provide an organizational context and conceptual framework for the practice of professional writing and speaking skills. Writing projects include a research report, a case study, and several shorter papers, practical and analytical, on assigned topics. Students cannot receive credit for both COMM 450 and COMM 550. (OC).

COMM 455 Gender and Media Studies

3.000 Credits

Must be enrolled in one of the following Levels:

Undergraduate

Must be enrolled in one of the following classes:

Sophomore

Senior

Junior

Prerequisites: WGST 275 or WGST 303 or ANTH 275 or PSYC 275 or SOC 275 or ANTH 303 or PSYC 303 or SOC 303 or HUM 275 or HUM 303 or WST 275

The course will focus on several feminist approaches used in understanding the media and attempting to create social change through the media. The role of media in the definition and reproduction of gender-based hierarchies and in the renegotiation of gender boundaries will both be explored. To this end, both mainstream and women's media will be examined. The course will take a multicultural and international perspective, incorporating concerns of class, race, ethnicity, and nation as these intersect with the study of gender and media. Mainstream and alternative media will be analyzed through readings, films, case studies, in-class collaborative exercises and longer term projects. News, entertainment, and advertising genres will be examined in a variety of media such as the printed press, television, video, film, and the Internet. (W).

COMM 460 Public Relations Campaigns

3.000 Credits

Prerequisites: COMM 260 and COMM 440

Focuses on strategies and tactics involved in planning and implementing a public relations campaign. Extends and refines skills acquired in earlier, prerequisite course work by incorporating management, production, and writing within a fourstage model for planning and action. This mode 1 provides a framework for role-playing, case study work, and projects done for evaluation by public relations professionals at local firms. The semester's portfolio of finished communications and "mock-ups" including planning materials, news releases, brochures, newsletters, Internet communications, video and audio scripts should demonstrate command of entry-level, professional abilities as a public relations campaign manager and producer. (YR).

COMM 464 Contemporary Rhetorical Theory

3.000 Credits

May not be enrolled in one of the following Classes: Graduate

Prerequisites: COMM 201 or COMM 220 or COMM 290 or ENGL 200 or ENGL 230 or ENGL 231 or ENGL 232 or ENGL 233 or ENGL 235 or ENGL 236 or ENGL 237 or ENGL 239 or ENGL 240 or ENGL 250

An examination of contemporary rhetorical theories through study of representative practitioners and related developments in linguistics, philosophy, psychology, communication, and composition and rhetoric. Students may not receive credit for both COMM 464 and COMM 564.

COMM 477 Prof Communication Ethics

3.000 Credits

May not be enrolled in one of the following Classes: Graduate

Prerequisites: COMM 340 or COMM 440 or COMM 450

An examination of professional communication ethics in the organizational context, focusing on important issues, problems, and concepts. This course is designed to help students become conscious of the role of values in a wide range of professional communication situations; to locate organizational behavior in an ethical framework based on considered definitions, standards, perspectives, and criteria for evaluation and analysis: to consider individuals as well as organizations as moral agents in a changing and complex universe; and to analyze topical cases on emergent issues in communication ethics. Some sample topics: ethics in decision-making and conflict-resolution; privacy confidentiality; sexual harassment; whistleblowing; "engineering" of consent; corporate image and ethos; issues in documentation, record-keeping, and technology; "issues management" and corporate responsibility; groupthink; obedience and personal responsibility; employee socialization. Students cannot receive credit for both COMM 477 and COMM 577. (OC).

COMM 481 Gender and Globalization

3.000 Credits

Must be enrolled in one of the following Levels:

Undergraduate

Must be enrolled in one of the following Colleges:

Coll of Arts, Sciences&Letters

May not be enrolled in one of the following Classes:

Sophomore

Freshman

Prerequisites: or HUM 303 or SOC 303 or PSYC 303 or WGST 303 ANTH 303 $\,$

Mass media, politics, and academia are full of references to globalization, and a future "world without borders." This interdisciplinary course considers the implication of globalization for women's lives, gender relations, and feminism. Topics covered include the global factory, cross-cultural consumption, human rights, global communications, economic restructuring, nationalism, and environmental challenges. Rather than survey international women's movements, this course explores how globalization reformulates identities and locations and the political possibilities they create. (AY).

COMM 570 Adv Technical and Prof Comm

3.000 Credits

Review and practice of advanced professional communication skills, especially audience analysis, assessment of organizational contexts and field-specific conventions, document design, varieties of formal and informal report writing, proposal writing, abstracting, editing, and documentation. Students will study specialized formats and communication issues specific to their professional needs, and will develop their abilities to present technical and complex information to a variety of audiences, both general and specialized, in a variety of professional contexts. Appropriate for graduate students in professional degree programs, such as engineering, management, public administration, and education. Undergraduates must have permission of instructor.

Comparative Literature

MINOR OR BGS/LIBS AREA OF FOCUS ONLY

A minor or area of focus consists of 12 hours of upper-level credit in comparative literature (COML).

Comparative Literature (COML) COURSE OFFERINGS

COML 221 Great Books I: Ancient World

3.000 Credits

Introduction to masterpieces of Western world literature from the ancient world. Readings include the Bible, Iliad, Odyssey, Greek drama, and Roman authors. (YR).

COML 222 Great Books II

3.000 Credits

Introduction to masterpieces of Western world literature from the Middle Ages and Renaissance. Readings include Dante, Chaucer, Wolfram, Cervantes, Shakespeare, Moliere, and Racine. (YR).

COML 223 Great Books III: Modern Era

3.000 Credits

Introduction to masterpieces of Western world literature from the Modern Era. Readings include Swift, Voltaire, Rousseau, English romantic poets, fiction and drama of the 19th and 20th century. (YR).

COML 301 Literary Criticism

3.000 Credits

Prerequisites: (COMP 106 or COMP 220 or COMP 270 or COMP 280 or CPAS 40) and (ENGL 200 or ENGL 230 or ENGL 231 or ENGL 232 or ENGL 233 or ENGL 235 or ENGL 236 or ENGL 237 or ENGL 239)

This course introduces literary criticism and theory from Aristotle to the present, focusing on the changing concept of literature's nature and function. Lectures, readings, and discussion cover such critics as Aristotle, Dryden, Pope, Johnson, Wordsworth, Coleridge, Arnold, T. E. Hulme, I. A. Richards, T. S. Eliot, and such movements as New Criticism, Phenomenology, Reader-Response, Archetypal Criticism, psychological approaches to literature, New Historicism, Marxism, Feminism, and Deconstruction. (OC).

COML 340 Modern European Short Fiction

3.000 Credits

Prerequisites: ENGL 230 or ENGL 231 or ENGL 232 or ENGL 233 or ENGL 235 or ENGL 236 or ENGL 237 or ENGL 239 or ENGL 200

A careful reading of between 10 and 15 short novels (in English translation) with particular attention being paid to the manner in which their plots and characters express contemporary cultural issues. Such works as Dostoyevsky's Notes from Underground, Conrad's Heart of Darkness, and Unamuno's Abel Sanchez will be included

COML 341 Mod Eur Poetry in Translation

3.000 Credits

Prerequisites: ENGL 231

Movements and genres of modern European poetry, from the Symbolists to the present. Included will be such poets as D'Annunzio, Cavafy, Rilke, Blok, Mayakovsky, Valery, Eluard, Pavese, Seferis, Akhmatova, Mandestram, Marinetti, Trakl, Mistrale, Vallejo, Morgenstern, Apollinaire, Loren, Transtromer, Brodsky, Milosz, and others in translation. (OC).

COML 342 Myth and Motif

3.000 Credits

Prerequisites: ENGL 230 or ENGL 231 or ENGL 232 or ENGL 233 or ENGL 235 or ENGL 236 or ENGL 237 or ENGL 239 or ENGL 200

A study of archetypal figures and thematic motifs. Their recurrent appearance in different literary periods and genres and their lineage will be examined in order to increase understanding of the works themselves and of the ages which produced them. A selection will be made from classical myth, Biblical narrative, and historical sources. Thus the figures may vary from Oedipus and Cain to Faust and Don Juan. Motifs or story patterns may include such devices as the spiritual quest, the journey into Hell, or the patricide prophecy.

COML 344 Modern Literature: the Novel

3.000 Credits

A careful examination of five or six significant modern novels in translation, with particular emphasis on their influence on the development of the novel, and their reflection of contemporary cultural issues. The works of such authors as Flaubert, Dostoyevsky, Tolstoy, Gide, Joyce, and Mann will be included.

COML 345 Modern Literature: Drama

3.000 Credits

A careful reading of selected plays from Ibsen to the contemporary theater, designed to develop appreciative criticism and an understanding of the plays in their relationships to movements to modern drama, theater, background, social forces and trends of thought.

COML 347 Clas Lit in Engl Translation

3.000 Credits

Must be enrolled in one of the following classes:

Junior

Prerequisites: ENGL 230 or ENGL 231 or ENGL 232 or ENGL 233 or ENGL 235 or ENGL 236 or ENGL 237 or ENGL 239 or ENGL 200

A study of masterworks of ancient Greek and Roman literature with special attention to the development of epic, tragedy, comedy, and lyric poetry. Authors studied will include Homer, Virgil, Aeschylus, Sophocles, Euripides, Aristophanes, Terence, and Plautus.

COML 355 Urban Voices: France and Italy

3.000 Credits

Must be enrolled in one of the following classes:

Freshman

This course is an interdisciplinary approach to the concepts of urban development and literary, visual and cultural responses to the process of urbanization mainly in Rome and Paris. The readings will illustrate how the city shaped the writers' creativity, as well as how their works interpret urbanization.

COML 375 The Hero in Literature

3.000 Credits

Reflections on myth, history, and literature, based on analyses of literary texts. The individual hero may change from term to term. The course, for example, might center on the transition from Faust to anti-Faust. In this instance, some of the writers or works might include: The Faustbook, Marlow's Doctor Faustus, Goethe's Faust, Byron's Manfred, a Faust opera, Thomas Mann's Doktor Faustus, Gunter Grass' The Tin Drum. All reading in English translation. (OC).

COML 390 Topics in Comparative Lit

3.000 Credits

Examination of problems and issues in selected areas of comparative literature. Title as listed in Schedule of Classes will change according to content. Course may be repeated for credit when specific topics differ. (OC).

COML 399 Independent Studies

1.000 TO 3.000 Credits

Readings or analytical assignments in Comparative Literature in accordance with the needs and interests of those enrolled and agreed upon by the student and instructor.

COML 404 Medieval Mystical Writers

3.000 Credits

Prerequisites: (COMP 106 or COMP 220 or COMP 270 or COMP 280 or CPAS 40) and (ENGL 200 or ENGL 230 or ENGL 231 or ENGL 232 or ENGL 233 or ENGL 235 or ENGL 236 or ENGL 237 or ENGL 239)

A study of the genre of mystical writing as it was developed and practiced throughout the Middle Ages and in 14th century England particularly. Attention will be given to the historical, religious, and cultural contexts that enabled and were created by mystical texts. In addition, the course will explore how traditional and contemporary trends in the fields of religious and literary studies can be brought to bear on the genre of mystical writing. (OC)

COML 433 Writing Women in Renaissance

3.000 Credits

Must be enrolled in one of the following Levels:
Undergraduate

This course will be taught in English, and will focus on the influence of Italian literary models for the construction of female literary types as well as female voices in France and Italy from 1300 to about 1600. Italian authors studied include three very influential Florentines, Dante, Petrarch and Boccaccio, as well as Castiglione and Ariosto. We will read women poets, patrons, prostitutes and queens from Italy and France such as Veronica Gambara, Isabella di Morra, Vittoria Colonna, Christine de Pizan, Louise Labe, and Marguerite de Navarre. At last issue will be women's roles and women's images in city and court culture during the early modern period, and the interaction of their writings with the literary canons of Italy and France. (OC).

COML 455 This American Life

3.000 Credits

May not be enrolled in one of the following Classes: Graduate

Freshman

The course "This American Life: Immigrant Literature and the American Dream" is a literary and cultural analysis of the literature of immigration. The readings are from works of fiction in a variety of genres, and are written by American and non-American prize-winning authors. Their common denominator is the pursuit of the American Dream and its many multifaceted aspects. The themes explored include: assimilation, acculturation, diversity, language, subculture, intertextuality, nostalgia, belonging, and double identity. Student wishing to take this course for graduate credit should sign up for COML 555. Students cannot receive credit for both COML 455 and COML 555.

Composition & Rhetoric

(not a field of concentration)

For information on placement into first-year composition courses, please see the Writing Program section under Special Programs.

WRITING CERTIFICATE

Nine credit hours of writing (at least one course must be COMP; minimum B grade required in each course). Here is a partial list:

ART 390A ("Graphic Novel"); COML/HUM?WGST 433; COMM 317, 340, 436; COMM/COMP 310, COMP/ENGL 327, COMP/COMM/ENGL 364, COMP/COMM/ENGL 464, COMP/ENGL 468, COMP 390C, 485; ENGL 323; FREN 302; GER 301; JASS 307, 310, 315, 330, 331, 436, 467; SPAN 301

Practicum experience required (minimum 30 clock hours; must include substantial writing/editing component). Possible ways to fulfill practicum requirement include:

Independent Study
Internship (HUM/HIST 485)
Co-op (LIBS 300+395)
Peer Consulting in Writing Center
Community Service Work/
Volunteerism/Civic Engagement

NOTES REGARDING WRITING CERTIFICATE PROGRAM:

- At most, one transfer course, or UM-Dearborn course that does not appear on the list of approved courses, may be counted toward the certificate, if approved by petition.
- Students, at the time that they are completing the Writing Certificate, must submit a Memorandum of Reflection, a sample of written work, and a Writing Certificate Completion Sheet. See LCC Department for details.
- Courses used toward another major, minor or certificate program may simultaneously count toward the Writing Certificate.

Composition (COMP) COURSE OFFERINGS

COMP 095 Engl Second Language I

3.000 Credits

An alternative to COMP 099. Specifically designed to address the needs of students for whom English is a second language and who are not yet proficient in English. Offers intensive practice in basic English grammar and rhetoric through the writing of short papers and the reading and discussion of appropriate texts. Focuses on the conventions of written English. (OC).

COMP 099 Writing Techniques

3.000 Credits

Course is designed to help the less-prepared student qualify for COMP 105 by providing a review of basic grammar and syntax and frequent practice in writing short papers to develop habits of unified, coherent, and correct composition. Student writing is complemented by the reading and analysis of short prose pieces selected to help students read for understanding and to learn more about writing through the study of professional authors. Must be taken by students who do not qualify for COMP 105. (F,W).

COMP 105 Writing & Rhetoric I

3.000 Credits

Prerequisites: COMP 099 or CPAS 20

Comp 105: Focuses on the study and practice of writing and rhetoric, with special emphasis on the writing process. Students write and read critically a range of texts, and consider academic and nonacademic genres and conventions. (F,W).

COMP 106 Writing & Rhetoric II

3.000 Credits

Prerequisites: COMP 105 or CPAS 30 or COMP 110

Comp 106: Focuses on the study of writing and rhetoric through composing a range of researched texts. Students study the rhetorical choices effective for writing in different media, and learn practical strategies for academic inquiry and for giving useful feedback in response to the writing of others. Such strategies include those related to the use of electronic and print resources, peer-review and revision. (F,W).

COMP 110 Honors Writing & Rhetoric I

3.000 Credits

Honors Program introductory composition course. Fulfills the Composition I requirement for students in the Honors Program. Course focuses on college-level expository writing techniques through seminar-type analysis of texts read in the Honors Program and through individualized and group writing workshops. Assignments include at least five finished papers incorporating revision. Honors students, like other students in first-semester composition, must pass the standard exit exam for COMP 105 to continue on to COMP 220 (or COMP 106). (F).

COMP 220 Honors Writing & Rhetoric II

3.000 Credits

Prerequisites: COMP 110 or CPAS 30 or COMP 105

Honors Composition fulfills the Composition II requirement for students in the Honors Program. It is designed to develop research, writing, and editing skills and to give the student experience in argumentation and persuasion and in the interpretation of literary texts. Satisfies for honors students the 200-level prerequisite for upper-division English courses, except for English concentrators. (YR).

COMP 223 Intro to Creative Writing

3.000 Credits

Prerequisites: COMP 106 or CPAS 40 or COMP 220 or COMP 270 or COMP 280

An introduction to the writing of poetry, the short story, and/or the play. Considerable writing analysis, criticism, and discussion. (F,W).

COMP 227 Intermed Expo and Arg

3.000 Credits

Prerequisites: COMP 106 or COMP 220 or COMP 270 or CPAS 40 or COMP 280

Further explorations in exposition and argumentation to develop and enhance the student's ability to write essays and/or articles. Review of basics of grammar and style. Intensive practice in writing and careful examinations of appropriate books and shorter prose works. Written assignments of 500 to 2000 words. (F,W).

COMP 267 Arab & Arab American Workshop

3.000 Credits

Prerequisites: COMP 106 or COMP 220 or COMP 270 or CPAS 40 or COMP 280

The Arab and Arab American Writers Workshop is a creative writing workshop focusing on poetry and fiction. Students will explore Arab American literature, writers, and themes. Students are expected to work on their own manuscripts as well as critique outside readings. The workshop will be conducted under the guidance of Arab and Arab American faculty and is open to all students.

COMP 270 Tech Writing for Engineers

3.000 Credits

Must be enrolled in one of the following Colleges:

Coll of Engineering & Comp Sci

Must be enrolled in one of the following classes:

Sophomore

Senior

Junior

Prerequisites: COMP 105 or CPAS 30 or COMP 110

Instruction and practice in designing technical reports. Students study the rhetorical problems facing the professional engineer in industry and learn practical strategies for analyzing and communicating technical information to both technical and non-technical audiences. Topics include audience analysis, technical research methods, report formats (written and oral, formal and informal), argumentation and persuasion, editing. This course fulfills the Composition II requirement for engineering students only. (F,W).

COMP 280 Business Writing & Rhetoric

3.000 Credits

Must be enrolled in one of the following Major fields of study:

Prebusiness

Prerequisites: COMP 105 or COMP 110 or CPAS 30

COMP 280 focuses on instruction and practice in composing and designing business documents, including abstracts, memos, email, letters, reports, resumes, proposals, and slide presentations. Students study the rhetorical problems facing business professionals and learn practical strategies for analyzing business information and communicating with professional and non-professional audiences. Such strategies include those related to the use of electronic resources, peerreview and revision. This course fulfills the Composition II requirement for pre-business students.

COMP 310 Narrative Journalism

3.000 Credits

Prerequisites: COMP 106 or COMP 220 or COMP 270 or CPAS 40 or COMP 280

Students learn to identify, understand and use the techniques of fiction in the service of nonfiction material. While studying the texts as literature, students are also encouraged to view them as models for writing. Assignments include the writing and revising of articles, based on research and interviews, and writing in story form, drawing on literary techniques. (YR).

COMP 327 Advanced Exposition

3.000 Credits

Prerequisites: COMP 106 or COMP 270 or COMP 220 or CPAS 40 or COMP 280 $\,$

A study of rhetorical theory and its application to various types of expository essays. Writing assignments will reflect the types of essays studied. May be repeated to a maximum of 6 credit hours.

COMP 331 Online Reprtng, Resrch, Writing

3.000 Credits

Must be enrolled in one of the following Levels:

Undergraduate

Must be enrolled in one of the following Classes:

Senior

Sophomore

Freshman

Junior

Prerequisites: COMP 106 or COMP 110 or COMP 270 or CPAS 40 or COMP 280

Course introduces the technical, social, legal and ethical practice of online research, focusing specifically on reporting (i.e. research and interview) skills required by journalists and others. Students use new media technology to generate ideas, to research subjects, and to develop general-audience writing projects in their areas of interest. Course covers the use of Web search engines, directories and databases; finding sources and interviewing people online; evaluating the credibility of online sources and information; using Lexis-Nexis to access archives and public records; and using spreadsheet and database programs.

COMP 364 Writing for Civic Literacy

3.000 Credits

Prerequisites: COMP 106 or COMP 220 or COMP 270 or CPAS 40 or COMP 280

In Writing for Civic Literacy, students will study how politicians, the media and critical citizens use language to engage with the broader community. Students themselves will learn to use language to become more active, well-informed citizens. They will study rhetorical awareness, audience analysis and persuasive writing techniques and put those lessons to use in community settings. They will perform community service at agencies of their choosing and use those experiences as objects of analysis, researching the social context in which those agencies operate and writing analytically about the agencies. Further, students will synthesize classroom lessons and real-world experience by executing writing tasks for and with the agencies (these tasks might include editorials for the local press, informational webpages and fundraising materials).

COMP 390 Topics in Composition

3.000 Credits

Prerequisites: COMP 106 or COMP 220 or COMP 270 or CPAS 40 or COMP 280

Examination of problems and issues in selected areas of rhetoric and composition. Title as listed in Schedule of Classes will change according to content. Course may be repeated for credit when specific topic differs. (OC).

COMP 399 Independent Study

1.000 TO 3.000 Credits

Must be enrolled in one of the following Levels: Undergraduate

A significant writing project in non-fiction or fiction prose developed in accordance with the needs and interest of those enrolled and agreed upon by the instructor. Participants may also study texts of published authors. May be repeated for a maximum of 6 credit hours.

COMP 436 Memoir and Travel Writing

3.000 Credits

Must be enrolled in one of the following Levels:

Undergraduate

Prerequisites: COMP 106 or COMP 220 or COMP 270 or CPAS 40 or COMP 280

A course in narrative non-fiction that focuses on memoir and travel writing. Reading involves several books as well as classic essay-length examples. Assignments include both short analytical papers and the writing and revising of three original articles, based on research, interviews, memory, and observation, and drawing on literary techniques. (YR).

COMP 464 Contemporary Rhetorical Theory

3.000 Credits

Prerequisites: COMP 106 or COMP 220 or COMP 270 or CPAS 40 or COMP 280

An examination of contemporary rhetorical theories through study of representative practitioners and related developments in linguistics, philosophy, psychology, communication, and composition and rhetoric. Students may not receive credit for both COMP 464 and COMP 564.

COMP 466 Feminist Rhetorical Theories

3.000 Credits

Must be enrolled in one of the following Levels:

Undergraduate

May not be enrolled in one of the following Classes:

Freshman

Prerequisites: COMP 106 or COMP 220 or COMP 270 or

COMP 280 or CPAS 40

An introduction to the work of major twentieth century feminists working in rhetoric and related fields. Students examine recurring themes of language, meaning, ethics and ideology, and practice writing strategies which address rhetorical and ethical concerns central to feminist/academic writing.

COMP 468 Read/Writ Young Adult Fiction

3.000 Credits

May not be enrolled in one of the following Classes:

Graduate

Prerequisites: COMP 106 and (ENGL 223 or COMP 223)

In this course participants will explore the young adult novel from the point-of-view of a reader and a writer. They will read recently published and critically acclaimed popular young adult novels. They will use these texts to explore such issues as gender, race and identity as they relate to young adult lives and their respective cultures generally. They will use these texts as models for the production of their own texts and will consider if and why young adult novels are abbreviated or limited in relationship to adult literature. In addition to reading about ten novels, they will complete several creative exercises leading up to a final portfolio.

COMP 485 Theories of Writing

3.000 Credits

Prerequisites: COMP 106 or COMP 220 or COMP 270 or

CPAS 40 or COMP 280

In this course we will investigate why and how people write for particular audiences and in a variety of contexts. Subjects will include: cognitive and social theories of writing and the writing process, theories of persuasion, writing across the curriculum, writing for multiple audiences, writing in the workplace, writing for self and for publics, and teaching writing. The course will be useful to students interested in teaching writing at the K-12 level, those interested in careers in communication and those who wish to better understand how writing promotes personal and societal change. (YR)

Computer and Computational Mathematics

MINOR OR BGS/LIBS AREA OF FOCUS ONLY

The courses in Computer and Computational Mathematics (CCM) develop skills in applying mathematical algorithms in ways useful in real world situations. A minor or area of focus consists of 12 hours of upper-level credit in courses specifically selected as CCM courses.

See College of Engineering and Computer Science for a major in Computer and Information Science.

Computer & Computational Mathematics (CCM)

COURSE OFFERINGS

CCM 150 Computer Science I

4.000 Credits

Prerequisites: MATH 115 * Co-requisites: CCM 150L

An introduction to structured computer programming covering problem formulation, algorithm development, the C++ programming language, program testing and debugging, capabilities and elements of computer organization, and object-oriented software methodologies.

CCM 172 Computing Environ for Math

3.000 Credits

Must be enrolled in one of the following Colleges:

Coll of Arts, Sciences&Letters

Must be enrolled in one of the following classes:

Senior Sophomore Freshman

Junior

Prerequisites: MATH 115

This course covers introductory programming techniques for Mathematics majors. Students learn to program in sage and python, Topics include data types, variables and assignments, decisions, loops, functions, recursion, arrays, and objects. Programming assignments focus on problems that are mathematical in nature, giving students an opportunity to use simulations to understand and verify familiar mathematical results. This course, or CIS/CCM 150 satisfies the programming requirement for the Mathematics concentration.

CCM 305 The Theory of Computation

3.000 Credits

Prerequisites: CIS 175 and (CIS 200 or IMSE 200)

An introduction to the foundations of computer science including the theory of computability, Turing machines, automata, and formal languages.

CCM 315 Applied Combinatorics

3.000 Credits

Prerequisites: MATH 200 and (MATH 217 or MATH 227)

An introduction to methods and applications of enumerative and configural combinatorics. Students study several elegant and useful techniques for counting and/or generating the elements in large and unwieldy finite sets. Students also study topics in graph theory that are applicable to real world problems. Topics include basic counting principles, the principle of inclusion-exclusion, generating functions and recurrence relations. Topics from graph theory include graph model paths, circuits, cycles, and connectedness; additional topics include the theory and applications of planarity, coloring, directed graphs, networks, and network flows.

CCM 372 Computing with Mathematica

3.000 Credits

Prerequisites: MATH 217 or MATH 227

The course explores a variety of topics from different areas of undergraduate mathematics including calculus, matrix algebra, number theory, geometry, and discrete mathematics. Students learn to design customized Mathematica functions to solve specific problems in these areas using the symbolic, computational, graphics, and programming tools provided within Mathematica.

CCM 390 Topics in Computational Math

1.000 TO 3.000 Credits

A course designed to offer selected topics in different areas of applied mathematics. The specific topics will be announced together with the prerequisites for each separate offering. Course may be repeated when the topics covered differ.

CCM 399 Independent Studies

1.000 TO 3.000 Credits

Readings or analytical assignments in Computers and Computational Mathematics in accordance with the needs and interests of those enrolled and agreed upon by the student and advising instructor.

CCM 404 Dynamical Systems

3.000 Credits

Prerequisites: MATH 216 and (MATH 217 or MATH 227)

The aim of this course is to survey the standard types of differential equations. This includes systems of differential equations, and partial differential equations, including for each type, a discussion of the basic theory, examples of applications, and classical techniques of solutions with remarks about their numerical aspects. Also included are autonomous and periodic solutions, phase space, stability, perturbation techniques and Method of Liapunov. (AY).

CCM 451 Computer Graphics

3.000 Credits

Must be enrolled in one of the following classes: Graduate Prerequisites: (CCM 350 or CIS 350 or IMSE 350) or (ECE 370 and MATH 276) and (MATH 215 or MATH 205) and (MATH 217 or MATH 227)

Basic geometrical concepts: graphics output primitives, twodimensional transformations, windowing and clipping, threedimensional viewing, visible surface detection methods, graphical user interfaces.

CCM 458 Introduction to Wavelets

3.000 Credits

May not be enrolled in one of the following Colleges:

No College Designated

Must be enrolled in one of the following classes:

Sophomore Senior Junior

Prerequisites: MATH 216 and (MATH 217 or MATH 227)

This course will introduce the students to theory and application of wavelets using linear algebra. Topics will include the discrete Fourier transform, the fast Fourier transform, linear transformations, orthogonal decomposition, discrete wavelet analysis, the filter bank, Haar Wavelet family, Daubechies's Wavelet family, and applications. Students cannot receive credit for both MATH 458 and MATH 558. (OC)

CCM 472 Intro to Numerical Analysis

3.000 Credits

Prerequisites: MATH 217 or MATH 227

Solution of linear systems by Gaussian elimination, solution of nonlinear equations by iterative methods, numerical solutions of ordinary differential equations, data fitting with spline functions, numerical integration, optimization. (F).

CCM 473 Matrix Computation

3.000 Credits

Prerequisites: MATH 217 or MATH 227

A study of the most effective methods for finding the numerical solution of problems which can be expressed in terms of matrices, including simultaneous linear equations, orthogonal projections and least squares, eigenvalues and eigenvectors, positive definite matrices, and difference and differential equations. (AY).

Cooperative Education Program

(not a field of concentration)

Cooperative Education is a nationally recognized educational plan that integrates academic study with paid, real world work experience. UM-Dearborn cooperates with business, industry, government and other private and public agencies to offer work assignments related to students' educational programs and career objectives.

Students may earn a maximum of 10 *S/E* credit hours through co-op work assignments of one to three credit hours each, and a mandatory one credit-hour seminar. Students should be aware that applying for co-op does not guarantee job placement. Liberal arts students are advised to use curriculum electives to acquire the technical skills needed to improve their marketability and to avail themselves of career counseling available through the Career Services Office.

For eligibility information, see Cooperative Education in Special Programs, or contact the Cooperative Education Office, Room 1038 CB, (313) 593-5188.

CRJ 316

Criminal Justice Studies

Criminal Justice Studies is a field that focuses on the study of criminal behavior and society's response to it. The field draws upon the insights of the social and behavioral sciences, the physical sciences, statistics, and the humanities to illuminate the issues of maintaining social order in a constitutional democracy committed to individual freedom, equality, and justice. More specifically, the field focuses on the causes and prevention of criminal behavior. The criminal justice system is composed of the police agencies, prosecutors, the legal profession, the courts, and correctional agencies, among others. The system is part of a larger social system which invariably influences the effectiveness and fairness of law enforcement. Criminal justice analyzes system responses to the changes in social values and law enforcement. The program in Criminal Justice Studies at UM-Dearborn prepares students for diverse careers in law, justice, public administration, policy analysis, public security, and for graduate work in the social and behavioral sciences.

work in the social and benavioral sciences.			
MAJOR REQUIREMENTS30-31 hours			
Required Con	re Courses		
CRJ 200	Introduction to Criminal Justice Studies		
CRJ 468	Criminology		
	Plus <u>one</u> course from the following:		
CRJ 363 ₁	Criminal Justice Systems and Policy		
CRJ 480 ₁	Applied Criminal Justice Theory		
CRJ 489 ₁	Law, Crime, and Society		
Special Topic	es in Criminal Justice		
CRJ 467	Drugs, Crime, and Justice		
CRJ 470	Current Issues in Criminal Justice		
CRJ 472	Correctional Systems		
CRJ 473	Race, Crime, and Justice		
CRJ 474	Cyber Crimes		
CRJ 475	Digital Evidence		
CRJ 483	Justice, Crime and the Environment		
CRJ 490	Topics in Criminal Justice		
Ethics			
CRJ 240	Ethics		
CRJ 308	Moral and Political Dilemmas		
CRJ 363	Criminal Justice Systems and Policy		
CRJ 445	Seminar in Contemporary Ethical Theory		
CRJ 482	Legal Ethics		
Social Insting	2		
	Psychology of Prejudice		
CRJ 322 CRJ 323	Urban Politics		
CRJ 323 CRJ 350	Poverty and Inequality		
CRJ 369	Civil Rights Movement		
CRJ 384	Immigration in America		
CRJ 403	Minority Groups		
CRJ 423	American Social Classes		
CRJ 435	Urban Sociology		
CRJ 443	Gender Roles		
CRJ 455	Immigrant Community in North America		
CRJ 461	Women in Prison		
CRJ 466	Drugs, Alcohol, and Society		
CRJ 467	Drugs, Crime and Justice		
CRJ 476	Inside Out Prison Exchange		
CRJ 483	Justice, Crime and the Environment		
	iety		
CRJ 302	Theory of Law		

American Judicial Process

CRJ 335	Philosophy of Law
CRJ 362	Women, Politics, and the Law
CRJ 413	American Constitutional Law
CRJ 414	Civil Rights and Liberties
CRJ 416	Criminal Law
CRJ 453	Sociology of Law
CRJ 471	Comparative Criminal Justice Systems
CRJ 489	Law, Crime, and Society
	•
Human Intera	action & Social Control3 hours
CRJ 325	Psychology of Interpersonal Relations
CRJ 382	Social Psychology
CRJ 407	Psychology of Adolescence
CRJ 421	Group Processes
CRJ 440	Abnormal Psychology
CRJ 446	Marriage and Family Problems
CRJ 447	Family Violence
CRJ 465	Deviant Behavior and Social Disorganization
CRJ 469	Juvenile Delinquency
CRJ 480	Applied Criminal Justice Theory
Dagaanah Mad	3.4 have
	thods 3-4 hours
CRJ 300	Political Analysis
CRJ 383	Introduction to Statistics
CRJ 410	Social Research (4 cr. hrs.)
CRJ 425	Lab in Social Psychology (4 hrs.)
Internship or	
THE CHILD	Co-on Experience 3-6 hours
	Co-op Experience
CRJ 478	Criminal Justice Studies Internship (3-6 hrs.)
CRJ 478 CRJ 485	Criminal Justice Studies Internship (3-6 hrs.) Psychology Internship (3-6 hrs.)
CRJ 478 CRJ 485 CRJ 494	Criminal Justice Studies Internship (3-6 hrs.) Psychology Internship (3-6 hrs.) Political Science Internship Seminar (3 hrs.)
CRJ 478 CRJ 485 CRJ 494 CRJ 495	Criminal Justice Studies Internship (3-6 hrs.) Psychology Internship (3-6 hrs.) Political Science Internship Seminar (3 hrs.) Political Science Internship (3-6 hrs.)
CRJ 478 CRJ 485 CRJ 494 CRJ 495 CRJ 497	Criminal Justice Studies Internship (3-6 hrs.) Psychology Internship (3-6 hrs.) Political Science Internship Seminar (3 hrs.) Political Science Internship (3-6 hrs.) Washington, DC Internship (3-6 hrs.)
CRJ 478 CRJ 485 CRJ 494 CRJ 495 CRJ 497 LIBS 300	Criminal Justice Studies Internship (3-6 hrs.) Psychology Internship (3-6 hrs.) Political Science Internship Seminar (3 hrs.) Political Science Internship (3-6 hrs.) Washington, DC Internship (3-6 hrs.) Co-op Seminar (1 hr.)
CRJ 478 CRJ 485 CRJ 494 CRJ 495 CRJ 497	Criminal Justice Studies Internship (3-6 hrs.) Psychology Internship (3-6 hrs.) Political Science Internship Seminar (3 hrs.) Political Science Internship (3-6 hrs.) Washington, DC Internship (3-6 hrs.) Co-op Seminar (1 hr.) Co-op Education Work Assignment (1-3 hrs.)
CRJ 478 CRJ 485 CRJ 494 CRJ 495 CRJ 497 LIBS 300 LIBS 395	Criminal Justice Studies Internship (3-6 hrs.) Psychology Internship (3-6 hrs.) Political Science Internship Seminar (3 hrs.) Political Science Internship (3-6 hrs.) Washington, DC Internship (3-6 hrs.) Co-op Seminar (1 hr.)
CRJ 478 CRJ 485 CRJ 494 CRJ 495 CRJ 497 LIBS 300 LIBS 395	Criminal Justice Studies Internship (3-6 hrs.) Psychology Internship (3-6 hrs.) Political Science Internship Seminar (3 hrs.) Political Science Internship (3-6 hrs.) Washington, DC Internship (3-6 hrs.) Co-op Seminar (1 hr.) Co-op Education Work Assignment (1-3 hrs.) Advanced Co-op Education Work Assignment

Internship/Co-op Experience

An internship or co-op experience of 3 to 6 credit hours is required. The CRJ internship provides supervised field experience in a variety of occupational agencies focusing on criminal justice and law enforcement. Each intern spends a minimum of 80 hours on site and attends a weekly seminar. Currently employed sworn federal, state, and local officers or agents may waive, through petition, the internship field experience. All students are required to register for and attend the weekly seminar.

NOTES:

- Any one course may be used to satisfy only <u>one</u> requirement within the major.
- 2. A maximum of 61 hrs. of CRJ can count toward the 120 hrs. required for graduation.
- 3. A maximum of 6 hrs. of internship (CRJ 478, 485, 494, 495, 496, 497) credit may count in the minimum 30 hours for the major.
- 4. At least 15 of the upper level hours in CRJ must be elected at UM-D.
- 5. Some upper level CRJ courses will require SOC 200 or 201, or PSYC 170 or 171 as prerequisites.

MINOR or BGS/LIBS AREA OF FOCUS

A minor or area of focus consists of the following courses: CRJ 200, 468; one course from CRJ 363, 480 or 489; and 6 additional hrs. from CRJ 363, 470, 471, 472, 474, 475, 480, 482, 489, 490.

Evening and Saturday Offerings

The criminal justice program is committed to offering both a day and evening/weekend program. Evening/weekend students should watch for infrequently offered courses and take them when available. If a required course is not offered during a reasonable period, a full-time evening student may petition to substitute another course.

Criminal Justice Studies (CRJ) COURSE OFFERINGS

CRJ 200 Intro to Criminal Justice

3.000 Credits

This course provides an introduction to issues of crime and neighborhood disorder as well as society's responses to these problems. We will examine the nature and causes of crime, criminal law, constitutional safeguards, and the organization and operation of the criminal justice system including the police, courts, and corrections. The history of the criminal justice system, terminology and career opportunities will also be discussed.

CRJ 240 Ethics

3.000 Credits

Must be enrolled in one of the following Levels: Undergraduate

A study of ethical concepts and theories. Typical questions: Is the morality of an action based on its results or on the intent of the person acting? Is ethics purely rational? What makes a good person? Ethical principles may be applied to such issues as abortion, capitalism, war, and capital punishment. (F, W).

CRJ 300 Political Analysis

3.000 Credits

Must be enrolled in one of the following Levels: Undergraduate

Introduction to research design, data collection and analysis, sampling, and statistics for social scientists. Should be elected as soon as possible after the declaration of major. POL 101 or equivalent recommended. (F, W).

CRJ 302 Theory of the Law

3.000 Credits

Must be enrolled in one of the following Levels: Undergraduate

A comprehensive introduction to the theoretical foundations and the political functions of law, with special emphasis on the different moral justifications of law; the relation between law and justice; the relation between law and freedom; due process and fairness in any legal system. This course is designed to have special relevance for those considering law as a career. POL 101 or equivalent recommended. (OC).

CRJ 308 Moral and Political Dilemmas

3.000 Credits

Must be enrolled in one of the following Levels:

Undergraduate

Must be enrolled in one of the following classes:

Senior

Junior

This course focuses on the tensions and relations between personal morality and political action by examining the moral aspect of contemporary policy issues such as the right to life, environmental policy, and discrimination. POL 101 or equivalent recommended. (YR).

CRJ 316 The American Judicial Proces

3.000 Credits

Must be enrolled in one of the following Levels: Undergraduate

An analysis of American legal institutions, processes, doctrines, and their relationship to the formulation of public policy and the solution of social problems. POL 101 or equivalent recommended. (AY).

CRJ 322 Psychology of Prejudice

3.000 Credits

Must be enrolled in one of the following Levels:

Undergraduate

Prerequisites: PSYC 170 or 171

A consideration of ethnic (including racial, sexual, and religious) prejudice from the psychological point of view, focusing on the mind of both the oppressor and the oppressed. (AY).

CRJ 323 Urban Politics

3.000 Credits

Must be enrolled in one of the following Levels: Undergraduate

A survey of the political process in urban areas, giving special attention to the changing roles of cities in American politics. POL 100 or equivalent recommended. (YR).

CRJ 325 Psyc of Interpersonal Relation

3.000 Credits

Must be enrolled in one of the following Levels:

Undergraduate

Prerequisites: PSYC 170 or 171

This course presents an overview of theory and research conducted by social psychologists that has been aimed at understanding interactions between individuals. Topics include an exploration of the research process that is used to investigate interpersonal relationships, the processes underlying social perception, friendship, liking, love, close relationships, aggression and violence in interpersonal relationships. (YR).

CRJ 335 Philosophy of Law

3.000 Credits

Must be enrolled in one of the following Levels:

Undergraduate

An examination of some of the important philosophical issues relevant to law and legal theory, including legal punishment, legal responsibility, and the relationship between law and morality. Both classical and contemporary writings will be studied. Prerequisite: a previous philosophy course or permission of instructor. (AY).

CRJ 350 Poverty and Inequality

3.000 Credits

Must be enrolled in one of the following Levels:

Undergraduate

Prerequisites: SOC 200 or 201

In a middle class-oriented culture, the poor experience many problems and are also considered deviant, which tend to make poverty self-perpetuating. This stratum will be explored with respect to life styles, life changes, contributing factors, characteristics, individual and social consequences, and evaluation of attempted solutions. (YR).

CRJ 362 Women, Politics, and the Law

3.000 Credits

Must be enrolled in one of the following Levels:

Undergraduate

Must be enrolled in one of the following Colleges:

Coll of Arts, Sciences & Letters

An examination of the political behavior of women in American politics. Included is an analysis of the legal and legislative demands of American women. (AY).

CRJ 363 Crim Justice Syst and Policy

3.000 Credits

Must be enrolled in one of the following Levels:

Undergraduate

The structure and processes of criminal justice administration in America, including analysis of current issues in police behavior, courts, and corrections. POL 101 or equivalent recommended. (AY).

CRJ 369 US Civil Rights Movement

3.000 Credits

Must be enrolled in one of the following Levels:

Undergraduate

A survey of race relations and civil rights activity from the late 19th century to the present. The principal focus, however, is on the period since World War II, especially on the mass-based Southern civil rights movement (1955-1965) and the various policy debates and initiatives of the past thirty years, most notably affirmative action and busing. We also examine critiques of non-violence and integrationism. (AY).

CRJ 382 Social Psychology

3.000 Credits

Must be enrolled in one of the following Levels:

Undergraduate

Prerequisites: PSYC 170 or PSYC 171 or SOC 200 or SOC 201

An introductory study of interrelationships of the functioning of social systems and the behavior and attitudes of individuals. (YR).

CRJ 383 Introduction to Statistics

3.000 Credits

Must be enrolled in one of the following Levels:

Undergraduate

Frequency distributions and descriptive measures. Populations, sampling and statistical inference. Elementary probability and linear regression. Use of statistical computer packages to analyze data. No credit for CASL math concentration, minor, or area of focus. Prerequisite: one year of high school algebra. (F, W, S,).

CRJ 390 Topics in Criminal Justice

3.000 Credits

Examination of problems and issues in selected areas of criminal justice. Title as listed in the Schedule of Classes will change according to content. Course may be repeated when specific topics differ. (OC)

CRJ 403 Minority Groups

3.000 Credits

Must be enrolled in one of the following Levels:

Undergraduate

Prerequisites: SOC 200 or 201

The status of racial and ethnic minorities in the United States with particular reference to the social dynamics involved with

regard to majority-minority relations. Topics of study include inequality, segregation, pluralism, the nature and causes of prejudice and discrimination and the impact that such patterns have upon American life. (F, W).

CRJ 407 Psychology of Adolescence

3.000 Credits

Must be enrolled in one of the following Levels:

Undergraduate

Prerequisites: PSYC 170 or 171

Considers adolescence as an interaction of rapid biological and social change. Examines the theoretical and empirical literature in some detail. Prerequisite or permission of instructor. (F, W).

CRJ 410 Quantitative Research

4.000 Credits

Must be enrolled in one of the following Levels:

Undergraduate

Prerequisites: SOC 200 or 201

An introduction to methods of data collection and analysis. Also discussion of research design and the philosophy of social science. (YR).

CRJ 412 Men and Masculinities

3.000 Credits

Must be enrolled in one of the following Levels:

Undergraduate

May not be enrolled in one of the following Classes:

Sophomore

Freshman

Prerequisites: SOC 200 or SOC 201 or ANTH 101 or WST 275 or WGST 275 or PSYC 275 or SOC 275 or ANTH 275 or HUM 275 or WGST 303 or PSYC 303 or SOC 303 or ANTH 303 or HUM 303

This course addresses the question, "What is a man?" in various historical, cross-cultural, and contemporary contexts. A major focus on the social and cultural factors that underlie the shape and conceptions of manhood and masculinity in America as well as in a variety of societies around the globe. (AY)

CRJ 413 American Constitutional Law

3.000 Credits

Must be enrolled in one of the following Levels:

Undergraduate

Prerequisites: POL 101

A major theme of this course is the development of the constitution, especially focusing on the themes of judicial review: judicial self-restraint and judicial activism; the expansion of executive and legislative powers; and the rise of "substantive due process of law." POL 101 or equivalent recommended. (AY).

CRJ 414 Civil Rights and Liberties

3.000 Credits

Must be enrolled in one of the following Levels:

Undergraduate

Must be enrolled in one of the following classes:

Senior Junior

Prerequisites: POL 101

An analysis of the Bill of Rights and the 14th Amendment, with particular emphasis upon recent landmark or controversial Supreme Court decision s dealing with freedom of speech and religion, rights of criminal defendants; cruel and unusual punishment, right to privacy; civil rights and equal protection clause; and apportionment. POL 101 or equivalent recommended. (YR).

CRJ 416 Criminal Law

3.000 Credits

Must be enrolled in one of the following Levels:

Undergraduate Prerequisites: POL 101

A survey of the major judicial, executive, and legislative decisions in the field of criminal law. (AY)

CRJ 421 Group Processes

3.000 Credits

Must be enrolled in one of the following Levels:

Undergraduate

Prerequisites: PSYC 170 or PSYC 171 or SOC 200 or SOC

201

Topics treated include group cohesiveness, "group think," the social structure of groups, emotional factors in group life, leadership, and development of groups. (YR).

CRJ 423 American Social Classes

3.000 Credits

Must be enrolled in one of the following Levels:

Undergraduate

Prerequisites: SOC 200 or 201

Stratification of American communities and society: a review of the findings of major studies and an introduction to methodology. (YR).

CRJ 425 Lab in Social Psychology

4.000 Credits

Must be enrolled in one of the following Levels:

Undergraduate

Prerequisites: PSYC 381 *

A broad introduction to research methods in basic and applied social psychology. Students will receive training in construction, implementation, and interpretation of scientific procedures used in the study of social psychology. Topics include: questionnaire construction, experimental design, and various multivariate analytic techniques. (AY).

CRJ 435 Urban Sociology

3.000 Credits

Must be enrolled in one of the following Levels:

Undergraduate

Prerequisites: SOC 200 or 201

A descriptive study of the form and development of the urban community with respect to demographic structure, spatial and temporal patterns, and functional organization. The relationship of city and hinterland. Social planning and its problems in the urban community. (YR).

CRJ 440 Abnormal Psychology

3.000 Credits

Must be enrolled in one of the following Levels:

Undergraduate

Prerequisites: PSYC 170 or 171

An introduction to the field of psychopathology, the study of mental disorders. Includes exposure to a number of historical and theoretical perspectives, each with their own theories, methodologies, and treatment approaches. Disorders covered will include: anxiety and mood disorders, personality disorders, schizophrenia, sexual disorders, and psychosomatic disorders. (F, W).

CRJ 443 Gender Roles

3.000 Credits

Must be enrolled in one of the following Levels:

Undergraduate

Prerequisites: PSYC 170 or PSYC 171 or SOC 200 or SOC

201

This course will investigate the development of gender roles in childhood and adolescence due to either innate physiological differences or sociological patterning, the effect of gender roles upon male-female relationships within our society, and the possibility of transcending sociological gender roles in alternate modes of living. (F,W).

CRJ 445 Contemporary Ethical Theory

3.000 Credits

Must be enrolled in one of the following Levels:

Undergraduate Prerequisites: PHIL 240

An intensive study of a topic in recent ethical theory. Topics will vary with each offering. Among the topics: ethics and law, utilitarianism, virtue theory, theories of justice, morality and emotion, ethics and partiality. (AY).

CRJ 446 Marriage and Family Problems

3.000 Credits

Must be enrolled in one of the following Levels:

Undergraduate

Prerequisites: SOC 200 or 201

Sociological analysis of problems encountered within the institution of marriage with particular reference to such issues as choosing a marriage partner, sexual adjustment, occupational involvement, conflict resolution, child rearing, divorce and readjustment. (YR).

CRJ 447 Family Violence

3.000 Credits

Must be enrolled in one of the following Levels:

Undergraduate

Prerequisites: SOC 200 or SOC 201 or SOC 301 or SOC

443 or PSYC 405 or WST 405

Sociological analysis of various forms of family violence which occurred is proportionately in the lives of girls and women. Topics such as incest, sexual abuse, date rape, wife battering, and elder abuse will be situated within the social and cultural context of contemporary gender relationships. Social and political responses to the phenomena will be examined. Permission of instructor is an optional prerequisite. (YR).

CRJ 453 Sociology of Law

3.000 Credits

Must be enrolled in one of the following Levels:

Undergraduate

Prerequisites: SOC 200 or 201

Various aspects of the relationship between law and society are explored. After a look at processes of law making, attention is turned to the administration of law. This involves a study of the activities of legislatures, courts, police, and correctional agents. (YR).

CRJ 455 Immigrant Cultures and Gender

3.000 Credits

Must be enrolled in one of the following Levels:

Undergraduate

Must be enrolled in one of the following classes:

Senior

Junior

Prerequisites: ANTH 101 or WST 275 or WGST 275 or PSYC 275 or SOC 275 or ANTH 275 or HUM 275 or WGST 303 or PSYC 303 or SOC 303 or ANTH 303 or HUM 303

The history and culture of immigration since 1850, including: (1) formation and perseverance of immigrant communities and interethnic boundaries; (2) relations between the homeland and the immigrant; and (3) impact of migration on family life and gender roles. Prerequisite: ANTH 101 and junior or senior standing. (AY).

CRJ 461 Cops & Cons: Women in Prison

3.000 Credits

Prerequisites: SOC 200 or SOC 201 or WST 275 or CRJ 240 or CRJ 300 or WGST 275 or PSYC 275 or SOC 275 or ANTH 275 or HUM 275 or WGST 303 or PSYC 303 or SOC 303 or ANTH 303 or HUM 303

Course uses contemporary theories of gendered organizations to frame analyses of prison policies and practices in employment and incarceration as they reflect and reproduce gender inequalities. Analyses will be framed within a restorative justice model, that is, a critique of the current criminal justice system of retributive justice and a paradigm of what an alternative system could be.

CRJ 465 Deviant Behavior/Soc Disorganz

3.000 Credits

Must be enrolled in one of the following Levels:

Undergraduate

Prerequisites: SOC 200 or 201

General analysis of the concepts of social deviance and social disorganization: factors producing each condition, the effects of social control measures on the course of deviance and disorganization, consequences for the social system, and the relationship between the two concepts. (YR)

CRJ 466 Drugs, Alcohol, and Society

3.000 Credits

Must be enrolled in one of the following classes:

Senior Junior

Prerequisites: SOC 200 or 201

Analyses of the sociology of substance use and abuse. Provides a sociological framework for understanding issues and evaluating our nation's responses to the phenomenon of drug use. Drawing on sociocultural and social psychological perspectives, this course systematically examines the social structure, social problems, and social policy aspects of drugs in American society. Prerequisite or permission of instructor. (YR).

CRJ 467 Drugs, Crime, and Justice

3.000 Credits

Must be enrolled in one of the following classes:

Senior Junior

Prerequisites: SOC 200 or 201

Provides a comprehensive analysis of the current state of research on interactions between crime and drug abuse. Examines drug distribution, organization of drug systems, and mechanisms of social control of drug systems. Analyzes the social problems associated with drugs and crime. The course also focuses on drug-law enforcement and public policy strategies for dealing with drugs and crime. Prerequisite or permission of instructor. (YR).

CRJ 468 Criminology

3.000 Credits

Must be enrolled in one of the following Levels:

Undergraduate

Analysis of criminal behavior in relationship to the institutional framework of society. Emphasis upon the more routinized and persistent forms of criminality along with the joint roles played by victims, the criminal, the police, and all other relevant parties. (F,W)

CRJ 469 Juvenile Delinquency

3.000 Credits

Prerequisites: SOC 200 or 201

The analysis of juvenile delinquent behavior in relationship to the institutional framework of society. Emphasis on the extent, causes, and methods of juvenile delinquency in the United States. (YR)

CRJ 470 Current Issues in Crim Justice

3.000 Credits

Current issues in the field of criminal justice and law enforcement in the U.S. and other countries. Topics include an evaluation of police activities, problems of apprehensions and prosecution, the courts and the correctional system, and the efficacy of the legal structure in its social context. (F,W,S).

CRJ 471 Comp Crim Justice Systems

3.000 Credits

Prerequisites: CRJ 200

Description, analysis, and evaluation of selected criminal justice systems throughout the world. Course focuses on the various systems, theories, structures, methods and functions, including common law systems and socialist law systems. (YR).

CRJ 472 Corrections

3.000 Credits

Must be enrolled in one of the following Levels:

Undergraduate

Must be enrolled in one of the following classes:

Senior Junior

Prerequisites: CRJ 200

Analysis of the legal, social, and political issues affecting contemporary correctional theory and practice. Topics covered include the history of corrections; the nature of existing institutions; the functions and social structure of correctional institutions; and alternatives to institutional incarceration, probation, and parole. (OC).

CRJ 473 Race, Crime and Justice

3.000 Credits

May not be enrolled in one of the following Classes:

Freshman

Prerequisites: SOC 200 or 201

This course is an analysis of race and its relation to crime in the criminal justice system. Students will analyze and interpret the perceived connection between race and crime, while exploring the dynamics of race, crime, and justice in the United States. This course is designed to familiarize students with current research and theories of racial discrimination within America's criminal justice system.

CRJ 474 Cyber Crimes

3.000 Credits

Prerequisites: SOC 200

This course in a hands-on approach investigating cybercrimes (e.g. child exploitation, predators, sexual/vice crimes, identity theft, etc.). Students will explore and discuss legal cases involving cyber technology and predatory practices and review applicable evidentiary rules. Students will also analyze the practical and ethical considerations that apply to undercover internet operations, and evidence collection and use to locate and apprehend offenders.

CRJ 475 Digital Evidence

3.000 Credits

This course is a detailed approach to how computers and networks function, how they can be involved in virtually any type of crime, and how they can be used as a source of evidence. Students will analyze relevant legal issues and specific investigative and forensic processes related to technology. This course examines how deductive criminal profiling, a systemic approach to focusing an investigation and understanding criminal motivations, is utilized to locate and apprehend offenders.

CRJ 476 Inside Out Prison Exchange

4.000 Credits

Must be enrolled in one of the following classes:

Senior

Junior

This community-based course, taught in a local correctional facility, brings university students and incarcerated students together to study as peers. Together students explore issues of crime and justice, drawing on one another to create a deeper understanding of how these issues affect our lives as individuals and as a society. The course creates a dynamic partnership between UMD and a correctional facility to allow students to question approaches to issues of crime and justice in order to build a safer and more just society for all. The course encourages outside (UMD) students to contextualize and to think deeply about what they have learned about crime and criminals and to help them pursue the work of creating a restorative criminal justice system; it challenges inside students to place their life experiences into larger social contexts and to rekindle their intellectual self-confidence and interest in further education.

CRJ 478 Criminal Justice Internship

3.000 TO 6.000 Credits

Provides field experience in social welfare or criminal justice agencies, e.g., for children/adolescents, in residential programs, in abuse remediation, in probation, for chemical dependencies, in victim advocacy, for the elderly, in prisons, for special needs populations, in court services, in medical/public health, in police services, and for families and communities. Supervision by approved field instructors. An internship of 80 hours is required for three (3) credits. Instructor and student will work together to determine appropriate intern placement. Approval of instructor. (F,W).

CRJ 479 Women's Studies Internshp

3.000 Credits

Prerequisites: WST 275

Provides field experience in social welfare agencies, e.g., for children/adolescents, abuse, chemical dependencies, the elderly, special needs populations, criminal justice/probation, medical/public health, and families and communities. Supervision by approved field instructors. Focus is on analysis of the social context of agency, the clients, and staff. An internship of 80 hours is required for three (3) credits. Prerequisite: WGST 275 and permission of the Women's Studies Director is required. (F, W).

CRJ 480 Applied Crim Justice Theory

3.000 Credits

Criminal Justice theorists study of formal and informal mechanisms of social control in specific places, such as bars and night clubs, city parks, schools and shopping malls. Students in this course will learn to apply their theories to practical, real life situations to achieve behavioral changes among individuals and groups toward the objective of effective crime control.

CRJ 481 Terrorism & US Natl Security

3.000 Credits

Prerequisites: CRJ 468

The United States responded to the events of September 11, 2001 with a series of unprecedented action under the umbrella of homeland security and the "War on Terror." This course examines American National security policy by asking a few key questions: What is terrorism and how does it threaten the United States? How has the United States responded to the threat of terrorism over time? What have the consequences of US policy been to date? Finally, how would we balance a desire for security with our desire for civil liberties and ethical action?

CRJ 482 Legal Ethics

3.000 Credits

Must be enrolled in one of the following Levels:

Undergraduate

Must be enrolled in one of the following classes:

Senior

Sophomore

Freshman

Junior

This course will explore the many ethical dilemmas faced by professionals in the legal system. We will pay particular attention to the criminal justice system and to the Rules of Professional Conduct for attorneys. Some of the questions we may address are: How should an attorney consider his/her own ethical beliefs when deciding the appropriate course of action in a case? How should a judge consider his/her own ethical beliefs when making a juvenile justice decision? How should a police officer determine the ethical course of action when the law's instructions are ambiguous?

CRJ 483 Justice, Crime and Environment

3.000 Credits

Must be enrolled in one of the following classes:

Senior

Junior

This service-learning course focuses on environmental justice and law. Environmental Justice is defined as the fair treatment of all people with respect to the development, implementation, and enforcement of environmental laws. In the classroom, students learn the theory, history, and enforcement of environmental laws and regulations in Detroit, Michigan, and nationwide. In a required civic engagement project, students apply their substantive knowledge to solve local environmental problems. Through classroom learning

and projects with community organizations, students connect law and justice concerns to Detroit's environmental problems.

CRJ 485 Psychology Internship

3 .000 OR 6.000 Credits

Must be enrolled in one of the following classes:

Senior Junior

Prerequisites: PSYC 170 or 171

The psychology internship offers experience in a wide variety of placements dealing with human services. These include programs related to child abuse, crisis intervention, geriatrics, human resources/staff development, mental retardation, probation departments, teenage runaways, substance abuse, and women's issues. The program is designed for juniors and seniors with a concentration in psychology or behavioral sciences and involves training in listening and helping skills. Written permission of instructor required. (F,W).

CRJ 489 Law, Crime, and Society

3.000 Credits

Must be enrolled in one of the following classes:

Senior Sophomore Freshman Junior

This course will incorporate both legal and empirical perspectives to emphasize the dynamic relationship between law, crime, and society. In this course, we will focus on the substantive and procedural criminal law ('law on the books') while we simultaneously focus on empirical research of enforcement, case processing and sentencing in the criminal justice system (the 'law in action'). As a result, we will assess the relationship and differences between what the criminal law says 'on the books' and the criminal justice system 'in action'.

CRJ 490 Topics in Criminal Justice

3.000 Credits

Must be enrolled in one of the following Levels:

Undergraduate

Must be enrolled in one of the following classes:

Senior

Junior

Examination of problems and issues in selected areas of criminal justice. Title as listed in Schedule of Classes will change according to the content of the course. Course may be repeated when specific topics differ.

CRJ 494 Pol Sci Internship Seminar

3 .000 OR 6.000 Credits

This is the academic part of the internship. Students must meet with other interns once a week to analyze political dynamics within their placements. Students are required to keep journals, prepare papers and reports, and do other written work. Anyone taking POL 495 or 496 is required to take POL 494. It may not be taken by itself. Repeatable if topic differs. Only six hours of internship credit is allowable toward concentration requirement. (F,W,S).

CRJ 495 Political Science Internship

3.000 TO 6.000 Credits

Field study placements in national, state, local government or private agencies. Primarily for junior or senior political science concentrators or other qualified applicants. Maximum of 20

students selected each term. Students must also register for CRJ 494. Only six hours of internship is allowed toward concentration requirement. (F,W,S).

CRJ 497 Washington, D.C. Internship

3.000 TO 6.000 Credits

Field placements in Washington, D.C. Course is offered only in summer semester. Primarily for junior or senior political science concentrators or other qualified applicants. Only six hours of internship credit is allowed toward concentration requirement.

CRJ 498 Directed Studies

1.000 TO 6.000 Credits

Must be enrolled in one of the following Levels:

Undergraduate

Must be enrolled in one of the following classes:

Senior

Junior

Directed individual study of any subject agreed upon by the student and the instructor. May not duplicate a formal course offering.

Earth Sciences

The Earth Sciences major is designed to provide students with a strong background in the areas of science that seek to understand Earth and its neighbors in space, including geology, GIS, oceanography, meteorology, and astronomy. The major leads to a BS degree that prepares students for graduate study in any of the earth sciences, for students who wish to qualify for a teaching certificate in Earth Science, or for students interested in the study of geology or astronomy as part of an undergraduate liberal arts education.

PREREQUISITES TO THE MAJOR

BIOL 130	Intro to Organismal and Envir Biology. 4 hrs
CHEM 134 or	144 General Chemistry I 4 hrs
CHEM 136 or	146 General Chemistry II 4 hrs
GEOG 203	Weather and Climate
GEOL 118	Physical Geology 4 hrs
GEOL 218	Historical Geology
MATH 113	Calculus I: Management, Life and Social
	Science
AND	
MATH 114	Calculus II: Management, Life and Social
	Science
OR	
MATH 115	Calculus I
AND	
MATH 116	Calculus II
	roductory PhysicsI4hrs
AND	
PHYS 126	Introductory Physics II 4 hrs
OR	
	eneral PhysicsI
AND	
PHYS 151	General Physics II
ASTR 130	Introduction to Astronomy
ASTR 131 Int	roductory Astronomy Laboratory 1 hrs

MAJOR REQUIREMENTS31 hrs		
Required Core	minimum of 12 hrs	
CHEM 344	Quantitative Analysis	
GEOL 342	Oceanography	
GEOL 350	Geomorphology4 hrs	
GEOL 377	Field Methods in Geology*1 hr	
OR		
GEOL 578	Geology of the National Parks3 hrs	
*Note: may be rep	peated	
Research/Interns	ship*	
GEOL 498	Readings in Earth Science	
OR		
GEOL 499	Laboratory and Field Research 3 hrs	
OR	-	
ENST 398	Environmental Internship	
AND	•	
ENST 485	Seminar in Environmental Topics 2 hrs	

^{*}The research or internship must culminate in an oral or poster presentation.

Electives in Earth Science – A minimum of 14 or 16 credit hours upper level, whichever is needed, to reach a total of 31 credit hours for the major (14 hrs. if GEOL 578 is taken in the core, 16 hrs. if GEOL 377 is taken) from the following:

CHEM 325 ESCI 330 ESCI 390	Principles of Organic Chemistry Land Use Planning and Management Topics in Environmental Science	t4 hrs
GEOG 390	Topics in Geographyevel, any courses that have not been u	3 hrs
	elsewhere in the major	
PHYS 390	Current Topics in Physics	3 hrs
PHYS 421	Astrophysics	
PHYS 490	Topics in Physics	3-4 hrs

Graduate-level (500/600 level) courses in Geology can be taken for upper-level credit to satisfy major requirements.

NOTES

- At least 12 of the 31 upper level hours in the major must be elected at UM-D.
- A maximum of 6 hrs. of independent study/research in any Dept. of Natural Sciences discipline may count towards the 120 hours required to graduate.

Economics

Economics is a social science that studies the ways a society can best use its resources. Thus, a sound knowledge of economics has become increasingly important for understanding the contemporary world and its problems. Economics helps one think critically about a diverse array of problems ranging from domestic and international public policy issues to personal choices about careers, spending, and investments. The Economics major also offers useful training for those interested in pursuing a business career, and provides excellent preparation for post-graduate work in Economics, Law, Business, and other professional fields. To meet the needs of those desiring a comprehensive introduction to economic principles and problems, ECON 201 and 202 are offered each term. For majors in economics a well-balanced offering of courses is designed to equip the student with an understanding of basic economic relationships, the essential tools of economic analysis, and a store of factual knowledge.

PREREQUISITES TO THE MAJOR

ECON 201	Principles of Macroeconomics	
ECON 202	Principles of Microeconomics	3 hrs
MATH 104	Pre-calculus for Management, Life and	
	Social Science*	4 hrs
OR		
MATH 105	Pre-calculus*	4 hrs

*MATH 113 or 115 can be substituted but **cannot** also be used in the Cognate area..

MAJOR REQUIREMENTS

Required courses*		9 hrs
ECON 301	Intermediate Macroeconomics**	
ECON 302	Intermediate Microeconomics**	
ECON 305	Economic Statistics	
(only one of the	above three courses may be transferred	to
	UM-D).	

*Note: MATH 104, 105, 113, 115, or equivalent are prerequisites to these courses.

** Note: ECON 301 and 302 should be taken no later than the junior year.

Note: Those considering graduate study in economics are advised to take one year of calculus (MATH 113 & 114 or MATH 115 & 116), MATH 217 Introduction to Matrix Algebra, ECON 4015 Introduction to Econometrics and ECON 4065 History of Economic Theory.

NOTES:

- . At least 15 of the 24 upper level hours of Economics must be elected at UM-D.
- 2. A maximum of 3 hrs. of internship (ECON 398) may count in the 24 hrs. of requirements for the major.

Economics majors may want to consider the new program called an Accelerated Master in Public Policy -Economic Policy Specialization (AMPP-EPS). This program enables a student to obtain a Bachelor's degree in economics and a Master's degree in Public Policy with an Economic Specialization within five years. The key to the program's "accelerated" aspect is that the five upper level Economics electives must be taken at the graduate level - even though the student is still an undergraduate. These five courses will count towards both the undergraduate and graduate degrees. Admission requirements to the AMPP-EPS program include having completed at least 60 credit hours with a 3.25 GPA, completion of two of the three core economic theory courses (ECON 301, 302, 305) with grades of "B" or better. For more information see any Economics professor; application forms may be obtained from Professor Natalia Czap, 2300 SSB, nczap@umich.edu.

MINOR OR BGS/LIBS AREA OF FOCUS

A minor or area of focus consists of 12 hours of upper-level (300/3000- and 400/4000-level courses) credit in Economics.

ECONOMICS HONORS DESIGNATION

To be recognized as graduating with honors in economics, students must (1) complete all the requirements for the economics major at UM-Dearborn; (2) earn a B+ or higher in each of at least two capstone 4000-level economics courses; (3) complete an Honors research paper as part of a 3 credit hour Directed Research (ECON 499); and (4) graduate with an overall 3.25 GPA at UM-Dearborn and a 3.5 GPA in upper division economics courses.

Students are expected to apply for candidate status for the Honors Award during or before the first term of their senior year at UM-Dearborn. Requirements for *candidate status* include being an Economics major, having a cumulative 3.25 GPA at UM-Dearborn, having successfully completed at least one core theory course (ECON 301/302/305), and possessing a 3.5 GPA average in upper division Economic classes.

Economics (ECON) COURSE OFFERINGS

ECON 100 Personal Economics & Finance

3.000 Credits

Students in ECON 100 will acquire the knowledge and tools needed to survive and thrive in the economic realities of the 21st century. Students will become familiar with the Michigan and U.S. economies, and will learn how to apply basic economic concepts to common personal choices, for example how to finance their education. They will also learn how to use economic concepts to critically evaluate economic information presented to them by others. Students who have already taken ECON 2001, ECON 201, or ECON 202 cannot receive credit for ECON 100.

ECON 2001 Introductory Economics

3.000 Credits

Introduction to economic reasoning, basic economic concepts and theories used in microeconomics and macroeconomics. Economic techniques including graphing and marginal analysis will also be introduced and applied to practical problems in everyday life. In addition, this course will focus on the way economic concepts can be taught at the elementary and high school level in a way that integrates economics into a broader understanding of Michigan history, government and geography. (F).

ECON 201 Prin: Macroeconomics

3.000 Credits

Together with ECON 202, this course serves to introduce the student to the basic ideas and concepts of modern economic analysis, and applies them to current economic problems, policies and issues. The focus of this course is on macroeconomics: income and wealth, employment, and prices at the national level in the United States economy. It is recommended that students take ECON 201 before ECON 202. MATH 105 is highly recommended but not required. (F,W,S).

ECON 202 Prin: Microeconomics

3.000 Credits

Together with ECON 201, this course serves to introduce the student to the basic ideas and concepts of modern economic

analysis, and applies them to current economic problems, policies, and issues. The focus of this course is on microeconomics, the behavior of consumers and firms and their interactions in specific markets. It is recommended that students take ECON 201 before ECON 202. MATH 104 or 105 is highly recommended but not required. (F,W,S).

ECON 290 Topics in Economics

3.000 Credits

Examination of problems and issues in selected areas of economics. Title as listed in Schedule of Classes will change according to content. Course may be repeated for credit when specific topics differ. (OC).

ECON 301 Intermediate Macroeconomics

3.000 Credits

Prerequisites: ECON 201 and ECON 202 and (MATH 104 or MATH 105 or MPLS 113)

A systematic study of the determinants of national output, economic growth, inflation, and unemployment. The effects of monetary policy, fiscal policy and other economic factors are analyzed for both the long run and short run. Debates about various approaches to macroeconomics policy are also discussed. (F,W).

ECON 302 Intermediate Microeconomics

3.000 Credits

Prerequisites: ECON 201 and ECON 202 and (MATH 104 or MATH 105 or MPLS 113)

A systematic study of the role of prices in organizing economic activity. The tools necessary for such study will be developed and applied to the analysis of the household, the firm, and the market under varying degrees of competition and monopoly. (F,W).

ECON 305 Economic Statistics

3.000 Credits

Prerequisites: ECON 201 and ECON 202 and (MATH 104 or MATH 105 or MPLS 113)

Introduction to the logic and use of statistical analysis, with emphasis on statistical inference. Topics covered include descriptive statistics, probability, estimation, hypothesis testing, and the use of linear regression analysis to study relationships between two variables. (F,W).

ECON 311 Money and Banking

3.000 Credits

Prerequisites: ECON 201 and ECON 202

The structure, workings, and regulation of financial systems, concentrating on bank-like financial institutions. While financial instruments like stocks, bonds, and some derivatives are discussed, the focus is on the economic theory behind financial markets. That is, the study of monetary policy underscores the interaction between the financial system and the economy. (F,W).

ECON 321 Labor in the American Economy

3.000 Credits

Prerequisites: ECON 201 and ECON 202

An analysis of the nature and underlying causes of the problems facing the worker in modern economic society. Includes an examination of wages, unemployment, economic insecurity, the trade union movement, collective bargaining, and labor legislation. (F,W).

ECON 325 Economics of Pov and Discrm

3.000 Credits

Prerequisites: ECON 201 and ECON 202

An analysis of the economic aspects of poverty and discrimination. Emphasis on the theoretical economic causes of poverty and the economic bases for discriminatory behavior, the impact of poverty and discrimination on individuals and society, and the effect of reform policies on the two problems. (AY).

ECON 331 Industrial Organization

3.000 Credits

Prerequisites: ECON 202

Theory and empirical evidence on the causes and effects of market power, especially in industrial markets. The focus is on the relationships between market structure and performance, and policy formation. (YR).

ECON 335 Experimental Economics

3.000 Credits

May not be enrolled in one of the following Classes:

Freshman

Prerequisites: ECON 202 or ECON 2001

This course on experimental economics is devoted to laboratory experiments on individual behavior in markets as well as in social situations. It focuses on different forms of strategic interactions between agents, including competition, coordination, bargaining, and public choice. We will consider individual decision experiments, choice anomalies, and the role of information in learning and signaling. We will also discuss the design of various economic experiments, such as market bargaining, auctions, trust, gift giving, adverse selection, public goods, common pool resources, etc. Students are recommended (but not required) to take Econ 302 before enrolling in this class. Basic knowledge of Excel is required for this class.

ECON 336 Behavior Econ & Econ Psych

3.000 Credits

May not be enrolled in one of the following Classes:

Freshman

Prerequisites: ECON 202 or ECON 2001

This class is a reading intensive course on behavioral economics and its sister discipline of economic psychology. We will discuss whether market forces, learning, and evolution can eliminate human limitations and lead to rational (or at least to bounded rational) behavior. We will examine anomalies, or the ways in which people deviate from the standard economics models. Finally we will explore how behavioral concepts can be incorporated into standard economic models and applied to a particular field. Students are recommended (but not required) to take Econ 302 before enrolling in this class.

ECON 351 Environmental Economics

3.000 Credits

Prerequisites: ECON 202

Course examines the economic aspects of pollution problems. Topics covered in this course include the economic theory of externalities, the theory of public goods, and the optimum use of depletable natural resources. The role of cost-benefit analysis as a part of the decision-making process is also examined. (AY).

ECON 355 Econ of the Medical Sector

3.000 Credits

Prerequisites: ECON 202

Course examines the health of a population and the health care industry, using the tools of economic analysis. Topics include the demand and supply of health services, alternate ways of financing health care, the application of cost-benefit analysis to health projects, and comparative health economic systems (e.g., Britain, Sweden). (AY).

ECON 361 US Economic History

3.000 Credits

Prerequisites: ECON 201 and ECON 202

A survey of the processes of development of the United States economy, their social implications, and the sources of today's economic problems. (YR).

ECON 362 Eur and Intl Economic Hist

3.000 Credits

Prerequisites: ECON 201 and ECON 202

A survey of the processes of industrialization in the major non-American industrial economies, with a focus on their relevance and implications. (AY).

ECON 372 Economic Demography

3.000 Credits

Prerequisites: ECON 201 and ECON 202

Course offers an introduction to economic demography, focusing on the interrelation between economic and population variables, and the techniques of demographic analysis. (OC).

ECON 375 Heterodox Economics

3.000 Credits

Prerequisites: ECON 201 or ECON 202 or ECON 2001

This course introduces students to alternative perspectives on economic theory and method. These alternatives include: Marxian and radical political economics, institutional and evolutionary economics, behavioral economics, post-Keynesian economics and feminist economics. (OC).

ECON 385 Public Choice

3.000 Credits

Prerequisites: ECON 201 and ECON 202

Public policy decision making, particularly governmental decisions regarding economic policies. Emphasis is on the use of economic methodology to analyze resource allocation via the political system rather than through private markets. (OC).

ECON 390 Topics in Economics

1.000 TO 3.000 Credits

Examination of problems and issues in selected areas of economics. Title as listed in Schedule of Classes will change according to content. Course may be repeated for credit when specific topics differ. (OC).

ECON 398 Economics Internship

3.000 TO 6.000 Credits

This internship affords the student the opportunity to apply tools learned in economics courses to real-world work situations. The student has 8-16 hours of unpaid work per week under the guidance of a faculty advisor and complementary academic work supervised by an economics professor. Only three credit hours may be applied to meeting the concentration requirements

in economics; up to six credit hours may be applied toward graduation credit. The internship is offered only on the S/E grading basis. Students cannot receive credit for both ECON398 and ECON498.(F,W,S). 3.000 TO 6.000 Credit hours

ECON 4011 Monetary Economics

3.000 Credits

Must be enrolled in one of the following Levels:

Undergraduate

Prerequisites: ECON 311 and ECON 301

This course examines financial institutions in a macroeconomic theoretical context. A rigorous treatment of monetary theory is presented followed by practical discussion of U.S. monetary policy as implemented by the Federal Reserve System. Students cannot receive credit for both ECON 4011 and ECON 411.

ECON 4015 Introduction to Econometrics

3.000 Credits

Must be enrolled in one of the following Levels:

Undergraduate

Prerequisites: MATH 113 or MATH 115 and ECON 305

The theory and practice of the statistical analysis of economic relationships. Topics covered include the construction and estimation of econometric models and tests of economic theories, emphasizing the use of multiple linear regression. Students cannot receive credit for both ECON 4015 and ECON 415.

ECON 4021 Economics of the Labor Sector

3.000 Credits

Must be enrolled in one of the following Levels:

Undergraduate Prerequisites: ECON 302

Theoretical analysis and empirical studies of the nature and operation of labor markets. Includes theories of wage determination and income distribution, the nature of unemployment, the impact of collective bargaining on the economy, the extent and economic effects of discrimination, and the nature and effects of government wage and employment policies. ECON 321, Labor in the American Economy, is valuable background to this course although it is not a prerequisite. This course counts as a required capstone (4000-level) course in Economics and also counts toward the Economics Honors designation. Students cannot receive credit for both ECON 421 and ECON4021.

ECON 4065 History of Economic Thought

3.000 Credits

Must be enrolled in one of the following Levels:

Undergraduate

Prerequisites: ECON 302

Course examines the evolution of economic thought and theory from the early origins to the present, focusing on the major contributions to economics, especially from Adam Smith onward, and assesses the current condition of economic analysis. Students cannot receive credit for both ECON 465 and ECON 4065.

ECON 407 Cost-Benefit Analysis

3.000 Credits

Must be enrolled in one of the following Levels:

Undergraduate

May not be enrolled in one of the following Classes:

Sophomore Freshman

Prerequisites: ECON 202 and ECON 302

Cost-benefit analysis arguably is the most important tool in evaluating public and private policies. Conceptually, cost-benefit analysis is simple: subtract the costs from the benefits and adopt those policies yielding the greatest net benefit. In practice cost-benefit analysis is much more complicated. Costs and benefits must be summed over time, requiring a calculation of net present value. Costs and benefits must be summed over different people, requiring a social welfare function. Finally costs and benefits must be summed over a variety of goods and services, some of which do not have market values or where market values are not appropriate measures. This course reviews the techniques involved in cost-benefit analysis and employs case studies to illustrate these techniques. (AY)

ECON 4085 Public Finance

3.000 Credits

Must be enrolled in one of the following Levels:

Undergraduate

Prerequisites: ECON 302

Analysis of the role of government in the economy. Course examines theories of the need for and nature of government intervention in economic activities. Includes analysis of public goods, externalities, taxation, state, and local finance, and models of public decision making. Students cannot receive credit for both ECON 4085 and ECON 481.

ECON 433 Antitrust and Regulation

3.000 Credits

Must be enrolled in one of the following Levels:

Undergraduate Prerequisites: ECON 202

This course uses economic theory to examine major antitrust laws and to evaluate government regulation of industry. ECON 331, Industrial Organization, is valuable background to this course although it is not a prerequisite. Students cannot receive credit for both ECON433 and ECON333. (OC).

ECON 442 Economic Development

3.000 Credits

Must be enrolled in one of the following Levels:

Undergraduate

Prerequisites: ECON 201 and ECON 202

A survey of economic problems currently affecting third world countries and the various policy options available to them. Topics covered will include agrarian vs. industrial growth, and monetary and fiscal policies, planning problems, foreign exchange and debt problems. Students cannot receive credit for both ECON 442 and ECON 342 (OC).

ECON 444 Economies of the Middle East

3.000 Credits

Must be enrolled in one of the following Levels:

Undergraduate

Prerequisites: ECON 201 or ECON 202

Survey of socio-economic issues of the post-WWII Middle East, using textbooks and web-based readings. Topics include population growth, urbanization, migration, gender issues, land reform, privatization, and stabilization policies. The Arab-Israeli conflict is not a focus of study. Grade based on papers and exams. Students cannot receive credit for both ECON 344 and ECON 444.

ECON 447 International Finance

3.000 Credits

Must be enrolled in one of the following Levels:

Undergraduate Prerequisites: ECON 201

This course studies the large-scale economic issues in interdependent economies, such as the behavior of exchange rates, interest rates, income, wealth, prices, and the balance of payments. International finance focuses particularly on economic policies in a world with a multitude of currencies and increasingly integrated goods, financial, and capital markets. Students cannot receive credit for both ECON 447 and ECON 347.

ECON 448 International Trade

3.000 Credits

Must be enrolled in one of the following Levels:

Undergraduate

Prerequisites: ECON 201 and ECON 202

Course analyzes in depth the debate of free trade vs. protectionism. Different theoretical models of the "gains from trade" are presented, as well as studies of their empirical validity. Some historical perspective is included, as well as discussion of the current situation of the European Union. Students cannot receive credit for both Econ 348 and Econ 448.

ECON 482 Regional Economics

3.000 Credits

Must be enrolled in one of the following Levels:

Undergraduate

Prerequisites: ECON 201 or ECON 202 or ECON 2001

Course explores methods of economics evaluation of regions in terms of intra- and inter-regional activity. Regions may smaller than a nation, be a collection of nations, or be composed of portions of more than one nation. Theoretical topics include the theories of (1) the location of the firm, (2) spatial demand, (3) agglomeration economies, and (4) input-output analysis. Regional development policy is discussed using Michigan and Ontario as subjects. Students cannot receive credit for both ECON382 and ECON482.

ECON 483 Urban Economics

3.000 Credits

Must be enrolled in one of the following Levels:

Undergraduate

Prerequisites: (ECON 201 and ECON 202) or ECON 2001

The economics of the city and the introduction of space in economic analysis; the determination of land use patterns, the location of firms and industries, and an urban area's growth; economic analysis and policy issues concerning urban poverty, housing, transportation, the local public sector, and other urban problems. Students cannot receive credit for both ECON 483 and ECON 381.

ECON 497 Economics Seminar

3.000 Credits

Must be enrolled in one of the following Levels: Undergraduate

An advanced study in selected areas of Economics. Topics vary; see the current Schedule of Classes for topics and prerequisites. May be offered in satisfaction of 400-level elective requirement for concentration. (OC).

ECON 499 Directed Research

1.000 TO 3.000 Credits

Must be enrolled in one of the following Levels:

Undergraduate

Independent study under the direction of a faculty supervisor in advanced topic areas. Normally must be elected on the "pass/fail" option, in which case it does not count toward credit hour requirement for concentration. Special consideration for the A through E grading option must be approved by members of the Economics discipline. In all cases students must have faculty supervisor's permission to register.

English

A major in English at UM-Dearborn focuses on the dynamic intersection of language, literature and society as well as the identities and communities shaped by this intersection. Majors in the English discipline have the opportunity to explore the relationships between reading and writing printed text by becoming familiar with the strategies that writers use to shape conceptions of truth.

The primary goal of the English discipline is to help students develop a sensitivity to the ways spoken and printed language frame how we conceive and discuss our identities throughout history. The UM-Dearborn English Faculty is committed to this goal by offering rigorous, comprehensive courses that contextualize language in terms of the various traditions and genres of English and American literature, the history of the English language and the critical skills necessary to craft effective expository and creative writing.

Acknowledging the unique perspective provided by studying English language and literature in a part of urban America that offers vibrant multi-cultural experiences, the UM-Dearborn English major also exposes students to the future of English language and literature in the context of a global community both in — and beyond — Detroit. Therefore, majors in the English discipline may expect to develop a close relationship to the social ramifications of the written word and its potential for incorporating both communities and individuals into a larger, more internationally aware reading and listening audience.

PREREQUISITES TO THE MAJOR

Students are required to complete the following as a prerequisite:

ENGL 200 Introduction to English Studies

This course serves as the "gateway" to the major with enrollment limited to 20 students per section. ENGL 200 exposes students to the terms of English Studies, literary criticism and literary theory, knowledge essential to higher-level English courses.

Virtually all 300/3000 and 400/4000-level English courses require as prerequisites ENGL 200 and COMP 106 or equivalent. In addition, other prerequisites for a specific upper-level English course may be introduced by the instructor in the term in which the course is offered. Students are advised to consult the current *Schedule of Classes* for prerequisites each term. If a student has not satisfied the prerequisites of a course, the student may be enrolled by permission of the instructor, provided that there are other relevant qualifications.

MAJOR REQUIREMENTS

All students majoring in English must complete 30 hours of course work on the 300/3000- and 400/4000-levels. Four of these courses are required upper-level surveys:

ENGL 311	Survey of British Literature, Beowulf to
LINGL 311	3
	Milton
ENGL 312	Survey of British Literature, Milton to 1900
ENGL 313	Survey of American Literature, Colonial
	Period to 1900
ENGL 314	Survey of Literature in English, 1900 to
	Present

Students are encouraged to take these surveys early in their careers so that they acquire an overview of literary history before taking more specialized upper-level courses. Students are required to take all four, but they can be taken at any time after ENGL 200 and are not prerequisites for other courses. Also, please note that students who have completed ENGL 235, 236 and/or 237 in the previous curriculum may petition to transfer these credits to cover ENGL 311, 312 and/or 313 in the current curriculum

In addition to taking the four required survey courses listed above, students are required to complete at least six upper-level electives. Students may wish to group some of these electives in the tracks listed below. Please note that students are not required to select a track for these remaining courses. However, if they wish, student may designate a "track" by taking three of their six electives in one of the four following tracks:

British Literature and Culture American Literature and Culture Writing World English Language and Literature (WELL)

English majors, whether they elect a track or not, must also fulfill the following requirements:

The English Discipline's "Diversity Requirement": English majors must elect one course with substantial inclusion of literature in English that expands the traditional Anglo-American literary curriculum. This literature may represent various national groups, ethnic groups, genders, and subcultures. The following courses satisfy the English "Diversity Requirement": ENGL 239, 300, 389, 443, 445, 469, 471, 4705, or other options that may be available on a semester by semester basis. Courses that satisfy the English Diversity Requirement will be noted in the Schedule of Classes for any particular semester.

The "<u>Historical Requirement</u>": English majors must elect one courses which addresses literature prior to 1800. Choose from: ENGL 346, 347, 348, 349, 371, 372, 373, 374, 375, 400, 401, 404, 405, 406, 408, 409, 410, 412, 413, 414, 420, 424.

The "Research Requirement": English majors must elect one course designated "Research Intensive," from the following list: ENGL 400, 401, 404, 405, 406, 408, 409, 410, 412, 413, 420, 423, 424, 434, 440, 443, 450, 453, 455, 456; or an "Independent Studies in English" (ENGL 399)

Cross listed comparative literatute, communication, journalism and screen studies, linguistics, and humanities courses may be elected either for major or for cognate credit, but not for both...

NOTES:

- A maximum of 54 hrs. in ENGL may count in the 120 hrs. required for graduation.
- 2. At least 15 of the 30 upper level hrs. in English must be elected at UM-D.
- 3. All English majors must complete an English Diversity requirement course, a English Historical requirement course, and a English Research Intensive/Independent Study course. Upper level courses used to fulfill the above requirements may also be counted in the 18 hrs. required in English Electives for the major.

SECONDARY CERTIFICATION SUPPLEMENT

One of the following supplements is required for students seeking certification for high school teaching in English. A major consists of 30 hours, including one upper-level writing course (ENGL 323 or 327) and two linguistics courses (ENGL/LING 280 or 281 and 461). The balance of the thirty hours for the major must be selected with the approval of the degree and certification advisors in accordance with the English major and certification requirements.

A minor in English for certification consists of 20 hours, including the same required courses in writing and linguistics, with the balance to be selected with the approval of degree and certification advisors.

Both the major and the minor have as a supplementary requirement, not included in the 30 or 20 hours, LIBR 470 Literature for Young People.

CASL MINOR OR BGS/LIBS AREA OF FOCUS

A minor or area of focus consists of 12 hours of upper-level credit in English.

English majors may find a minor in business administration, computer sciences, foreign languages, women and gender studies, humanities, art or music history a valuable supplement to the major. Students should consult with an academic advisor before deciding to pursue a minor.

HUMANITIES INTERNSHIP PROGRAM

The Humanities Internship Program offers practical experience to students concentrating in English and other humanistic fields and those interested in journalism. Students gain and demonstrate skills desired by employers, make important contacts, and explore a field of work before graduation. For more information on the Humanities Internship, see the Internship Coordinator, 3028 CB, (313) 593-5136, or inquire at the Literature, Philosophy, and The Arts Department office in 3011 CB, (313) 593-5433.

INDEPENDENT STUDY

Independent Study (ENGL 399) provides an opportunity for students to extend the work of existing courses or to explore areas not included in the current course offerings. Consult the Literature, Philosophy, and the Arts Department Guidelines for Independent Study, available in the Department Office, 3011 CB, (313) 593-5433. To enroll in an independent research project, students must have a prior, written contract with the instructor and prior, written permission of the Department Chair. One to three credit hours available.

ELECTIVE "TRACKS" IN THE ENGLISH **CURRICULUM**

Students may choose to elect a "track" by taking at least 3 of their upper-level courses from one of the following four areas:

British Literature and Culture American Literature and Culture Writing World English Language and Literature (WELL)

Electing a track is optional, but tracks give students the ability to focus their electives if they so desire. The courses for the four tracks are as follows. The following list is subject to change. Consult the current Schedule of Classes or contact the English Discipline representative for future additions to the tracks, including Topics courses offered on a semester basis.

British Literature and Culture Track

ENGL 346	Bible and Western Tradition
ENGL 356	Reading Urban Monstrosity: London
ENGL 368	Twentieth- and Twenty-First Century
	British/American Poetry
ENGL 371	British Literature: Beginning to 1500
ENGL 372	British Literature: 1500-1600
ENGL 373	British Literature: 1600-1660
ENGL 374	Restoration and Early Eighteenth-Century
	British Literature
ENGL 375	The Age of Johnson and Burney
ENGL 376	British Literature in the Romantic Era
ENGL 377	Victorian Poetry and Prose
ENGL 400	Major English Authors of the Middle Ages
ENGL 401	Literature of Anglo-Saxon England
ENGL 404	Medieval Mystical Writers
ENGL 405	Chaucer
ENGL 406	Studies in Medieval Literature and Culture
ENGL 408	Shakespeare I: Earlier Works
ENGL 409	Shakespeare II: Later Works
ENGL 410	Major English Authors of the Renaissance
ENGL 412	Milton
ENGL 413	English Renaissance Drama (Excluding
	Shakespeare)
ENGL 414	Seventeenth-Century Readings
ENGL 420	Major English Eighteenth-Century Authors
ENGL 423	Restoration Drama
ENGL 424	The Eighteenth-Century English Novel
ENGL 430	Studies in Nineteenth-Century British
ENGL 421	Literature
ENGL 431	British Romantic Writers
ENGL 432	Victorian Writers
ENGL 434	The Victorian Novel
ENGL 440	Major English and American Authors of the
ENCL 441	Twentieth and Twenty-First Centuries
ENGL 441	Major English Authors of the Twentieth and
ENGL 443	Twenty-First Centuries
ENGL 443 ENGL 482	Anglo-Irish Literature
ENGL 482	History of the English Language

American Literature and Culture Track

ENGL 304	Studies in Detroit Culture
ENGL 305	Society and Arts in Detroit
ENGL 306	Comparative American Identities
ENGL 361	Survey of American Literature: 1630 to the
	Civil War
ENGL 363	Survey of American Literature: Civil War to
	WWI

ENGL 368	Twentieth- and Twenty-First Century	
	British/American Poetry	
ENGL 383	American English	
ENGL 389	Odyssey of Black Men in America	
ENGL 440	Major English and American Authors of the	
	Twentieth and Twenty-First Centuries	
ENGL 450	Major American Authors to the Civil War	
ENGL 451	Major American Authors: Civil War to	
Erroz ioi	WWI	
ENGL 452	Major American Authors of the Twentieth	
	and Twenty-First Centuries	
ENGL 453	Contemporary American Novel	
ENGL 455	Studies in Nineteenth-Century American	
	Literature	
ENGL 456	Teaching Fiction	
ENGL 469	Twentieth-Century African-American	
	Literature	
ENGL 4705	Voices of Black Women in Literature, Film,	
EITGE 1705	Music	
ENGL 473	Arab American Women Writers	
ENGL 477	African-American English	
ENGL 4//	Amenican English	
riting Track		
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ENGL 341

ENGL 310	Narrative Journalism
ENGL 317	Studies in Technical Writing
ENGL 323	Advanced Creative Writing
ENGL 327	Advanced Exposition
ENGL 330	Feature Writing
ENGL 331	Online Reporting, Research, Writing
ENGL 364	Writing for Civic Literacy
ENGL 436	Memoir and Travel Writing
ENGL 454	Postmodern Literature
ENGL 464	Contemporary Rhetorical Theory
ENGL 465	Discourse Analysis
ENGL 467	Script-Writing Workshop
ENGL 468	Writing Young Adult Fiction
ENGL 485	Theories of Writing

World English Language and Literature (WELL Track)

ENGL 381	Introduction to Postcolonial Studies
ENGL 389	Odyssey of Black Men in America
ENGL 469	Twentieth-Century African-American
	Literature
ENGL 4705	Voices of Black Women in Literature, Film,
	Music
ENGL 473	Arab American Women Writers
ENGL 477	African-American English
ENGL 482	History of the English Language
ENGL 484	World Englishes

Some courses will fit in a track or tracks depending on their content for a given semester. These include:

Religion and Literature

ENGL 349	Bible in/as Literature
ENGL 370	Narratives of Film and Literature
ENGL 386	Gender Issues in Literature
ENGL 390	Topics in English
ENGL 421	Swingers, Flirts, and Libertines
ENGL 422	Satire
ENGL 442	Studies in Twentieth- and Twenty-First
	Century Literature
ENGL 444	Seminar in Twentieth- and Twenty First
	Century Poetry
ENGL 445	Twentieth/Twenty-first Century Women
	Authors

ENGL 454	Postmodern Literature
ENGL 486	Queer Theory and Literature
ENGL 487	Monsters, Women, and the Gothic
ENGL 488	Environmental Literature and
	Representations of Nature

Some courses will not be placed in any track. These include:

ENGL 301	Literary Criticism
ENGL 342	Myth and Motif
ENGL 343	Adaptations of Literary Texts
ENGL 345	Modern Literature: Drama
ENGL 347	Classical Literature in English Translation
ENGL 394	Psychology and Theater
ENGL 461	Modern English Grammar

English (ENGL) COURSE OFFERINGS

ENGL 200 Intro to English Studies

3.000 Credits

Prerequisites: COMP 105 or COMP 110 or CPAS 30

An introduction to English Studies for English concentrators. The course provides students with the interpretive, analytical and basic research skills, the critical vocabulary, the understanding of genre, and the knowledge of major critical approaches necessary for the study of literature. Readings will consist primarily of poetry, fiction, drama, and non-fiction prose written in English by British and American authors, but the course will also include other historical and cultural texts as well as works of criticism. Students will submit at least 20 pages of written work for extensive instructor feedback. (F,W)

ENGL 223 Intro to Creative Writing

3.000 Credits

Prerequisites: COMP 106 or COMP 220 or COMP 270 or COMP 280 or CPAS 40

An introduction to the writing of poetry, the short story, and/or the play. Considerable writing, analysis, criticism, and discussion. (F,W).

ENGL 230 Introduction to Literature

3.000 Credits

Introduces students to imaginative literature in several genres, including, for example, fiction, poetry, and drama. Stress will be both on appreciation of the aesthetic and cultural value of reading literature and on understanding the process of reading sensitively and intelligently.

ENGL 231 Intro to Literature: Poetry

3.000 Credits

A disciplined introduction to the reading of poetry, English and American. (F,W).

ENGL232 Intro to Literature: Fiction

3.000 Credits

A disciplined introduction to the reading of short stories and novels, English and American. (F,W).

ENGL 233 Intro to Literature: Drama

3.000 Credits

A disciplined introduction to the reading of plays, English and American. (F,W).

ENGL 235 Engl Lit, Beginnings to 1660

3.000 Credits

A study of the literature of English from the Anglo-Saxon era to 1660, including Chaucer and Milton, designed to introduce students to important authors, works, and literary movements in their historical contexts. Also designed to introduce students to the various ways of writing about literature. Although ENGL 235 is continued in ENGL 236, either course may be elected by itself.

ENGL 236 Engl Lit, 1660 to the Present

3.000 Credits

Prerequisites: COMP 105 or CPAS 30 or COMP 110

A study of the literary history of England from the Restoration to the 20th century, designed to introduce students to important authors, works and literary movements in their historical context. Also designed to introduce students to various ways of writing about literature. Although ENGL 236 is a continuation of ENGL 235, either course may be elected by itself.

ENGL 237 Survey of Amer Literature

3.000 Credits

Prerequisites: COMP 106 or CPAS 40 or COMP 220 or COMP 280 or COMP 270

A survey of American literature from the Colonial period to the early 20th century, designed to expose students to major American authors, works, and literary movements. Topics covered include Puritanism, the literature of the American Revolution, American Romanticism, Transcendentalism, the 19th-century poetic tradition, Realism and Naturalism, early 20th-century poetry and prose, and 20th-century social fiction. Also designed to introduce students to various ways of writing about literature.

ENGL 238 Intro to Lit: Arab American

3.000 Credits

Prerequisites: COMP 106 or COMP 220 or COMP 270 or COMP 280 or CPAS 40

This course in an introduction to Arab American literature, its historical and cultural contexts and contemporary relevance. Topics will include the literary and cultural productions of Arab immigrants, their transnational vision, and explorations of such concepts as home, memory and identity; the literary, dramatic and poetic responses of Arab American writers to 9/11 and the ongoing the war on terror; the role Arab American literature in offering different versions of Arab and Arab American lives and experiences from the one circulated in mainstream media, Hollywood cinema and culture.

ENGL 239 Intro to Lit: African American

3.000 Credits

A study of African-American literature designed to expose students to important periods, works, and authors within historical context. Topics will include slavery, reconstruction, the Great Migration, the Harlem Renaissance, and the contemporary renaissance in Black women's literature. Students will be required to read, critically discuss, analyze, and write their responses to several literary genres that will be incorporated (fiction, drama, poetry).

ENGL 248 Introduction to Screen Studies

3.000 Credits

This course will introduce students to the development of world cinema by integrating the aesthetics of film with its technology, and its social and economic milieu. It will train the students in analyzing the formalist qualities of the medium, and in understanding the evolution of its various genres and styles. (YR).

ENGL 301 Literary Criticism

3.000 Credits

Prerequisites: (COMP 106 or COMP 220 or COMP 270 or COMP 280 or CPAS 40) and (ENGL 200 or ENGL 230 or ENGL 231 or ENGL 232 or ENGL 233 or ENGL 235 or ENGL 236 or ENGL 237 or ENGL 239)

This course introduces literary criticism and theory from Aristotle to the present, focusing on the changing concept of literature's nature and function. Lectures, readings, and discussion cover such critics as Aristotle, Dryden, Pope, Johnson, Wordsworth, Coleridge, Arnold, T.E. Hulme, I.A. Richards, T.S. Eliot, and such movements as New Criticism, Phenomenology, Reader-Response, Archetypal Criticism, Structuralist-Semiotic Criticism, Psychological approaches to literature, New Historicism, Marxism, Feminism, and Deconstruction.

ENGL 304 Studies in Detroit Culture

3.000 Credits

This course is an attempt to define a modern cultural history of Detroit. Taught by two faculty members, the emphasis of the course will vary but the following aspects of the city's cultural history will be covered in some detail: its literature, arts, music, and architecture; its social conditions and broader American culture context. (AY).

ENGL 306 Comparat. American Identities

3.000 Credits

Must be enrolled in one of the following Levels:

Undergraduate

Prerequisites: COMP 106 or CPAS 40 or COMP 220 or COMP 280 or COMP 270

This course will confront and complicate the following key questions: what does it mean to be an American? What is American culture? Participants in this course will respond to the questions central to the American Studies field by reading and discussing historical, sociological, literary, artistic, material culture, political, economic, and other sources. Students will use this interdisciplinary study to examine the multiple identities of Americans - as determined by factors such as gender, race, class, ethnicity and religion. While emphasizing the diversity of American culture, participants will consider some core values and ideas uniting America both in historical and contemporary society. Students will be invited to seek out and share fresh narratives of the American experience.

ENGL 310 Narrative Journalism

3.000 Credits

Prerequisites: COMP 106 or COMP 220 or COMP 270 or COMP 280 or CPAS 40

Students learn to identify, understand and use the techniques of fiction in the service of nonfiction material. While studying the texts as literature, students are also encouraged to view them as models for writing. Assignments include the writing and revising of articles, based on research and interviews, and written in story form, drawing on literary techniques. (YR).

ENGL 311 British Lit: Beowulf to Milton

3.000 Credits

Prerequisites: (COMP 106 or COMP 220 or COMP 270 or COMP 280 or CPAS 40) and (ENGL 200 or ENGL 230 or ENGL 231 or ENGL 232 or ENGL 233 or ENGL235 or ENGL 236 or ENGL 237 or ENGL 239)

A study of British literature from the Anglo-Saxon period to the works of John Milton, designed to introduce students to important authors, works, and literary movements in their wider historical and cultural contexts. (YR)

ENGL 312 British Lit: Milton to 1900

3.000 Credits

Prerequisites: (COMP 106 or COMP 220 or COMP 270 or COMP 280 or CPAS 40) and (ENGL 200 or ENGL 230 or ENGL 231 or ENGL 232 or ENGL 233 or ENGL 235 or ENGL 236 or ENGL 237 or ENGL 239)

A study of British literature from the works of John Milton to 1900, designed to introduce students to important authors, works, and literary movements in their wider historical and cultural contexts. (YR)

ENGL 313 American Lit: Colonial to 1900

3.000 Credits

Prerequisites: (COMP 106 or COMP 220 or COMP 270 or COMP 280 or CPAS 40) and (ENGL 200 or ENGL 230 or ENGL 231 or ENGL 232 or ENGL 233 or ENGL 235 or ENGL 236 or ENGL 237 or ENGL 239)

A study of American literature from the Colonial period to 1900, designed to introduce students to important authors, works, and literary movements in their wider historical and cultural contexts. (YR)

ENGL 314 Brit & Amer Lit: 1900-Present

3 000 Credits

Prerequisites: (COMP 106 or COMP 220 or COMP 270 or COMP 280 or CPAS 40) and (ENGL 200 or ENGL 230 or ENGL 231 or ENGL 232 or ENGL 233 or ENGL 235 or ENGL 236 or ENGL 237 or ENGL 239)

A study of British and American literature from 1900 to the present, designed to introduce students to important authors, works, and literary movements in their wider historical and cultural contexts. (YR)

ENGL 317 Case Studies in Tech Writing

3.000 Credits

Must be enrolled in one of the following classes:

Junior

Senior

Graduate

Prerequisites: COMP 106 or COMP 220 or COMP 270 or COMP 280 or CPAS 40

ENGL 317 offers both practical and conceptual studies in technical writing and is open to non-technical as well as technical students. (Engineering students may take ENGL/COMM 317 for elective credit.) The course offers in-depth treatment of the communication problems and various document designs common to technical writing professionals. Instructional format includes lectures and discussion based on case material derived from actual events, followed up by preparation of written documents. Topics will include document design, language barriers, and the role of technical documents in product liability. (AY).

ENGL 323 Advanced Creative Writing

2.000 TO 3.000 Credits

Prerequisites: ENGL 223 or COMP 223

Practice in writing poetry, the short story, the novel, and/or the play. May be repeated to a maximum of six credit hours. (OC).

ENGL 327 Advanced Exposition

3.000 Credits

Prerequisites: COMP 106 or COMP 220 or COMP 270 or COMP 280 or CPAS 40

A study of rhetorical theory and its application to various types of expository essays. Writing assignments will reflect the types of essays studied. May be repeated to a maximum of six credit hours. (YR).

ENGL 330 Feature Writing

3.000 Credits

Must be enrolled in one of the following Levels:

Undergraduate

Prerequisites: COMP 106 or COMP 220 or COMP 270 or COMP 280 or CPAS 40

An introduction to the writing of feature stories for magazines and newspapers. Students read and discuss classic examples and study the methods of gathering information, of weaving an article from a variety of story elements, and of preparing a manuscript for publication.

ENGL 331 Online Reprtng, Resrch, Writing

3.000 Credits

Prerequisites: COMP 106 or COMP 110 or COMP 270 or CPAS 40

Course introduces the technical, social, legal and ethical practice of online research, focusing on research skills required by journalists and other writers. Students use new media technology to generate ideas, to research subjects, and to develop general-audience writing projects in their areas of interest. Course covers the use of Web search engines, directories and databases; finding sources and interviewing people online; evaluating the credibility of online sources and information; using Lexis-Nexis to access archives and public records; and using spreadsheet and database programs.

ENGL 341 Religion and Literature

3.000 Credits

Prerequisites: (COMP 106 or COMP 220 or COMP 270 or COMP 280 or CPAS 40) and (ENGL 230 or ENGL 231 or ENGL 232 or ENGL 233 or ENGL 235 or ENGL 236 or ENGL 237 or ENGL 239 or ENGL 200)

An investigation of the ways in which religious ideas and practices have informed works of literature, and vice versa. Surveying a variety of genres and themes, the course will focus mainly on British and/or American literature and its engagement with Judaeo-Christian religion, though some attention may be devoted to other literary and religious traditions (e.g., ancient and medieval texts, European and world literature, Islam and Eastern religions).

ENGL 342 Myth and Motif

3.000 Credits

Prerequisites: ENGL 230 or ENGL 231 or ENGL 232 or ENGL 233 or ENGL 235 or ENGL 236 or ENGL 237 or ENGL 239 or ENGL 200

A study of archetypal figures and thematic motifs. Their recurrent appearance in different literary periods and genres and their lineage will be examined in order to increase understanding of the works themselves and of the ages which produced them. A selection will be made from classical myth, Biblical narrative, and historical sources. Thus, the figures may vary from Oedipus and Cain to Faust and Don Juan. Motifs and story patterns may include such devices as the spiritual quest, the journey into Hell, or the patricide prophecy.

ENGL 343 Adaptations of Literary Texts

3.000 Credits

May not be enrolled in one of the following Classes: Freshman

Prerequisites: (ENGL 200 or ENGL 230 or ENGL 231 or ENGL 232 or ENGL 233 or ENGL 235 or ENGL 236 or ENGL 237 or ENGL 239) and (COMP 106 or COMP 220 or COMP 270 or COMP 280)

This course explores the adaptation of literary texts in a variety of literary genres (poetry, drama, fiction) to other artistic mediums (film, graphic novels/comics, paintings, etc.). Moving beyond limited comparisons of "good" originals and "bad" adaptations, this course focuses on the dialogue among multiple versions of the same story across a range of historical periods, asking how and why adaptations modify their sources in a particular manner. This course addresses the difference between adaptation and appropriation as well as imitation, quotation, allusion, pastiche, and parody.

ENGL 345 Modern Literature: Drama

3.000 Credits

A careful reading of selected plays from Ibsen to the contemporary theater, designed to develop appreciative criticism and an understanding of the plays in their relationships to movements in modern drama, theater, background social forces, and trends of thoughts.

ENGL 346 Bible and Western Tradition

3.000 Credits

A detailed study of major episodes from the Bible, first as a literary work, and second as it is reflected in both poetry and the visual arts during the Renaissance and Baroque periods. Included are selected works by such masters as John Donne, George Herbert, and John Milton in poetry and Michelangelo, Raphael, and Leonardo da Vinci in painting and sculpture. (AY).

ENGL 347 Classicl Lit/Engl Translation

3.000 Credits

Must be enrolled in one of the following classes:

Junior

Senior

Graduate

Prerequisites: ENGL 230 or ENGL 231 or ENGL 232 or ENGL 233 or ENGL 235 or ENGL 236 or ENGL 237 or ENGL 239 or ENGL 200

A study of masterworks of ancient Greek and Roman literature with special attention to the development of epic, tragedy, and comedy. Authors studied will include Homer, Virgil, Aeschylus, Sophocles, Euripides, Aristophanes, Terence, and Plautus.

ENGL 349 The Bible In/As Literature

3.000 Credits

Prerequisites: (COMP 106 or COMP 220 or COMP 270 or COMP 280 or CPAS 40) and (ENGL 230 or ENGL 231 or ENGL 232 or ENGL 233 or ENGL 235 or ENGL 236 or ENGL 237 or ENGL 239 or ENGL 200)

This course will study selected readings from the Bible, first in regard to their own literary, historical, and cultural contents, and then in regard to their reception, interpretation, and reapplication by later literary tradition. Biblical selections may cover both the Old and New Testaments as well as Apocryphal traditions, while readings from later non-biblical texts will be drawn from various literary periods.

ENGL 356 Reading Urban Monstrosity

3.000 Credits

Prerequisites: (COMP 106 or CPAS 40 or COMP 220 or COMP 280 or COMP 270) and (ENGL 200 or ENGL 230 or ENGL 231 or ENGL 232 or ENGL 233 or ENGL 235 or ENGL 236 or ENGL 237 or ENGL 239)

This course questions the literary techniques and forms the English writers developed between 1660 and 1900 to characterize and imagine London to be a unified community and to counter the growing perception of London as a "monstrous city." This image of "the English-speaking City" as an uncontrollable monster may be explored in writings by Daniel Defoe, Jane Austen, Elizabeth Gaskell, Robert Louis Stevenson, Charles Dickens, Thomas Hardy, and Joseph Conrad.

ENGL 361 Am Lit: 1630 to Civil War

2.000 TO 3.000 Credits

Prerequisites: (COMP 106 or CPAS 40 or COMP 220 or COMP 280 or COMP 270) and (ENGL 200 or ENGL 230 or ENGL 231 or ENGL 232 or ENGL 233 or ENG 235 or ENGL 236 or ENGL 237 or ENGL 239)

A wide-ranging exploration of American literature from its colonial origins through the Civil War. The works of such major authors as Anne Bradstreet, Benjamin Franklin, Frederick Douglass, and Herman Melville will be studied in cultural context.

ENGL 363 Am Lit: Civil War to WW I

3.000 Credits

Prerequisites: (COMP 106 or CPAS 40 or COMP 220 or COMP 280 or COMP 270) and (ENGL 200 or ENGL 230 or ENGL 231 or ENGL 232 or ENGL 233 or ENGL 235 or ENGL 236 or ENGL 237 or ENGL 239)

A study of the major trends in American prose and poetry, including realism and naturalism, during the late nineteenth and early twentieth centuries, through the work of such authors as Walt Whitman, Mark Twain, and Sara Orne Jewett.

ENGL 364 Writing for Civic Literacy

3.000 Credits

Prerequisites: COMP 106 or COMP 220 or COMP 270 or COMP 280 or CPAS 40

In Writing for Civic Literacy, students will study how politicians, the media and critical citizens use language to engage with the broader community. Students themselves will learn to use language to become more active, well-informed citizens. They will study rhetorical awareness, audience analysis and persuasive writing techniques and put those lessons to use in community settings. They will perform community service at agencies of their choosing and use those experiences as objects of analysis, researching the social context in which those agencies operate and writing analytically about the agencies. Further, students will synthesize classroom lessons and real-world experience by executing writing tasks for and with the agencies (these tasks might include editorials for the local press, informational webpages and fundraising materials).

ENGL 368 20C/21C British/Amer Poetry

3.000 Credits

Prerequisites: (COMP 106 or CPAS 40 or COMP 220 or COMP 280 or COMP 270) and (ENGL 200 or ENGL 230 or ENGL 231 or ENGL 232 or ENGL 233 or ENGL 235 or ENGL 236 or ENGL 237 or ENGL 239)

A survey of 20th- and 21st- century British and/or American poetry and poets, including such authors as Wallace Stevens, W.H. Auden, T.S. Eliot, Dylan Thomas, Langston Hughes, and Sylvia Plath.

ENGL 370 Narratives of Film and Lit

3.000 Credits

Prerequisites: HUM 248 or ENGL 248 or FILM 248 or JASS 248

Explores the narrative conventions of literary and filmic fictions in a cultural, historical, and psychoanalytic context. Goes beyond a discussion of the relative merits of novels and their respective film adaptations and examines the more complex interchanges between the two narrative forms, the ideological function of narrative in contemporary society, and the effect of the medium of a fictional text on the reader/viewer. (AY).

ENGL 371 Engl Lit from Begin-1500

2.000 TO 3.000 Credits

Prerequisites: (COMP 106 or CPAS 40 or COMP 220 or COMP 280 or COMP 270) and (ENGL 200 or ENGL 230 or ENGL 231 or ENGL 232 or ENGL 233 or ENGL 235 or ENGL 236 or ENGL 237 or ENGL 239)

A survey of Old and Middle English literature (mostly in translation) designed to acquaint students with the development of themes and techniques of English authors writing before 1500. (OC)

ENGL 372 Engl Lit: 1500 to 1600

2.000 TO 3.000 Credits

Prerequisites: (COMP 106 or CPAS 40 or COMP 220 or COMP 280 or COMP 270) and (ENGL 230 or ENGL 231 or ENGL 232 or ENGL 233 or ENGL 235 or ENGL 236 or ENGL 237 or ENGL 239 or ENGL 200)

A survey of English literature from the beginnings of the Renaissance in England through the works of Sidney, Spenser, and Shakespeare (excluding his plays).

ENGL 373 English Lit 1600-1660

3.000 Credits

Prerequisites: (COMP 106 or CPAS 40 or COMP 220 or COMP 280 or COMP 270) and (ENGL 230 or ENGL 231 or ENGL 232 or ENGL 233 or ENGL 235 or ENGL 236 or ENGL 237 or ENGL 239 or ENGL 200)

A survey of English literature from Jonson, Bacon, and Donne through the Metaphysicals, the Cavaliers, and Milton's early poems. Representative prose works will also be studied.

ENGL 374 Restoration&Early 18th Cen Lit

3.000 Credits

Prerequisites: (COMP 106 or CPAS 40 or COMP 220 or COMP 280 or COMP 270) and (ENGL 200 or ENGL 230 or ENGL 231 or ENGL 232 or ENGL 233 or ENGL 235 or ENGL 236 or ENGL 237 or ENGL 239 or ENGL 240 or ENGL 250 or ENGL 200)

A survey of English literature of the Restoration and early 18th century, with special emphasis on verse satire (Swift, Montague, and Pope), Restoration drama (Behn, Wycherly, and Congreve), and the origins of the English novel (Defoe, Fielding, and Richardson). (OC)

ENGL 375 The Age of Johnson and Burney

3.000 Credits

Prerequisites: (COMP 106 or CPAS 40 or COMP 220 or COMP 280 or COMP 270) and (ENGL 230 or ENGL 231 or ENGL 232 or ENGL 233 or ENGL 235 or ENGL 236 or ENGL 237 or ENGL 239 or ENGL 200)

A survey of English Literature of the late 18th century. Readings address the literary gothic, Boswell's journals, the "graveyard school" of poetry, Samuel Johnson's poetry and prose, the 1789 revolutionary fervor, and the novels of Frances Burney and Jane Austen.

ENGL 376 Brit Lit in Romantic Era

2.000 TO 3.000 Credits

Prerequisites: (COMP 106 or CPAS 40 or COMP 220 or COMP 280 or COMP 270) and (ENGL 230 or ENGL 231 or ENGL 232 or ENGL 233 or ENGL 235 or ENGL 236 or ENGL 237 or ENGL 239 or ENGL 200)

A survey of British literature from 1789 to 1832 with special emphasis on the rise of Romantic poetry.

ENGL 377 Victorian Poetry and Prose

2.000 TO 3.000 Credits

Prerequisites: (COMP 106 or CPAS 40 or COMP 220 or COMP 280 or COMP 270) and (ENGL 230 or ENGL 231 or ENGL 232 or ENGL 233 or ENGL 235 or ENGL 236 or ENGL 237 or ENGL 239 or ENGL 200)

A survey of British poetry and prose during the reign of Queen Victoria 1837 to 1901.

ENGL 381 Intro to Postcolonial Studies

3.000 Credits

Prerequisites: (COMP 106 or CPAS 40 or COMP 220 or COMP 280 or COMP 270) and ENGL 200 or ENGL 230 or ENGL 231 or ENGL 232 or ENGL 233 or ENGL 235 or ENGL 236 or ENGL 237 or ENGL 239 or ENGL 240 or ENGL 250

This course offers a general introduction to Postcolonial Studies - a field of cultural inquiry that questions how personal identity (specifically race, language and ethnicity) shapes, and is shaped by, the politics of colonization and nationalism. Students will clarify the subject of Postcolonial Studies by examining a variety of cultural and linguistic objects (literature, film, TV-journalism, slave- and middle-passage-narrative, and political manifesto) from a variety of cultural perspectives (Arab American, Anglo-Indian, West African, and Caribbean).

ENGL 383 American English

2.000 TO 3.000 Credits

Prerequisites: (COMP 106 or CPAS 40 or COMP 220 or COMP 280 or COMP 270) and (ENGL 230 or ENGL 231 or ENGL 232 or ENGL 233 or ENGL 235 or ENGL 236 or ENGL 237 or ENGL 239 or ENGL 200)

The development of American English and its dialects interpreted in the light of cultural history and processes of language change.

ENGL 386 Gender Issues in Literature

3.000 Credits

Prerequisites: ENGL 230 or ENGL 231 or ENGL 232 or ENGL 233 or ENGL 235 or ENGL 236 or ENGL 237 or ENGL 239 or ENGL 200

A study of gender issues in English and American literature. The exact topic will vary from semester to semester, but the course may feature such topics as gay and lesbian literature, feminist criticism, images of masculinity, the representation of sexual ideologies, etc. Course may be repeated for credit when specific topic differs.

ENGL 389 The Odyssey of Blk Men in Amer

3.000 Credits

Prerequisites: (COMP 106 or CPAS 40 or COMP 220 or COMP 280 or COMP 270) and (ENGL 200 or ENGL 230 or ENGL 231 or ENGL 232 or ENGL 233 or ENGL 235 or ENGL 236 or ENGL 237 or ENGL 239)

This course will examine the struggle of African American men for personal, political, and creative expression. This course incorporates several literary genres (narrative, fiction, essay, drama, and poetry) and the literary voices of black men who range from professional writers to politicians, from athletes to actors. Students will be required to critically read, discuss, analyze, and write their own responses to the literature found in the texts.

ENGL 390 Topics in English

3.000 Credits

Prerequisites: (COMP 106 or CPAS 40 or COMP 220 or COMP 280 or COMP 270) and (ENGL 200 or ENGL 230 or ENGL 231 or ENGL 232 or ENGL 233 or ENGL 235 or ENGL 237 or ENGL 239)

Examination of problems and issues in selected areas of English. Title as listed in Schedule of Classes will change according to content. Course may be repeated for credit when specific topics differ. (OC).

ENGL 394 Psychology and Theater

3.000 Credits

Prerequisites: (COMP 106 or COMP 220 or COMP 270 or COMP 280 or CPAS 40) and (ENGL 200 or ENGL 223 or ENGL 230 or ENGL 231 or ENGL 232 or ENGL 233 or ENGL 235 or ENGL 236 or ENGL 237 or ENGL 239)

The linkages between psychology and theater are analyzed from the perspective of the actor, the audience, and the analyst (both psychotherapeutic and literary). This includes ties between plays and theories of human behavior, psychodrama, and self-insight through performance. Class involves a significant experiential component.

ENGL 399 Independent Studies in English

1.000 TO 3.000 Credits

Readings or analytical assignments in English, selected in accordance with the needs and interests of those enrolled and agreed upon by the instructor and the student. May be repeated for a maximum of 6 credit hours. (F,W).

ENGL 400 Maj Engl Auth of the Mid Ages

3.000 Credits

Prerequisites: (COMP 106 or CPAS 40 or COMP 220 or COMP 280 or COMP 270) and (ENGL 230 or ENGL 231 or ENGL 232 or ENGL 233 or ENGL 235 or ENGL 236 or ENGL 237 or ENGL 239 or ENGL 200)

A concentrated study of the works of three or four major authors of medieval England, from the 13th through the 15th centuries.

ENGL 401 Lit of Anglo-Saxon England

2.000 TO 3.000 Credits

May not be enrolled in one of the following Classes: Graduate

Prerequisites: (COMP 106 or CPAS 40 or COMP 220 or COMP 280 or COMP 270) and (ENGL 230 or ENGL 231 or ENGL 232 or ENGL 233 or ENGL 235 or ENGL 236 or ENGL 237 or ENGL 239 or ENGL 200)

A literary analysis of Beowulf and other old English poems. Some attention will be given to the structure and pronunciation of Old English. Students cannot receive credit for both ENGL 401 and ENGL 501.

ENGL 404 Medieval Mystical Writers

3.000 Credits

Prerequisites: (COMP 106 or COMP 270 or COMP 220 or COMP 280 or CPAS 40) and (ENGL 200 or ENGL 230 or ENGL 231 or ENGL 232 or ENGL 233 or ENGL 235 or ENGL 236 or ENGL 237 or ENGL 239)

A study of the genre of mystical writing as it was developed and practiced throughout the Middle Ages and in 14th century England particularly. Attention will be given to the historical, religions, and cultural contexts that enabled and were created by mystical texts. In addition, the course will explore how traditional and contemporary trends in the fields of religious and literary studies can be brought to bear on the genre of mystical writing.(OC)

ENGL 405 Chaucer

3.000 Credits

May not be enrolled in one of the following Classes:

Prerequisites: (COMP 106 or CPAS 40 or COMP 220 or COMP 280 or COMP 270) and (ENGL 230 or ENGL 231 or ENGL 232 or ENGL 233 or ENGL 235 or ENGL 236 or ENGL 237 or ENGL 239)

An introduction to the poetry of Chaucer, with primary reference to the Canterbury Tales and some attention to Chaucer's short poems. Students cannot receive credit for both ENGL 405 and ENGL 505.

ENGL 406 Studies in Medieval Lit/Cult

3.000 Credits

Prerequisites: (COMP 106 or COMP 220 or COMP 270 or COMP 280 or CPAS 40) and (ENGL 200 or ENGL 230 or ENGL 231 or ENGL 232 or ENGL 233 or ENGL 235 or ENGL 236 or ENGL 237 or ENGL 239)

An intensive study of a single author, movement, genre, or theme in the Medieval period. Lectures will explore historical and cultural contexts and the relevance of contemporary methodologies to the study of Medieval texts.

ENGL 408 Shakespeare I: Earlier Works

3.000 Credits

May not be enrolled in one of the following Classes: Graduate

Prerequisites: (COMP 106 or CPAS 40 or COMP 220 or COMP 280 or COMP 270) and (ENGL 230 or ENGL 231 or ENGL 232 or ENGL 233 or ENGL 235 or ENGL 236 or ENGL 237 or ENGL 239 or ENGL 200)

Intensive study of selected works from the first half of Shakespeare's career, designed to increase the student's critical appreciation and understanding. Students cannot receive credit for both ENGL 408 and ENGL 508.

ENGL 409 Shakespeare II: Later Works

3.000 Credits

May not be enrolled in one of the following Classes: Graduate

Prerequisites: (COMP 106 or CPAS 40 or COMP 220 or COMP 280 or COMP 270) and (ENGL 230 or ENGL 231 or ENGL 232 or ENGL 233 or ENGL 235 or ENGL 236 or ENGL 237 or ENGL 239 or ENGL 200)

Intensive study of selected works from the second half of Shakespeare's career, designed to increase the student's critical appreciation and understanding. Students cannot receive credit for both ENGL 409 and ENGL 509.

ENGL 410 Maj Engl Authors of the Renais

2.000 TO 3.000 Credits

Prerequisites: (COMP 106 or CPAS 40 or COMP 220 or COMP 280 or COMP 270) and (ENGL 230 or ENGL 231 or ENGL 232 or ENGL 233 or ENGL 235 or ENGL 236 or ENGL 237 or ENGL 239 or ENGL 200)

An investigation of significant themes and attitudes current in the Renaissance, as seen through an intensive examination of the works of two or three major authors, such as More, Spenser, Bacon, and Donne.

ENGL 412 Milton

3.000 Credits

May not be enrolled in one of the following Classes:

Prerequisites: (COMP 106 or CPAS 40 or COMP 220 or COMP 280 and COMP 270) and (ENGL 230 or ENGL 231 or ENGL 232 or ENGL 233 or ENGL 235 or ENGL 236 or ENGL 237 or ENGL 239 or ENGL 200)

An intensive study of Paradise Lost and Paradise Regained, Areopagitica and the shorter poems, including Samson Agonistes and Comus. Consideration is given to historical background and to other writings by Milton insofar as they illuminate his major works. Students cannot receive credit for both ENGL 412 and ENGL 512.

ENGL 413 Engl Ren Drama, Exc Shakespr

2.000 TO 3.000 Credits

Must be enrolled in one of the following Levels:

Undergraduate

Prerequisites: (COMP 106 or CPAS 40 or COMP 220 or COMP 280 or COMP 270) and (ENGL 230 or ENGL 231 or ENGL 232 or ENGL 233 or ENGL 235 or ENGL 236 or ENGL 237 or ENGL 239 or ENGL 200)

An examination of representative works of Elizabethan and Stuart playwrights, with special attention being given to the literary history reflected in the plays.

ENGL 414 Seventeenth-Century Readings

2.000 TO 3.000 Credits

May not be enrolled in one of the following Classes: Graduate

Prerequisites: (COMP 106 or CPAS 40 or COMP 220 or COMP 280 or COMP 270) and (ENGL 230 or ENGL 231 or ENGL 232 or ENGL 233 or ENGL 235 or ENGL 236 or ENGL 237 or ENGL 239 or ENGL 200)

An intensive study of mid-17th century authors or literary movements, such as Browne, Burton, and the metaphysical poets. Students cannot receive credit for both ENGL 414 and ENGL 514.

ENGL 420 Maj Engl 18th-Century Authors

2.000 TO 3.000 Credits

May not be enrolled in one of the following Classes: Graduate

Prerequisites: (COMP 106 or CPAS 40 or COMP 220 or COMP 280 or COMP 270) and (ENGL 230 or ENGL 231 or ENGL 232 or ENGL 233 or ENGL 235 or ENGL 236 or ENGL 237 or ENGL 239 or ENGL 200)

An intensive study of two or three authors, such as Dryden, Behn, Pope, Swift, Burney, Austen, or Samuel Johnson. Students cannot receive credit for both ENGL 420 and ENGL 520.

ENGL 421 Swingers, Flirts, & Libertines

3.000 Credits

Prerequisites: (COMP 106 or COMP 220 or COMP 270 or COMP 280 or CPAS 40) and (ENGL 230 or ENGL 231 or ENGL 232 or ENGL 233 or ENGL 235 or ENGL 236 or ENGL 237 or ENGL 239 or ENGL 200)

An examination of the functions that writers in English have assigned to literary decadence, libertinism, and aestheticism (or, the study of beauty and "art for art's sake"). We will read writers who identified themselves as libertines as well as writers who represented libertines as we address the Restoration rake (Rochester & Behn), the Regency buck (the Shelleys & DeQuincey), the Victorian dandy (Oscar Wilde, Michael Field, & the Decadents), the modern playboy (Nin, Waugh & Fitzgerald), hippie-swinger (Wolfe & Jagger), and finally, the postmodern player-celebrity (Bret Easton Ellis, Will Self & rock-lyricists).

ENGL 422 Satire

3.000 Credits

Prerequisites: (COMP 106 or COMP 220 or COMP 270 or COMP 280 or CPAS 40) and ENGL 200 or ENGL 230 or ENGL 233 or ENGL 235 or ENGL 236 or ENGL 237 or ENGL 239

An exploration of satirical writing and its functions from its English origins in eighteenth-century London (Montagu, Swift, Pope) to its twenty-first-century reincarnations in both America and Britain (Zadie Smith, Burgess, Schulyer, Hughes, Waugh). The course emphasizes the various goals that writers have assigned to satire, especially in terms of race, gender, and nationalism.

ENGL 423 Restoration Drama

3.000 Credits

Prerequisites: (COMP 106 or CPAS 40 or COMP 220 or COMP 280 or COMP 270) and (ENGL 230 or ENGL 231 or ENGL 232 or ENGL 233 or ENGL 235 or ENGL 236 or ENGL 237 or ENGL 239 or ENGL 200)

A survey of playwriting and theatrical performance in England from Charles II's opening of the theaters in 1660 to the Licensing Act of 1737. Playwrights and movements include historical drama (Dryden, Rowe), tragicomedy (Southerne), urban social satire (Behn, Etherege, Gay, Cantilever, and Congreve), subversive comedy (Behn and Wycherley), sentimental comedy (Steele), and revisions of Shakespeare.

ENGL 424 18th-Century English Novel

3.000 Credits

May not be enrolled in one of the following Classes:
Graduate

Prerequisites: (COMP 106 or CPAS 40 or COMP 220 or COMP 280 or COMP 270) and (ENGL 230 or ENGL 231 or ENGL 232 or ENGL 233 or ENGL 235 or ENGL 236 or ENGL 237 or ENGL 239 or ENGL 240 or ENGL 250)

A study of the rise and development of the English novel during the 18th century. Consideration is given to such novelists as Defoe, Richardson, Fielding, Sterne, Austen, and Smollett. Students cannot receive credit for both ENGL 424 and ENGL 524.

ENGL 430 Stud in 19th-Century Brit Lit

3.000 Credits

Prerequisites: (COMP 106 or CPAS 40 or COMP 220 or COMP 280 or COMP 270) and (ENGL 230 or ENGL 231 or ENGL 232 or ENGL 233 or ENGL 235 or ENGL 236 or ENGL 237 or ENGL 239 or ENGL 200)

Intensive study of a special topic in 19th-century British literature. The course may treat a single author (e.g., Dickens), a movement (e.g., the Pre-Raphaelites), or a theme (e.g., literary responses to the French Revolution, the literature of mental crisis, Victorian social criticism).

ENGL 431 British Romantic Writers

3.000 Credits

May not be enrolled in one of the following Classes: Graduate

Prerequisites: (COMP 106 or CPAS 40 or COMP 220 or COMP 280 or COMP 270) and (ENGL 230 or ENGL 231 or ENGL 232 or ENGL 233 or ENGL 235 or ENGL 236 or ENGL 237 or ENGL 239 or ENGL 200)

An intensive study of selected British Romantic writers, with attention to the historical and literary contexts in which they wrote. Students cannot receive credit for both ENGL 431 and ENGL 531.

ENGL 432 Victorian Writers

3.000 Credits

May not be enrolled in one of the following Classes: Graduate

Prerequisites: (COMP 106 or CPAS 40 or COMP 220 or COMP 280 or COMP 270) and (ENGL 230 or ENGL 231 or ENGL 232 or ENGL 233 or ENGL 235 or ENGL 236 or ENGL 237 or ENGL 239 or ENGL 200)

An intensive study of selected Victorian poets and/or nonfiction prose writers, with attention to the literary and historical contexts in which they wrote. Students cannot receive credit for both ENGL 432 and ENGL 532.

ENGL 434 The Victorian Novel

3.000 Credits

Prerequisites: (COMP 106 or CPAS 40 or COMP 220 or COMP 280 or COMP 270) and (ENGL 230 or ENGL 231 or ENGL 232 or ENGL 233 or ENGL 235 or ENGL 236 or ENGL 237 or ENGL 239 or ENGL 200)

A study of the British novel during the reign of Queen Victoria, 1837 to 1901.

ENGL 436 Memoir and Travel Writing

3.000 Credits

Prerequisites: COMP 106 or COMP 220 or COMP 270 or COMP 280 or CPAS 40

A course in narrative non-fiction that focuses on memoir and travel writing. Reading involves several books as well as classic essay-length examples. Assignments include both short analytical papers and the writing and revising of three original articles, based on research, interviews, memory, and observation, and drawing on literary techniques. (YR).

ENGL 440 Major 20C/21C Engl/Amer Auths

3.000 Credits

May not be enrolled in one of the following Classes: Graduate

Prerequisites: (COMP 106 or CPAS 40 or COMP 220 or COMP 280 or COMP 270) and (ENGL 230 or ENGL 231 or ENGL 232 or ENGL 233 or ENGL 235 or ENGL 236 or ENGL 237 or ENGL 239 or ENGL 200)

An intensive examination of the works of representative English and American authors since 1900. Students cannot receive credit for both ENGL 440 and ENGL 540.

ENGL 441 Major20C/21C English Authors

3.000 Credits

May not be enrolled in one of the following Classes: Graduate

Prerequisites: (COMP 106 or CPAS 40 or COMP 220 or COMP 280 or COMP 270) and (ENGL 230 or ENGL 231 or ENGL 232 or ENGL 233 or ENGL 235 or ENGL 236 or ENGL 237 or ENGL 239 or ENGL 200)

An intensive study of several modern English authors, such as Shaw, Joyce, Forster, Dylan Thomas, D.H. Lawrence, and Woolf. Students cannot receive credit for both ENGL 441 and ENGL 541.

ENGL 442 Studies in 20-21 Century Lit

3.000 Credits

Must be enrolled in one of the following Levels: Undergraduate

Prerequisites: (COMP 106 or CPAS 40 or COMP 220 or COMP 280 or COMP 270) and (ENGL 230 or ENGL 231 or ENGL 232 or ENGL 235 or ENGL 236 or ENGL 237 or ENGL 239 or ENGL 200)

Intensive study of a special topic in 20th- or 21st-century literature in English. The course may treat a single author (e.g. E.M. Forster), a movement (e.g. Postmodernism), a genre (e.g. modern short story), or a theme (e.g. Literature of World War).

ENGL 443 Anglo-Irish Literature

3.000 Credits

Prerequisites: (COMP 106 or CPAS 40 or COMP 220 or COMP 280 or COMP 270) and (ENGL 230 or ENGL 231 or ENGL 232 or ENGL 233 or ENGL 235 or ENGL 236 or ENGL 237 or ENGL 239 or ENGL 200)

A survey of Irish Literature written in English. Special emphasis will be given to Swift, Lady Gregory, Synge, Yeats, Joyce, and O'Casey, whose works will be examined in the context of Ireland's unique history and culture.

ENGL 444 Sem in 20C/21C Poetry

3.000 Credits

Prerequisites: (COMP 106 or CPAS 40 or COMP 220 or COMP 280 or COMP 270) and (ENGL 230 or ENGL 231 or ENGL 232 or ENGL 233 or ENGL 235 or ENGL 236 or ENGL 237 or ENGL 239 or ENGL 200)

A seminar focusing on the poems of two or three English and/or American poets of the 20th- or 21st-century. Intensive discussion of individual poems, along with lectures on authors' critical and historical backgrounds.

ENGL 445 20C/21C Women Authors

3.000 Credits

May not be enrolled in one of the following Classes: Graduate

Prerequisites: (COMP 106 or CPAS 40 or COMP 220 or COMP 280 or COMP 270) and (ENGL 230 or ENGL 231 or ENGL 232 or ENGL 233 or ENGL 235 or ENGL 236 or ENGL 237 or ENGL 239 or ENGL 200)

An analysis of selected works by significant and emerging 20th and 21st century women authors writing in English, with special emphasis on issues of gender and social and cultural identity.

ENGL 450 Maj Am Auth to the Civ War

3.000 Credits

May not be enrolled in one of the following Classes: Graduate

Prerequisites: (COMP 106 or CPAS 40 or COMP 220 or COMP 280 and COMP 270) and (ENGL 230 or ENGL 231 or ENGL 232 or ENGL 233 or ENGL 235 or ENGL 236 or ENGL 237 or ENGL 239 or ENGL 200)

An intensive study of two or three authors, such as Charles Brockton Brown, Nathaniel Hawthorne, or Harriet Beecher Stowe, from the earlier periods of American Literature. Students cannot receive credit for both ENGL 450 and ENGL 550.

ENGL 451 Maj Am Auth Civ War to WWI

3.000 Credits

May not be enrolled in one of the following Classes: Graduate

Prerequisites: (COMP 106 or CPAS 40 or COMP 220 or COMP 280 or COMP 270) and (ENGL 230 or ENGL 231 or ENGL 232 or ENGL 233 or ENGL 235 or ENGL 236 or ENGL 237 or ENGL 239 or ENGL 200)

An intensive study of two or three major authors from the period between the Civil War and World War I, such as Emily Dickinson, Charles Chesnutt, or Henry James. Students cannot receive credit for both ENGL 451 and ENGL 551.

ENGL 452 Major 20C/21C American Authors

3.000 Credits

May not be enrolled in one of the following Classes: Graduate

Prerequisites: (COMP 106 or CPAS 40 or COMP 220 or COMP 280 or COMP 270) and (ENGL 230 or ENGL 231 or ENGL 232 or ENGL 233 or ENGL 235 or ENGL 236 or ENGL 237 or ENGL 239 or ENGL 200)

An intensive study of several modern American authors, from the World War I to the present, such as Langston Hughes, Frost, Hemingway, and Faulkner. Students cannot receive credit for both ENGL 452 and ENGL 552.

ENGL453 Contemporary American Novel

3.000 Credits

May not be enrolled in one of the following Classes: Graduate

Prerequisites: (COMP 106 or COMP 220 or CPAS 40 or COMP 280 or COMP 270) and (ENGL 230 or ENGL 231 or ENGL 232 or ENGL 233 or ENGL 235 or ENGL 236 or ENGL 237 or ENGL 239 or ENGL 200)

Study of selected American novels and novelists since WWII with an eye to their social, political, and literary contexts. Course will focus on major works by major authors and representative works by lesser-known writers in order to explore technical, thematic and critical crosscurrents among the works. Students cannot receive credit for both ENGL 453 and ENGL 553.

ENGL 454 Postmodern Literature

3.000 Credits

Prerequisites: (COMP 106 or CPAS 40 or COMP 220 or COMP 280 or COMP 270) and (ENGL 230 or ENGL 231 or ENGL 232 or ENGL 233 or ENGL 235 or ENGL 236 or ENGL 237 or ENGL 239 or ENGL 200)

This course explores the expression of postmodernism in literature (primarily fiction) and critical theory. Selected works of fiction and creative non-fiction will be analyzed in terms of the problems and issues raised by the postmodern movement. Students cannot receive credit for both ENGL 454 and ENGL 554.

ENGL 455 Stud in 19th-Cent Amer Lit

3.000 Credits

Prerequisites: (COMP 106 or CPAS 40 or COMP 220 or COMP 280 or COMP 270) and (ENGL 230 or ENGL 231 or ENGL 232 or ENGL 233 or ENGL 235 or ENGL 236 or ENGL 237 or ENGL 239 or ENGL 200)

Close investigation of a special topic in 19th century American literature. The course may treat a single author (e.g. Whitman), a movement (e.g. transcendentalism), or a theme (e.g. utopianism, technology, or pragmatism), and may draw on work from other field of study.

ENGL456 Teaching Fiction

3.000 Credits

Must be enrolled in one of the following Levels:

Undergraduate

Must be enrolled in one of the following Colleges:

Coll of Ed, Health, & Human Ser

Coll of Arts, Sciences&Letters

May not be enrolled in one of the following Classes:

Sophomore

Freshman

Prerequisites: (COMP 106 or CPAS 40 or COMP 220 or COMP 270 or COMP 280) and (ENGL 230 or ENGL 231 or ENGL 232 or ENGL 233 or ENGL 235 or ENGL 236 or ENGL 237 or ENGL 239 or ENGL 200)

ENGL 461 Modern English Grammars

3.000 Credits

May not be enrolled in one of the following Classes:

Graduate

Prerequisites: LING 280 or LING 281 or LING 480 or LING 480

The morphological and syntactic analysis of the structure of present day English considered in the light of modern linguistic science. Students cannot receive credit for both ENGL 461 and ENGL 561.

ENGL 464 Contemporary Rhetorical Theory

3.000 Credits

May not be enrolled in one of the following Classes: Graduate

Prerequisites: (COMP 106 or CPAS 40 or COMP 220 or COMP 280 or COMP 270) and (ENGL 200 or ENGL 230 or ENGL 231 or ENGL 232 or ENGL 233 or ENGL 235 or ENGL 236 or ENGL 237 or ENGL 239)

An examination of contemporary rhetorical theories through study of representative practitioners and related developments in linguistics, philosophy, psychology, communication, and composition and rhetoric. Students may not receive credit for both ENGL 464 and ENGL 564.

ENGL 465 Discourse Analysis

3.000 Credits

May not be enrolled in one of the following Classes: Graduate

Prerequisites: (COMP 106 or CPAS 40 or COMP 220 or COMP 280 or COMP 270) and (COMM 201 or COMM 220 or COMM 290 or ENGL 230 or ENGL 231 or ENGL 232 or ENGL 233 or ENGL 235 or ENGL 236 or ENGL 237 or ENGL 239 or ENGL 240 or ENGL 250)

An examination of the syntactic and semantic devices and structures underlying communication in written texts and oral interaction. Material to be analyzed will vary from term to term (technical reports, scholarly articles, newspaper stories) but examples will be drawn primarily from the written language. Students cannot receive credit for both ENGL 465 and ENGL 565. (OC).

ENGL 467 Script-Writing Workshop

3.000 Credits

Prerequisites: JASS 310 or COMP 310 or ENGL 310 or

COMM 310

This writing intensive course will train students to compose a film script, focusing on the substance, structure, and style of an original screenplay. The course will be conducted as a workshop in which students will first study classic scripts (and films based on these) of the film-school generation of directors, then model scenes and sequences of their own scripts on the principles of the above texts, and finally, write their own respective film stories in accordance with an appropriate narrative structure and design. (YR).

ENGL 468 Writing Young Adult Fiction

3.000 Credits

May not be enrolled in one of the following Classes: Graduate

Prerequisites: (COMP 106 or CPAS 40 or COMP 220 or COMP 280 or COMP 270) and (ENGL 223 or COMP 223)

In this course participants will explore the young adult novel from the point-of-view of a reader and a writer. They will read recently published and critically acclaimed popular young adult novels. They will use these texts to explore such issues as gender, race and identity as they relate to young adult lives and their respective cultures generally. They will use these texts as models for the production of their own texts and will consider the constraints and benefits of constructing and writing to a particular audience. They will consider if and why young adult novels are abbreviated or limited in relationship to adult literature. In addition to reading about ten novels, they will complete several creative exercises leading up to a final portfolio. Students will not receive credit for both ENGL 468 and ENGL 568.

ENGL 469 Contemporary African Amer Lit

3.000 Credits

May not be enrolled in one of the following Classes: Graduate

Prerequisites: (COMP 106 or CPAS 40 or COMP 220 or COMP 280 or COMP 270) and (ENGL 200 or ENGL 230 or ENGL 231 or ENGL 232 or ENGL 233 or ENGL 235 or ENGL 236 or ENGL 237 or ENGL 239)

An intensive study of major 20th-century African-American writers. Fiction, poetry, autobiography, and drama will be examined but one genre will be stressed in any given term, e.g., the novel. Lectures will provide historical and biographical context for analysis and discussion of the works. Students cannot receive credit for both ENGL 469 and ENGL 569. (OC).

ENGL 4705 Black Women / Lit, Film, Music

3.000 Credits

Prerequisites: FILM 240 or FILM 248 or FILM 385 or AAAS 239 or AAAS 275 or WST 275 or WGST 275 or WST 370 or WGST 370 or HUM 221 or HUM 222 or HUM 223 or ENGL 231 or ENGL 232 or ENGL 233 or ENGL 237 or ENGL 239 or ENGL 248 or ENGL 200 or ANTH 275 or HUM 275 or PSYC 275 or SOC 275 or WGST 303 or HUM 303 or ANTH 303 or PSYC 303 or SOC 303

This course will examine works produced by Black women authors, activists, filmmakers and musical performers in order to determine the methods they have incorporated in order to challenge and eradicate the prevailing stereotypes about Black women while advancing their own personal and racial agendas. It will also focus on the extent to which race, gender and class have shaped the creative work of Black women. Students will be required to read, discuss, analyze and write their own responses to the works of such firebrands as author Zora Neale Hurston, activist Ida B. Wells, filmmaker Julie Dash, and singer Billie Holliday.

ENGL 471 Sexual Subcultures in Lit

3.000 Credits

Prerequisites: (ENGL 200 or ENGL 231 or ENGL 230 or ENGL 232 or ENGL 233 or ENGL 235 or ENGL 236 or ENGL 237 or ENGL 239) and (COMP 106 or COMP 220 or COMP 270 or COMP 280 or CPAS 40)

This course surveys primarily contemporary literature by writers who identify as gay, lesbian, bi-sexual, transgender, or queer. By studying the self-representation and culturally unique perspective of this emerging canon of writers, students in this course understand the emergence of LGBTQ literary traditions and understand the cultural diversity within these traditions. Students learn to identify the aesthetic qualities (such as camp, performativity, coded subtexts, homoeroticism, and the relationship between creativity and sexuality), and historical, political, and social concerns that characterize LGBTQ literary and cultural production. Topics covered include the struggle for civil rights before and after Stonewall, coming out narratives, the negotiation of homophobic cultures, post-colonial writers, and memoirs of the LGBTQ experience, as well as the historical emergence of sexual categories and the literary critique of heteronormativity. This course counts toward the English discipline diversity requirement. Students cannot receive credit for ENGL 471 and ENGL/WGST 571.

ENGL 472 Reading in Multicult Contexts

3.000 Credits

May not be enrolled in one of the following Classes: Graduate

Prerequisites: (COMP 106 or COMP 220 or COMP 270 or COMP 280 or CPAS 40) and (ENGL 200 or ENGL 230 or ENGL 231 or ENGL 232 or ENGL 233 or ENGL 235 or ENGL 236 or ENGL 237 or ENGL 239)

An examination of the effect of different cultural backgrounds on reading and literature. Topics include contrastive rhetoric, folk narrative, and multicultural juvenile literature. This course does not satisfy requirements for the English concentration. Not open to English concentrators. Students cannot receive credit for both ENGL 472 and ENGL 572. (YR).

ENGL 473 Arab American Women Writers

3.000 Credits

Prerequisites: (COMP 106 or COMP 220 or COMP 270 or COMP 280 or CPAS 40) and ENGL 200 or ENGL 230 or ENGL 231 or ENGL 232 or ENGL 233 or ENGL 235 or ENGL 236 or ENGL 237 or ENGL 238 or ENGL 239

Examines the literary and cultural contributions of Arab and Arab American women novelists, poets and artists to the development and consolidation of the cultures of understanding and coexistence; explores the tensions between citizenship and belonging, race and the politics of fears, gender and geographical mobility, and ethnic minorities and mainstream consciousness; discerns how Arab women writers and artists retool their various artistic endeavors to channel socio-political disenchantment, critique and civil disobedience; stresses how literary and artistic productions of a heterogeneous number of Arab American women writers and artists can indeed foster alternative visions of socio-cultural coexistence, dialogue and hospitality via artistic commitments to technical and stylistic experimentation and renovation. Students cannot receive credit for both ENGL 473 and ENGL 473. For graduate credit take ENGL 573.

ENGL 474 Second Lang Acquisition: Engl

3.000 Credits

Prerequisites: LING 280 or LING 281 or LING 480

A survey of fundamental concepts and major concerns in the study of English as a Second Language (ESL). The course examines a variety of psycholinguistic and sociolinguistic issues related to second language acquisition (SLA), ranging from theoretical to pedagogical. A primary focus is on developmental patterns and cognitive processes of SLA and individual variation in ESL speakers in terms of their social motivations and learning strategies. Implications for practical concerns such as the ESL teaching profession, instructional materials and curriculum development will be addressed where relevant.

ENGL 477 African American English

3.000 Credits

Must be enrolled in one of the following Levels: Undergraduate

Prerequisites: LING 280 or LING 281 or LING 480

An examination of the structure, history and use of African-American English. Topics will include the pronunciation, grammar and vocabulary of African-American English, theories of origin, linguistic repertoire and code-switching in African-American communities, the Ebonics controversy, and the role of this variety in education and identity formation. Students cannot receive credit for both ENGL 477 and ENGL 577.

ENGL 482 History of the English Lang

3.000 Credits

Must be enrolled in one of the following Levels: Undergraduate

Prerequisites: LING 280 or LING 480

A thorough grounding in the history and structure of the English language. At issue are the linguistic and ideological origins of the concept of Standard English, and the strengths and limitations of different methods of analyzing the history of the language. The course will emphasize sound change, grammatical change, and their sociological context. (YR)

ENGL 484 World Englishes

3.000 Credits

May not be enrolled in one of the following Classes: Graduate

Prerequisites: LING 280 or LING 480

A study of the origin and significance of different forms of English throughout the world. Contact with other languages, pidginization, creolization, standardization, and the formation of the three circles of English are examined. (YR)

ENGL 485 Theories of Writing

3.000 Credits

Prerequisites: COMP 106 or COMP 220 or COMP 270 or CPAS 40 or COMP 280

In this course we will investigate why and how people write for particular audiences and in a variety of contexts. Subjects will include: cognitive and social theories of writing and the writing process, theories of persuasion, writing across the curriculum, writing for multiple audiences, writing in the workplace, writing for self and for publics, and teaching writing. The course will be useful to students interested in teaching writing at the K-12 level, those interested in careers in communication and those who wish to better understand how writing promotes personal and societal change. (YR)

ENGL 486 Queer Theory & Literature

3.000 Credits

Prerequisites: (COMP 106 or COMP 220 or COMP 270 or COMP 280 or CPAS 40) and (ENGL 200 or ENGL 230 or ENGL 231 or ENGL 232 or ENGL 233 or ENGL 235 or ENGL 236 or ENGL 237 or ENGL 239 or AAAS 239)

This course reads theories of sexuality to analyze how writers since 1600 have imagined printed text to reflect and shape desire, particularly same-sex desire. The course questions how same-sex desire appears in literature written before the theorization of "the Homosexual" in the late nineteenth century as well as how writers imagine sexuality before a hetero/homosexual binary appears. Writers may include contemporary theorists (Sedgwick, Foucault, Butler) as well as novelists (Gaskell and Stoker), playwrights (Kushner and Wycherley), and poets.

ENGL 487 Monsters, Women & the Gothic

3.000 Credits

Prerequisites: (COMP 106 or COMP 220 or COMP 270 or COMP 280 or CPAS 40) and (ENGL 200 or ENGL 230 or ENGL 231 or ENGL 232 or ENGL 233 or ENGL 235 or ENGL 236 or ENGL 237 or ENGL 239)

This course questions our inheritance of "the gothic" as a district literary style that continues to discipline readers' notions of gender and sexual identity. The course argues that by tracing the gothic's literary history, we may simultaneously witness a history of gender formation. Readings may include English novelists who originated a gothic style in English (Walpole, Radcliffe, Lewis) as well as English and American poets and novelists who have debated as well as resisted the effects of the gothic on readers' (particularly women's) psychology (Christina Rossetti, Austen, King, Stoker).

ENGL 488 Env Lit & Reps of Nature

3.000 Credits

Prerequisites: (COMP 106 or CPAS 40 or COMP 220 or COMP 280 or COMP 270) and (ENGL 230 or ENGL 200 or ENGL 231 or ENGL 232 or ENGL 233 or ENGL 235 or ENGL 236 or ENGL 237 or ENGL 239)

An interdisciplinary study of the ways in which the relationship between "nature" and humankind has been represented in literature and other forms of cultural expression. Emphasis on American and British texts of the 19th centuries, but assigned materials may include readings from other cultures and historical periods.

ENGL 490 Advanced Topics in English

3.000 Credits

Prerequisites: (COMP 106 or COMP 220 or COMP 270 or COMP 280 or CPAS 40) and (ENGL 200 or ENGL 230 or ENGL 231 or ENGL 232 or ENGL 233 or ENGL 235 or ENGL 236 or ENGL 237 or ENGL 239)

Examination of advanced problems and issues in selected areas of English studies. Title as listed in the Schedule of Classes will change according to content. May be repeated for credit when specific topics differ.

Environmental Science

The environmental science major provides students with a strong background in areas of science related to environmental concerns and with an opportunity to study environmental problems from a scientific point of view that integrates biology, chemistry, earth science, and physics. The major leads to a BS degree and prepares students for careers in waste management, environmental consultation, teaching, environmental health and resource management.

PREREQUISITES TO THE MAJOR

BIOL 130	Introduction to Organismal and Environmental Biology 4 hrs
CHEM134 OR	General Chemistry IA 4 hrs
CHEM 144	General Chemistry IB 4 hrs
CHEM 136 OR	General Chemistry IIA 4 hrs
CHEM 146	General Chemistry IIB 4 hrs
GEOG 203 GEOL 118	Weather and Climate
MATH 113or 115 MATH 114 or 116	Calculus I
PHYS 100 OR	Perspectives in Physics* 3 hrs
PHYS 125 OR	Introductory Physics I* 4 hrs
PHYS 150	General Physics I* 4 hrs

*Note: Students in the Environmental Chemistry track must elect PHYS 125 or PHYS 150.

MAJOR REQUIREMENTS 41-49 hrs		
Upper Division Co	ore	22 hrs
ESCI 304	Ecology	4 hrs
CHEM 344	Quantitative Analysis	4 hrs
ESCI 301	Environmental Science	4 hrs
ENST 301	Concepts of Environmentalism	3 hrs
ESCI 395	Seminar on Environmental Issues.	1 hr

At least	three up	pper-level	cr	edit h	ours	in	Geolo	ogy	(GEOL)
(beyond	courses	applied	to	other	port	ions	of	the	major
requirem	ents)								

At least three upper- level credit hours in Environmental Science (ESCI) (beyond courses applied to other portions of the major requirements)

Research/Interr	ıship							3 hrs
At least three	credit	hours	in	ESCI	498	and/or	ESCI	499
culminating in	a public	semin	ar p	resenta	tion (of resear	ch resu	ılts

OR	
ENST 385	Environmental Internship
AND	
ENST 485	Seminar on Environmental Topics

Note: LIBS 300 and 395 may be substituted for ENST 385 if the cooperative education work assignment is environmentally oriented.

Specialization	24	hrs
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One of the following tracks:

Environmental Biology Track

BIOL 140	Introduction to Molecular and Cellular	
	Biology4 hrs	S

Twelve credit hours in upper-level (300+) Biological Sciences courses (other than BIOL 304) including at least seven credit hours selected from:

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BIOL 360	Population Genetics and Evolution.	3 hrs
BIOL 361	Population Genetics and Evolution	
	Laboratory	1 hr
BIOL 390	Topics in Biology*	1-3 hrs
BIOL 490	Seminar in Biology*	1-3 hrs.
BIOL 497	Seminar in Biology*	1 hrs.
ESCI 315	Aquatic Ecosystems	4 hrs
ESCI 320	Field Biology	4 hrs
ESCI 337	Plant Biology	3 hrs
ESCI 414	Limnology	4 hrs
ESCI 420	Advanced Field Ecology	4 hrs
ESCI 497	Seminar*	1 hr

^{*} Note: Acceptable when topic is environmentally oriented.

Environmental Chemistry Track

BIOL 140	Introduction to Molecular and Cellular Biology4 hrs
OR	
PHYS 126	Introductory Physics II4 hrs
OR	, ,
PHYS 151	General Physics II4 hrs
CHEM 225	Organic Chemistry I
CHEM 226	Organic Chemistry II
CHEM 227	Organic Chemistry Laboratory
ESCI 348	Environmental Chemistry
ESCI 349	Environmental Chemistry Laboratory 1 hr
At least eight addi	tional credit hours selected from:
BCHM 370	Principles of Biochemistry 3 hrs
BCHM 470	Biochemistry I
BCHM 471	Biochemistry II
BCHM 472	Biochemistry Laboratory I

BCHM 473 CHEM 352	Biochemistry Laboratory II
CHEM 368 CHEM 390	Physical Chemistry I
CHEM 447	Current Topics in Chemistry* 1-3 hrs Instrumental Methods of Analysis 4 hrs
CHEM 469 CHEM 490	Physical Chemistry II
CHEM 497 CHEM 498	Seminar in Chemistry*
CHEM 499 ESCI 352	Laboratory Research in Chemistry* 1-3 hrs Introduction to Toxicology

^{*} Note: Acceptable when topic is environmentally oriented.

Earth Science Track

BIOL 140	Introduction to Molecular and Cellular Biology 4 hrs
OR	<u> </u>
PHYS 126	Introductory Physics II 4 hrs
OR	
PHYS 151	General Physics II
GEOL 377	Field Methods

At least eleven additional credit hours in upper- level (300+) Geology (GEOL) and physical geography courses. (Physical geography offerings include GEOG 310 and ESCI 330.)

Individualized Track

This track is a highly selective program for qualified students with well-conceived academic goals.

BIOL 140	Introduction to Molecular and Cellular
	Biology
OR	
PHYS 126	Introductory Physics II 4 hrs
OR	
PHYS 151	General Physics II

A minimum of 12 upper-level (300+) credit hours in natural sciences courses that address a common theme. Individualized specializations must be developed in consultation with the Environmental Science program advisor, and the proposed coursework must be approved by the Environmental Science Program Committee before the student achieves senior standing.

NOTES:

- A maximum of 72 hrs. in courses offered by the Department of Natural Sciences (ASTR, BCHM, BIOL, CHEM, ESCI, ENST, GEOL, MICR, NSCI, PHYS) may count in the 120 hrs. required for graduation.
- At least 12 of the 37 upper level hours in the major must be elected at UM-D.
- Students cannot take both CHEM 370 and CHEM 470 and/or 471 for any combination of major or minor requirements.
- A maximum of 6 hrs. of independent study/research in any Dept. of Natural Sciences discipline may count towards the 120 hours required to graduate.

MINOR OR BGS/LIBS AREA OF FOCUS

A minor or area of focus consists of 12 hours of upper-level credit in Environmental Science (ESCI) courses.

Environmental Science (ESCI) COURSE OFFERINGS

ESCI 275 Intro to Environmental Science

3.000 Credits

A distribution course which surveys major environmental problems. Concepts discussed are ecology, environmental chemistry, methods of investigating the environment, and possible solutions to environmental problems. Three hours lecture. (YR).

ESCI 301 Environmental Science

4.000 Credits

Prerequisites: (CHEM 124 or CHEM 134 or CHEM 144) and GEOL 118 and BIOL 130

A survey of historical and current environmental problems, with emphasis on understanding causes, consequences, and control. Topics include human population growth, air pollution, water pollution, and waste disposal. Laboratory emphasizes an experimental approach to environmental problems, including data collection, analysis, and interpretation. Lecture and laboratory/recitation.

ESCI 304 Ecology

4.000 Credits

Prerequisites: BIOL 130 and (MATH 113 or MATH 104 or

MATH 105 or MATH 115 or MPLS 116)

Co-requisites: ESCI 304L

Relationships between organisms and their environments. Patterns in the physical environment, physiological and behavioral adaptations, population dynamics, energy flow, nutrient cycling; succession. Three hours lecture, four hours laboratory (with field trips). (F).

ESCI 305 Intro to GIS

4.000 Credits

Prerequisites: GEOG 302 Co-requisites: ESCI 305L

The basic elements of geographic information systems, map interpretation and map design. Principles and methods of spatial data collection, analysis, and display are introduced. (W)

ESCI 315 Aquatic Ecosystems

4.000 Credits

Prerequisites: BIOL 130 and (CHEM 124 or GEOL 118)

An introduction to the physical, chemical, and biological characteristics of lakes, rivers, and wetlands emphasizing a comparison of ecosystem structure and function. Laboratory emphasizes data collection and analysis to characterize a representative lake, river, and wetland. Lecture and laboratory. (AY,F).

Field Biology **ESCI 320**

4.000 Credits

Prerequisites: BIOL 130 or BIOL 100 or NSCI 120 or **NSCI 233**

Adaptations, taxonomy, systematics, ecology, and behavior of southeastern Michigan flora and fauna. Techniques of field observation and recording are emphasized. Skills in the use of identification keys and guides are developed. The campus Environmental Study Area is used intensively. Three hours lecture, four hours laboratory (with field trips). (S).

ESCI 330 Land Use Planning and Mgmt

4.000 Credits

Prerequisites: (BIOL 130 and GEOL 118) or ESCI 275

Environmental aspects of land use planning, park planning, and site planning. Consideration of soils, groundwater, topography, and sensitive natural features and their role in determining landuse suitability. Examination of the mechanics and effectiveness of the planning process. Lecture and recitation. (AY,W).

Hazardous Waste Management

3.000 Credits

Prerequisites: GEOL 118 or ESCI 275

Environmental problems associated with solid and hazardous waste. Regulations governing the generation, transport, and disposal of hazardous waste. Waste management techniques, including reduction, reuse, recycling, treatment, incineration, and land disposal. Three hours lecture. (AY,W).

ESCI 337 Plant Ecology

3.000 Credits

Prerequisites: BIOL 130

This course focuses on different aspects of the relationship between plants and their environment. Topics include: a) interactions of plants with the physical environment; b) ways in which the environment acts to shape plant populations through evolution; c) intra- and interspecific interactions among individuals; and d) large-scale patterns and processes at the landscape-level. Three hours lecture.

ESCI 348 **Environmental Chemistry**

3.000 Credits

Prerequisites: CHEM 344 and (CHEM 225 or CHEM 325)

Description of the concepts, principles, practices, and current problems in the chemistry of natural waters, the soil, and the atmosphere. Three hours lecture. (AY,W).

ESCI 349 **Environmental Chemistry Lab**

1.000 Credits

Prerequisites: ESCI 348 * or CHEM 348 *

Collection and analysis of air, water, soil, and organisms for pollutants such as noxious gases, heavy metals, and trace organics. EPA-approved methods are emphasized. Four hours laboratory. (AY,W).

ESCI 352 Introduction to Toxicology

3.000 Credits

Prerequisites: CHEM 225

An introduction to the principles of toxicology with an emphasis on environmental toxicology. Major topics include toxic agents, toxicological mechanisms, and use of toxicological reference literature. Discussion of chemical carcinogenesis, genetic toxicology, immunotoxicology, teratology, and toxic responses of the skin, eyes and nervous system. Three h ours lecture. (AY,W).

ESCI 370 - Environmental Geology

3.000 Credits

Prerequisites: GEOL 118

Interactions between people and the physical environment. Geological hazards and natural processes, such as earthquakes, volcanism, floods, landslides, and coastal processes. Relationships between geology and environmental health, including chronic disease, water use and pollution, waste disposal, mineral resources, and energy use. Three hours lecture. (AY).

ESCI 372 Energy Resources

3.000 Credits

Prerequisites: GEOL 118 or ESCI 275 or ESCI 301

Origin and development of fossil fuels (petroleum, coal, natural gas) and of radioactive ores used in nuclear power. Renewable and alternative energy sources, including hydro, solar, wind, biomass, and geothermal power. Environmental impacts of energy use. Three hours lecture. (OC).

ESCI 375 Groundwater Hydrology

4.000 Credits

Prerequisites: GEOL 118 Co-requisites: ESCI 375L

Sources, occurrence, and movement of groundwater. Surface and subsurface investigations. Principles of hydrogeology. Groundwater pollution and management. Three hours lecture. (AY,F).

ESCI 390 Topics in Environmental Sci

1.000 TO 3.000 Credits

A course in special topics current to environmental science. Topics and format may vary. See current Schedule of Classes.

ESCI 395 Sem on Environmental Issues

1.000 Credits

Readings, discussions, and presentations which examine current environmental issues. One hour seminar. Permission of instructor. (F,W).

ESCI 414 Limnology

4.000 Credits

Prerequisites: BIOL 130 and (CHEM 136 or CHEM 146) Co-requisites: ESCI 414L

The study of the structural and functional relationships and productivity of organisms in lakes and streams as they are regulated by their physical, chemical and biotic environments. Laboratories will emphasize field study of area lakes and streams. Three hours lecture, four hours laboratory. BIOL/ESCI 304 or ESCI 275 recommended.

ESCI 416 Stream Ecology

4.000 Credits

Prerequisites: BIOL 304

A study of the physical, chemical and biological characteristics of streams and rivers. Three hours lecture, four hours laboratory. (OC).

ESCI 420 Advanced Field Ecology

4.000 Credits

Prerequisites: BIOL 304 or BIOL 320 or ESCI 320

An intense study of behavioral ecology and field-oriented research at an advanced level, utilizing ecological habitats on campus and in surrounding urban areas. Focus will be on plant/animal interactions and will include pollination ecology, reproduction and distribution ecology, optimal foraging theory, as well as hypothesis testing of animal migration and distribution of species in extreme urban environments. Three hours lecture, four hours laboratory. (OC).

ESCI 490 Topics in Environmental Sci

1.000 TO 3.000 Credits

A course in special topics of current interest in environmental science. Topics and course format may vary; see current Schedule of Classes for availability. (OC)

ESCI 497 Seminar in Environmental Sci.

1.000 Credits

Readings, discussion, and presentation of research in selected areas of study. One hour seminar. Permission of instructor. (OC).

Indep Study in Environ Sci

1.000 TO 3.000 Credits

Library research and independent study performed under the guidance of a faculty member. Four to twelve hours readings. Permission of instructor. (F,W,S).

ESCI 499 Lab Research in Environ Sci

1.000 TO 3.000 Credits

Directed laboratory or field research performed under the guidance of a faculty member. Four to twelve hours laboratory. Permission of instructor. (F,W,S).

Environmental Studies

The solutions to the current environmental problems are complex and require teamwork and understanding between specialists and generalists in many disciplines. The AB in Environmental Studies degree program focuses on the interdisciplinary nature of environmental problem solving at the local, regional and international level. Students can choose from among four (4) focus areas. Throughout their academic studies, students in this program interact with students in the Environmental Science program.

CAREER OPPORTUNITIES

Upon completion of this program, the graduates have a great variety of career opportunities available in both the public and private sector. For example, recent graduates hold such positions as teacher, national park naturalist, resource policy planner, Regional Director of International Joint Commission, Director of Environmental Programs for SEMCOG, regional land use planner, public health officer, and director of a public interest group. All students who qualify for graduate school should seriously consider working toward an advanced degree, which is required for most leadership positions.

INTERNSHIP PROGRAM

An important feature of this program is the internship requirement that allows the students to examine possible professional positions in an area of their interest through on-thejob experience. Some of the internships which environmental studies students have had are field analyst for the Michigan Department of Environmental Quality, hazardous waste analyst, marine safety inspector with the U.S. Coast Guard, public health sanitarian, researcher for a public interest group, national park naturalist, assistant to a state legislator, director of a community organic garden, summer camp nature director, and assistant analyst in a remote sensing operation.

PREREQUISITES TO THE MAJOR

BIOL 130*	Introduction to Organismal and Environmental Biology	4 hrs
CHEM 134	General Chemistry 1A	4 hrs
GEOL 118*	Physical Geology	4 hrs
CIS 112**	Computer Literacy/Info Mgmt	3 hrs

^{*} MATH 104, 105, 113 or 115 is a required prerequisite for

^{**}Other computer literacy courses may substitute for CIS 112 by petition.

Other lower- level prerequisite courses vary according to upper-
level courses students elect to take. Review the list of courses in
the Environmental Core Courses and the Focus Areas to
determine the proper prerequisites. Some of the prerequisites
may be fulfilled through the CAS&L Distribution Requirements.

The graduate in Environmental Studies requires a broad background of knowledge in the Natural Sciences, the Humanities, the Social Sciences, and the Behavioral Sciences as well as interdisciplinary courses which provide a synthesis among disciplines. Students in the program will also have an opportunity to interact with a variety of environmental professionals through seminars and an internship.

	BIOL 320	Field Biology4 hrs
	ENST 301	Concepts of Environmentalism 3 hrs
	ENST 305	Environmental Instrumentation
		and Analysis
	ESCI 301	Environmental Science
	ENST 385	Internship in Environmental Studies 1-3 hrs
	ENST 395	Seminar on Environmental Issues
	ENST 485	Seminar in Environmental Topics2 hrs
Cho	oose one course	from the following
	ENGL 488	Environmental Literature and
		Representation of Nature
	PHIL 312	Environmental Ethics
	Choose two fro	m the following
	ANTH 325	Anth of Env and Health
	ENST 201	Cultural Ecology
	ENST 300	Urban Geography
	ENST 310	Economic Geography
	ENST 325	Environmental Politics
	ENST 351	Environmental Economics
	ENST 456	Ecological Economics
	ENST 483	Justice, Crime and the Envir 3 hrs
	ENST 487	Comparative Enviro Policy 3 hrs
	ENST 491	Ecological Economics

MAJOR REQUIREMENTS

A minimum of 18 hours of courses chosen from one of the following four Focus Areas:

Required courses

ENST 330	Land Use Planning & Management 3 hrs
ENST 340	Remote Sensing
ENST445	Environmental Law
Electives	
ANTH 350	Prehistoric Archeology 3 hrs
BIOL 304	Ecology4 hrs
ENST 203	Weather and Climate
ENST 204	Landforms 3 hrs
ENST 310	Economic Geography
ENST 325	Environmental Politics
ESCI 332	Hazardous Waste Management 3 hrs
GEOL 305	Introduction to GIS and Cartography 4 hrs
GEOL 370	Environmental Geology
GEOL 377	Field Geology*

^{*}Note: can be taken up to three times.

Focus Area B: Naturalist		
		ΓS
Required cours BIOL 304		
ENST 474	Ecology	
ENST 474 ENST 486	Environmental Interpretation	
ENST 400	Environmental interpretation	15
Electives		
ANTH 325	Anth of Env and Health	
ANTH 350	Prehistoric Archeology	
ANTH 370	Indians of North America	
ANTH 430	Medical Anthropology	
BIOL 353	Ornithology	
ENST 340	Remote Sensing	rs
ENST 488	Environmental Literature and Representation	
	of Nature	
ESCI 305	Intro to GIS and Cartography 3 hr	rs
ESCI 315	Aquatic Ecosystems 4 hr	rs
ESCI 420	Advanced Field Ecology	
GEOG 203	Weather and Climate	
GEOG 204	Landforms	
GEOL 350	Geomorphology	
GEOL 377	Field Methods	
OD 254		
OB 354	Organizational Behavior	rs
OR	II D D. 1: 0 A 1 21	
HRM305	Human Resource Policy & Admin 3 hr	rs
Focus Area C: 1	Resource Policy and Management	
		rs
Prerequisite cour		
ECON 202	Microeconomics	rs
Required cours	es	
ENST 325	Environmental Politics	rs
ENST445	Environmental Law	
ENST 351	Environmental Economics	rs
OR	E 1 : 1E : 21	
ENST456	Ecological Economics	rs
ECCL 204	Faalaan Ale	
ESCI 304	Ecology	rs
Electives		
ECON 372	Economic Demography 3 hr	rs
ENST 310	Economic Geography 3 hi	rs
ENST 456	Ecological Economics	rs
ENST 483	Justice, Crime and the Envir 3 h	rs
ESCI 332	Hazardous Waste Management 3 ha	rs
ESCI 372	Energy Resources	
MATH 363	Introduction to Statistics 3 hr	
POL 300	Political Analysis	
POL 312	Legislative Process	
POL 487	Compar. Envir. Policy	rs
Focus Area D: Urban Service		
Prerequisite cour		
ECON 201	Macroeconoimcs	rs
ECON 202	Microeconomics	
POL 101	Inro to Amer. Government 3 hi	rs
SOC 200	Understanding Society	
Dogginsd source		
Required cours		rc
EXPS 410 GEOG 300	Multiculturalism 3 h	
POL 323	Urban Geography	
SOC 435	Urban Politics	
ECON 481	Urban Sociology	
ECON 401	O roan Economics	15

Electives	
ANTH 340	Race and Evolution
ANTH 455	Immigrant Cult. And Gender 3 hrs
ECON 351	Environmental Economics
OR	
ENST456	Ecological Economics
ENST445	Environmental Law
ESCI 304	Ecology
ESCI 332	77 1 777 1 77
LOCI 332	Hazardous Waste Management
GEOL 305	Hazardous Waste Management
GEOL 305	Inro to GIS
GEOL 305 POL 300	Inro to GIS4 hrs

Notes:

- Some upper level courses in Focus Areas A, B, C, and D may require additional prerequisites.
- Courses used to satisfy ENST core area can also be used to satisfy focus area requirements.
- 3. A maximum of 6 hrs. of independent study/research in any Dept. of Natural Sciences discipline may count towards the 120 hours required to graduate.

MINOR OR BGS/LIBS AREA of FOCUS

A minor or area of focus consists of 15 hours of upper-level credit in Environmental Studies (ENST).

Environmental Studies (ENST) COURSE OFFERINGS

ENST 201 Cultural Geography

3.000 Credits

Overview of the major components of culture such as language, religion, agriculture, settlement patterns, and related landscape features in a spatial context. Emphasis on how various cultures perceive and interact with the environment. (F).

ENST 203 Weather and Climate

3.000 Credits

The controls and conditions of Earth's weather and climate including atmospheric circulation, precipitation processes, severe weather, climatic regions, and climatic change. (F).

ENST 204 Landforms

3.000 Credits

Processes and agents that shape the landscapes and landforms of the Earth's surface. The discussion of landforms is divided into two parts: (1) constructive processes and their spatial distribution and (2) gradational processes and their spatial distribution. (W).

ENST 300 Urban Geography

3.000 Credits

The geography of human settlement and urbanization. Particular emphasisis placed on human transformation of the physical environment, and resource use throughout history from ancient civilizations to modern megalopolises. Universal urban challenges such as sprawl, pollution, congestion, crime, poverty, etc., are addressed. (W).

ENST 301 Concepts of Environmentalism

3.000 Credits

Designed to identify the underlying concepts of any environmental issue. The course will demonstrate the interdisciplinary nature of environmental problems solving through current readings, classical monographs and films. Students will conduct a system analysis of a household and a local community. This course will not be open to students who take ENST 105. (W).

ENST 305 Env Instrumentation and Analys

3.000 Credits

Prerequisites: ENST 301

This course will survey the parameters which must be measured in order to properly assess the environment. Methods for the analysis of the biophysical as well as the social, psychological, and political environment will be studied. (W).

ENST 310 Economic Geography

3.000 Credits

Spatial aspects of the ways people make their living. Discussion of the spatial distribution of resources and wealth at various scales. Introduction of site selection and location analysis. (W).

ENST 312 Environmental Ethics

3.000 Credits

Prerequisites: PHIL 100 or PHIL 233 or PHIL 240 * or ENST 105 or ENST 301

The relationship of human beings to the non-human environment raises pressing moral and political issues. This course will use the theories and concepts of philosophical ethics to explore such questions as human obligations to non-human animals; the preservation of wilderness; balancing economic, aesthetic, and spiritual values; and the problems of pollution, urban sprawl, and ecological justice. (F, YR).

ENST 320 Global Climate Change

3.000 Credits

This course explores concepts and current thinking on global climate change and environmental impacts. It covers the history of Earth's climate, causes of climate change and current research attempting to forecast change. The biotic, economic, and social implications of climate change are discussed. (AY)

ENST 325 Environmental Politics

3.000 Credits

Prerequisites: POL 101

This course will examine the process of policy making on environmental and energy problems at the global level, at the national level, and at the local level. (AY).

ENST 326 Anth of Health and Environment

3.000 Credits

Cultural conflicts over pollution, disease etiology, development and natural resources often originate and are played out in local ecosystems. Anthropologists are increasingly becoming involved as researchers, developers, and activists in these cultural strifes. This course reviews the work of environmental and medical anthropologists as well as other critical scholars who unravel the values, meanings and ideologies associated with ecological issues in given localities. Drawing on theoretical advances in critical medical anthropology, environmental anthropology and applied anthropology, the course seeks to improve the knowledge and abilities of student anthropologists in their environmental health work.

ENST 330 Land Use Planning and Mgmt

4.000 Credits

Prerequisites: ESCI 275 or (BIOL 130 and GEOL 118)

Environmental aspects of land use planning, park planning, and site planning. Consideration of soils, groundwater, topography, and sensitive natural features and their role in determining landuse suitability. Examination of the mechanics and effectiveness of the planning process. Lecture and recitation. (AY).

ENST 340 Remote Sensing

3.000 Credits

Must be enrolled in one of the following classes:

Junior Senior Graduate

Prerequisites: GEOG 302

This course explores the use of image interpretation and processing techniques on remote sensor data, with a particular emphasis on environmental and urban applications. The course will cover concepts and foundations of remote sensing, aerial photography and photogrammetry, visual interpretation, characteristics of various sensing systems (e.g., multispectral, thermal, hyperspectral, microwave, lidar), and an introduction to digital image processing techniques.

ENST 351 Environmental Economics

3.000 Credits

Prerequisites: ECON 202

This course examines the economic aspects of pollution problems. Topics covered include the economic theory of externalities, the theory of the commons, the theory of public goods, and the optimum use of depletable natural resources. The role of cost-benefit analysis as an intricate part of the decision-making process will also be thoroughly examined. (AY).

ENST 365 Environmental Psychology

3.000 Credits

Prerequisites: PSYC 170 or PSYC 171

A survey of the contributions of the behavioral sciences to the understanding and solution of environmental problems that threaten our survival. Insights derived from psychology, anthropology, and computer sciences are discussed. Major topics include overpopulation, overconsumption, "future shock," cognitive limitations in our understanding of ecological-political systems, and the use of Skinnerian behavior control. (AY).

ENST 385 Environmental Internship

1.000 TO 9.000 Credits

Must be enrolled in one of the following classes:

Junior Senior Graduate

A field assignment relating to the student's environmental interests. The student will work in an off-campus government or private business for a prescribed number of hours each week to be arranged by the advisor and employer. May be repeated up to three times. Written permission of instructor.

ENST 390 Topics in Environmental Stds

1.000 TO 9.000 Credits

Examination of problems and issues in selected areas of environmental studies. Title listed in the Schedule of Classes will change according to the content. Course may be repeated for credit when specific topics differ.

ENST 395 Sem on Environmental Issues

1.000 Credits

Readings, discussions, and presentations which examine current environmental issues. One hour seminar. Written permission of instructor. (YR).

ENST 436 Human Ecology

3.000 Credits

Deals with the forms and modes of change of social structure and culture, as affected by interactions with environment, population, and technology. Emphasis is given to territorially based social structures.

ENST 445 Environmental Law

3.000 Credits

Must be enrolled in one of the following Levels:

Undergraduate

May not be enrolled in one of the following Classes:

Sophomore

Freshman

A survey of common law theories and analysis of environmental statutes from a functional perspective. The course also includes environmental law aspects of constitutional law, administrative law and criminal law, as well as the public trust doctrine and public lands. Student cannot receive credit for both ENST 350 and ENST/POL 445.

ENST 456 Ecological Economics

3.000 Credits

Must be enrolled in one of the following Levels:

Undergraduate

Must be enrolled in one of the following classes:

Senior

Junior

Prerequisites: (ECON 201 * or ECON 202 *) and ENST 301 *

A review of major theories and issues concerning the relationship between ecological and economic systems. Topics include these questions: What is the purpose of economics activity? How important is the preservation of the natural world compared to the production of economic goods? How do principles of social and intergenerational equity affect the use of resources and choice of goods to be produced? The course utilizes a transdisciplinary approach in the development of new models where conventional economics and ecology alone have been ineffective in addressing questions of sustainability and equity. (AY).

ENST 474 Environmental Education

2.000 TO 3.000 Credits

An analysis of environmental education at elementary and secondary levels, particularly stressing the environment as a teaching resource. Community resources as they relate to environmental education are also investigated. (AY).

ENST 483 Justice, Crime and Environment

3.000 Credits

Must be enrolled in one of the following classes:

Senior

Junior

This service-learning course focuses on environmental justice and law. Environmental Justice is defined as the fair treatment of all people with respect to the development, implementation, and enforcement of environmental laws. In the classroom, students learn the theory, history, and enforcement of

environmental laws and regulations in Detroit, Michigan, and nationwide. In a required civic engagement project, students apply their substantive knowledge to solve local environmental problems. Through classroom learning and projects with community organizations, students connect law and justice concerns to Detroit's environmental problems.

ENST 485 Seminar in Environ Topics

2.000 Credits

A seminar course taken during the student's senior year to provide an opportunity for students with diverse environmental interests to interact and synthesize the information and skills acquired during their previous studies. (W).

ENST 486 Environmental Interpretation

2.000 TO 3.000 Credits

Course deals with the interpretation of the environment, its characteristics, and its presentation to school groups as well as to the general public. Intended to acquaint students with a variety of skills and techniques necessary for interpreting the environment to others. Extensive use is made of the UM-Dearborn Environmental Study Area. (AY).

ENST 487 Comparative Enviro Policy

3.000 Credits

Must be enrolled in one of the following classes:

Senior

Junior

This course explores environmental policy as a result of political processes involving diverse participants and entailing movement through several stages from defining an issue as an environmental problem to placing it on political agenda and then receiving a response at domestic governmental or international levels. This course analyzes environmental issues from a crosscultural and comparative perspective, with a particular attention given to political institutions, political change, levels of development, political culture, public participation, and international commitments that shape the nature and dynamics of environmental politics and policy in different countries.

ENST 488 Env Lit & Reps of Nature

3.000 Credits

Prerequisites: (COMP 106 or CPAS 40 or COMP 220 or COMP 270) and (ENGL 230 or ENGL 200 or ENGL 231 or ENGL 232 or ENGL 233 or ENGL 235 or ENGL 236 or ENGL 237 or ENGL 239)

An interdisciplinary study of the ways in which the relationship between "nature" and humankind has been represented in literature and other forms of cultural expression. Emphasis on American and British texts of the 19th centuries, but assigned materials may include readings from other cultures and historical periods.

ENST 490 Dir Research in Envir Studies

1.000 TO 6.000 Credits

This course will provide students with an opportunity to conduct an independent research investigation on topics in environmental studies under the direction of various faculty members. The results will be presented in a paper and public seminar. May be repeated.

ENST 491 Topics in Environmental St

3.000 Credits

The examination of problems and issues in selected areas of environmental studies. The title listed in the Schedule of Classes will change according to the content. The course may be repeated for credit when the specific topic differs. Also offered for graduate credit. (OC).

ENST 497 Seminar in Environmental Sci

1.000 Credits

Readings, discussions and presentation of research in selected areas of study. One hour seminar.

ENST 498 Independent Study

1.000 TO 3.000 Credits

Readings or analytical assignments in accordance with the needs and interests of those enrolled and agreed upon by the student and instructor, which shall not duplicate a formal course offering. Permission of instructor.

ENST 499 Independent Study

1.000 TO 3.000 Credits

Readings or analytical assignments in accordance with the needs and interests of those enrolled and agreed upon by the student and instructor, which shall not duplicate a formal course offering. Permission of instructor.

Film Studies

Designed as an interdisciplinary program, the minor provides an intellectually challenging and cross-culturally oriented approach to the study of cinema.

MINOR OR BGS/LIBS AREA OF FOCUS ONLY

In order to minor in Film Studies, a student must fulfill the following requirements:

Prerequisite

JASS 248: Introduction to Screen Studies

Required courses

15 credits in upper-level courses from the list below.

JASS 332: Creating the Graphic Novel

JASS 336: Film and Music

JASS 357: National Cinemas

JASS 370: Narratives of Film and Lit

JASS 385: Black Cinema

JASS 387: Film and Feminisms

JASS 398: Independent Study

JASS 403: Issues in Cyberspace

JASS 406: History & Theory of Documentary

JASS 413: Photojournalism

JASS 457: American Cinema

JASS 467: Script-Writing Workshop

JASS 477: Ethnographic Film

Film Studies (FILM) COURSE OFFERINGS

Please see Journalism and Screen Studies (JASS) for descriptions of the film studies courses listed above.

French/French Studies

(See also International Studies Major)

UM-Dearborn offers undergraduates two degree programs involving French: International Studies and French Studies. Both are designed to enable majors to take practical advantage of the study of one of the world's leading languages and cultures. As they complete their degree requirements, International and French Studies majors acquire knowledge and skills that prepare them for careers in numerous fields, both in the United States and abroad.

Students who do not major in International Studies or French Studies may wish to choose French as a minor or an area of focus.

FRENCH STUDIES MAJOR

The major in French Studies offers students a thorough training in the language and culture of the more than 200 million people who live in France and other Francophone areas in the world. In so doing, it familiarizes them with a vital and influential tradition in literature and the arts which spans twelve centuries and a language of importance in the realms of business, politics, science and technology.

French Studies recognizes the need to provide today's students with a much broader education in French than that afforded by traditional degrees devoted primarily to literature. Consequently, it requires majors to complete coursework in four general areas: language (including the specialized language of business) culture/civilization, film, as well as literature. For the same reason, French Studies takes as its purview the French-speaking world as a whole. Although it places emphasis on France, the concentration also provides an introduction to the other French-speaking countries of Europe, Asia, Africa, and North and South America which are playing roles of increasing prominence in global affairs.

As designed, the French Studies Program offers graduates a wide variety of educational and employment possibilities. It prepares them for careers in government service, in print and electronic journalism, and in language-related professions such as translating and interpreting. It also enables them to enter the teaching profession and to pursue advanced study in French at the master's and doctoral level. With supplementary training in areas such as political science, law, and management, graduates of the program could embark on careers in international affairs, law, and business.

PREREQUISITES TO THE MAJOR

Students majoring in French Studies must successfully complete FREN 202 or demonstrate equivalent French language proficiency.

MAJOR REQUIREMENTS

A minimum of 24 credit hours in upper-level French classes must be completed as outlined below.

Required courses.	6 hrs
FREN 301	Advanced Conversation and Composition I
FREN 302	Advanced Conversation and Composition II

One specialized language course		
FREN 305	Language of Business	
FREN 306	Cultural Introduction to French Business	
FREN 308	Advanced Writing	
FREN 408	Writing and Translating	
One civilization/cu	lture course	
FREN 336	French Civilization of Past	
FREN 337	France in the 20th Century	
FREN 338	France of Today	
FREN 339	Francophone Literature and Culture	
FREN 375	Parisian Itineraries	
FREN 388	Socio-Cultural Issues of Contemporary	
	France	
One film course		
FREN 332	French Cinema	
One literature course		
FREN 330	French Literature: Middle Ages-18th	
	Century	
FREN 331	French Literature: 19th - 20th Century	
FREN 334	Workshop in French Theater	
FREN 339	Francophone Literature and Culture	
FREN 375	Parisian Itineraries	

Two additional upper-level French courses 6 hrs

Majors are encouraged to strengthen their knowledge of French language and culture by participating in any of the approved study-abroad programs.

NOTES:

- FREN 339 and 375 can be used as a literature or civilization/culture requirement, but not both.
- A maximum of 54 hours in FREN may count in the 120 hours required for graduation.
- 3. At least 15 of the 24 upper level hours in French must be elected at UM-D.
- 4. A maximum of 3 credits of HUM 485 internship can be used in the cognate area.

MINOR OR BGS/LIBS AREA OF FOCUS

A minor or area of focus consists of 12 hours of upper-level credit in French.

French (FREN) COURSE OFFERINGS

FREN 101 Beginning French I .000 OR 4.000 Credits

First course in a two-course elementary French sequence. Listening comprehension, speaking, reading, writing, and culture are emphasized. Course materials promote the use of language to communicate with others and to function in the French-speaking world. (F).

FREN 102 Beginning French II

.000 OR 4.000 Credits

Prerequisites: FREN 101 or FPL 102 or FPL 201 or FPL 202 or FPL 301 or FPL 302

Second course in the two-course elementary sequence. Continued emphasis on culture and the four skills of listening, speaking, reading, and writing. (W).

FREN 201 Intermediate French I

.000 OR 4.000 Credits

Prerequisites: FPL 201 or FPL 202 or FPL 301 or FPL 302 or FREN 102

An intermediate language course designed to increase the student's ability to read, speak, and write French. The course will utilize a wide range of reading selections representative of modern French prose as the basis for class discussions and written assignments. A systematic review of grammar and oral exercises should enable the student to make definite progress in conversation and composition. (F).

FREN 202 Intermediate French II

.000 OR 4.000 Credits

Prerequisites: FREN 201 or FPL 202 or FPL 301 or FPL 302

Continuation of FREN 201. Further readings in modern French prose, extensive practice in conversation and composition. (W).

FREN 234 French Conversation

1.000 TO 2.000 Credits Prerequisites: FREN 102

Development of conversational skills through discussion of contemporary readings and the use of communicative activities and games. Emphasis will be placed on vocabulary acquisition by students, on improving their pronunciation, and on increasing their overall fluency in French. (S).

FREN 235 Fren Conversation and Culture

2.000 Credits

Prerequisites: FREN 102

Intensive practice in developing conversational skills through a coordinated program of classroom and field activities in France. Students will read and discuss current materials of various sorts and will perform skits and other oral exercises designed to increase their fluency in French. A series of planned, extracurricular activities (visits to museums and historical monuments, viewing of plays, interviews of average French men) will enable students to profit from direct contact with the French and their culture.

FREN 290 Topics in French

1.000 TO 3.000 Credits

Examination of problems and issues in selected areas of French. Title as listed in Schedule of Classes will change according to content. Course may be repeated for credit when specific topics differ. (OC).

FREN 301 Advanced Conversation and Comp

3.000 Credits

Prerequisites: FREN 202 or FPL 301 or FPL 302

An advanced course in conversation, composition, and syntax. Numerous oral reports and weekly written assignments based on readings from current sources; discussion of a recent French motion picture; translation exercises and the study of specific topics in French grammar. (F).

FREN 302 Advanced Conversation and Comp

3.000 Credits

Prerequisites: FREN 301 or FPL 302 or FPL 302.

Continuation of FREN 301. (W).

FREN 305 Language of Business

3.000 Credits

Prerequisites: FREN 301

A systematic presentation of the vocabulary and conventions of business French. Students will receive extensive training in composing business letters, reports, vitas, and similar texts. They will be exposed to French practices in correspondence, accounting and record keeping. They will also be required to translate various business documents from English to French (and vice versa) and to familiarize themselves with the specialized vocabulary of computers. (OC).

FREN 306 Cult Intro to French Business

3.000 Credits

Prerequisites: FREN 301

An introduction to the practices and organization of the French business world. Students will learn how a typical French firm is structured and how business is normally conducted in France. Special attention will be given to those differences in organization and operation which contrast French businesses with our own. The class will also examine the impact of history and general cultural attitudes on French business practices of today. (OC).

FREN 308 Advanced Writing

3.000 Credits

Prerequisites: FREN 301

Intensive practice in writing expository prose in French. Students will complete a wide variety of writing assignments (resumes, critical analyses, explications de texte, and the like) over the course of the semester. Class sessions will be devoted to the discussion of student papers and technical issues related to effective writing. Students should expect to prepare several drafts of each assignment under the close supervision of the instructor. (OC).

FREN 330 Frnch Lit: Md Ages-18 Century

3.000 Credits

Prerequisites: FREN 301

A survey of French literature through the Enlightenment based on the study of individual masterpieces of principal French authors: Villon, Rabelais, Montaigne, Pascal, Moliere, Racine, Montesquieu, Voltaire, and Rousseau. (OC).

FREN 331 French Lit: 19th-20th Century

3.000 Credits

Prerequisites: FREN 301

The sequel to FREN 330. A survey of French literature from Romanticism to the Theater of the Absurd and the nouveau roman. Writers studied will include Balzac, Stendhal, Baudelaire, Flaubert, Proust, Gide, Camus, Sartre, Beckett, and Sarraute. (OC).

FREN 332 French Cinema

3.000 Credits

Prerequisites: FREN 301

A survey of French films from the experiments of the turn of the century to the trends of the present day. Representative silent films, "classic" and "new-wave" movies of the 1930's and 50's, as well as contemporary productions will be presented in their cultural context and the contributions of major French directors to filmmaking will be highlighted. Attention will also be given to the basic elements of film as a means of expression: camera angle, distance, movement, and editing. (OC).

FREN 334 Workshop in French Theater

3.000 Credits

Prerequisites: FREN 301

This course will provide a brief survey of representative masterpieces of the French theater. Students will be required to read and analyze a number of celebrated plays and then to perform selected scenes from them. (OC).

FREN 336 French Civilization of Past

3.000 Credits

Prerequisites: FREN 301

An introduction to the civilization of France (from the Middle Ages to the 20th Century). This course will examine the social and historical developments and the accomplishments in the arts and literature that have combined to shape the French nation. (OC).

FREN 337 - France in the 20th Century

3.000 Credits

Prerequisites: FREN 301

An introduction to France of the Third, Fourth, and Fifth Republics. This course will examine the major political, social, and economic issues of France of the 20th Century as well as its contributions to literature and the arts. (OC).

FREN 338 France of Today

3.000 Credits

Prerequisites: FREN 301

An exploration of various facets of contemporary French civilization. Although students will consider historical and political developments since World War II, special attention will be given to the values and attitudes of the French, to the contrasting modes of life in Paris and the provinces, and to important forms of popular culture. (OC).

FREN 339 Francophone Lit and Civil

3.000 Credits

Prerequisites: FREN 301

An introduction to twentieth-century award-winning texts from the Caribbean, Canada, North Africa and West Africa. Students will analyze the strategies through which these powerful, dramatic, post-colonial writers address such issues and themes of universal relevance as love and the search for identity, while also expressing the experience and culture realities of his or her own country. Representative authors include Birago Diop, Simone Schwartz-Bart, Arlette Coustre, Anne Hebert, Roch Carrier, Michel Tremblay, and Tehar Ben Jelloun. (OC).

FREN 375 Parisian Itineraries

3.000 Credits

Must be enrolled in one of the following classes:

Senior Sophomore Freshman Junior

Parisian Itineraries follows cultural developments in Paris, and literary responses to the specific nature of urban development in France in the 19th and 20th century in France. Students consider urban planning and expansion in Paris through cultural, historical, social and literary approaches, and analyze the connections between cultural voices and urban progress. The object of this course is thus the lived experience of Parisian urbanization through the various artistic representations.

FREN 385 French Across the Curriculum

1.000 Credits

Prerequisites: FREN 202

Course is attached to an upper-level course in another discipline and taken concurrently with it. Course materials in French are related to the subject matter of the second course and are discussed with a French-are a faculty member. Materials are also integrated into the assignments of the second course. (F,W).

FREN 388 Socio-Cltrl Iss Contemp France

3.000 Credits

Prerequisites: FREN 301

The course concentrates on a series of socio-cultural issues that are debated in France today, as well as on a number contemporary cultural and artistic phenomena. Particular attention is given to discourses on otherness and on the ways in which French cultural production and media constructions have reflected, reinforced, reshaped and, in some instances, contested the country's past and current dominant ideologies, and identities.

FREN 399 Independent Studies

1.000 TO 3.000 Credits

Readings or analytical assignments in the humanities in accordance with the needs and interests of those enrolled and agreed upon by the student and advising instructor. May be repeated for a maximum of 6 credit hours. (F.W).

FREN 408 Writing and Translating

3.000 Credits

Prerequisites: FREN 301 and FREN 302

A course designed to increase the written fluency of students who have already assimilated the advanced grammatical concepts introduced in the 301-302 sequence. Students will prepare weekly written assignments and will translate and analyze passages written in various styles. (OC).

FREN 490 Topics in French

1.000 TO 3.000 Credits Prerequisites: FREN 301

Examination of problems and issues in selected areas of French. Title as listed in the Schedule of Classes will change according to content. Course may be repeated for credit when specific topics differ. (OC).

General Studies

(see Bachelor of General Studies: Two plus Two requirements)

Geography

MINOR OR BGS/LIBS AREA OF FOCUS ONLY

In order to minor or complete the area of focus in geography, a student must fulfill the following requirements:

Prerequisite

One course from *physical geography*: GEOG 203, 204; or GEOL 118 **AND** one course from *human geography*: GEOG 201, 205, or 206.

Required courses

12 credit hours in upper level courses including GEOG 302 <u>and</u> 9 credit hours from any of the following: *Physical Geography courses:* GEOG 320; GEOL 350, 377; ESCI 301, 375; *Human Geography courses:* ECON 483; GEOG 300, 310; HIST 3695; POL 323; *Regional Geography courses:* GEOG 307, 390D; *Geospatial Techniques courses:* GEOG 305; GEOL 340, 440; *Other courses:* GEOG 390, 399

Geography (GEOG) COURSE OFFERINGS

GEOG 201 Cultural Geography

3.000 Credits

Overview of the major components of culture such as language, religion, agriculture, settlement patterns, and related landscape features in a spatial context. Emphasis on how various cultures perceive and interact with the environment. (F).

GEOG 203 Weather and Climate

3.000 Credits

The controls and conditions of Earth's weather and climate including atmospheric circulation, precipitation processes, severe weather, climatic regions, and climatic change. (F).

GEOG 204 Landforms

3.000 Credits

Processes and agents that shape the landscapes and landforms of the Earth's surface. The discussion of landforms is divided into two parts: (1) constructive processes and their spatial distribution and (2) gradational processes and their spatial distribution. (W).

GEOG 205 Geography of the United States

3.000 Credits

A regional analysis of the United States that stresses the difference in the physical elements of landscapes that explain differences in economic development, cultural attainment, and land use and which, in turn, motivate regional interdependencies and interrelationships. (W).

GEOG 206 World Regional Geography

3.000 Credits

World Regional Geography includes a systematic study of the world's geographic realms and regions, including Europe, Russia, Australia-New Zealand, East Asia, South Asia, Southwest Asia, N Africa, Subsaharan Africa, Middle and South America. Geographic concepts, such as map reading and spatial analysis,

are first introduced. Then, the world is classified into geographic realms and regions using both physical and social criteria. Each region results from a unique interaction between the human societies and the physical environment. The physical, cultural, political, economic and social features of each region are studied, along with any special regional concerns or problems.

GEOG 300 Urban Geography

3.000 Credits

The geography of human settlement and urbanization. Particular emphasis is placed on human transformation of the physical environment, and resource use throughout history from ancient civilizations to modern megalopolises. Universal urban challenges such as sprawl, pollution, congestion, crime, poverty, etc., are addressed.

GEOG 302 Mapping Our World

3.000 Credits

Mapping our World provides an introduction to geospatial techniques and the important roles spatial data play in today's world. This course introduces the students to basic concepts of geographic information systems, remote sensing and cartography. A focus of the course is on map analysis and map design.

GEOG 305 Intro to GIS

4.000 Credits

Prerequisites: GEOG 302 Co-requisites: GEOG 305L

The basic elements of geographic information systems, map interpretation and map design. Principles and methods of spatial data collection, analysis, and display are introduced. (W)

GEOG 307 Geography of Western Europe

3.000 Credits

An analysis of the strengths, weaknesses, interrelationships, and interdependence of selected countries of this economically advanced region. (OC).

GEOG 310 Economic Geography

3.000 Credits

Spatial aspects of the ways people make their living. Discussion of the spatial distribution of resources and wealth at various scales. Introduction of site selection and location analysis.

GEOG 315 Political Geography

3.000 Credits

The spatial dimensions of political activity from the local to the global scale. Themes include: control of territory, relations among political entities, and political ideology.

GEOG 320 Global Climate Change

3.000 Credits

Must be enrolled in one of the following classes:

Senior Sophomore Freshman

Junior

This course explores concepts and current thinking on global climate change and environmental impacts. It covers the history of Earth's climate, causes of climate change and current research attempting to forecast change. The biotic, economic, and social implications of climate change are discussed. (AY)

GEOG 390 Topics in Geography

1.000 TO 3.000 Credits

Selected topics to be announced. (OC).

GEOG 399 Independent Study

1.000 TO 3.000 Credits

Readings or analytical assignments in accordance with the needs and interests of those enrolled and agreed upon by the student and the advising instructor.

Geology

(minor only, see Earth Science for major)

MINOR OR BGS/LIBS AREA OF FOCUS ONLY

A minor or area of focus consists of 12 hours of upper-level credit in geology.

Geology (GEOL) COURSE OFFERINGS

GEOL 110 Urban Geology

3.000 Credits

The study of how the geosciences can be used to solve community-based environmental problems. Taught within the context of the Rouge River watershed, one of the most urbanized watersheds in the country, the focus of this 3-week course is water and watersheds. Classroom lectures are combined with extensive field work, field trips and guest speakers. Taught as a summer II mini course in July. Open only to high school juniors and seniors participating in the Geosciences Research Institute.

GEOL 118 Physical Geology

4.000 Credits

Co-requisites: GEOL 118L

An introduction to the study of geologic processes at work in the earth's interior and on its surface. Rocks and minerals, the origin and evolution of the continents, and the gradual and catastrophic processes that shape surface and bedrock features. Three hours lecture, three hours laboratory. (W).

GEOL 218 Historical Geology

4.000 Credits

Co-requisites: GEOL 218L

A generalized study of the history of the earth, with emphasis on the fossil record of life development, the stratigraphic sequence of deposits and paleogeography. Laboratory work will include the study of geologic and topographic maps and fossils of prominent invertebrate phyla. (YR).

GEOL 305 Intro to GIS

4.000 Credits

Prerequisites: GEOG 302 Co-requisites: GEOL 305L The basic elements of geographic information systems, map interpretation and map design. Principles and methods of spatial data collection, analysis, and display are introduced. (W)

GEOL 332 Hazardous Waste Management

3.000 Credits

Prerequisites: GEOL 118 or ESCI 275

Environmental problems associated with solid and hazardous waste. Regulations governing the generation, transport, and disposal of hazardous waste. Waste management techniques, including reduction, reuse, recycling, treatment, incineration, and land disposal. Three hours lecture.

GEOL 340 Remote Sensing

3.000 Credits

Prerequisites: GEOG 302

This course explores the use of image interpretation and processing techniques on remote sensor data, with a particular emphasis on environmental and urban applications. The course will cover concepts and foundations of remote sensing, aerial photography and photogrammetry, visual interpretation, characteristics of various sensing systems (e.g., multispectral, thermal, hyperspectral, microwave, lidar), and an introduction to digital image processing techniques.

GEOL 342 Physical Oceanography

3.000 Credits

An introduction to physical and chemical oceanography, fundamental marine processes and plate tectonics. Interactions between the oceans and atmosphere and the effect of greenhouse gases on the oceans and the role of physical processes in global climate change will be studied.

GEOL 350 Geomorphology

4.000 Credits

Must be enrolled in one of the following Levels:

Undergraduate

Must be enrolled in one of the following classes:

Senior Junior

Prerequisites: GEOL 118 or (GEOG 203 and GEOG 204)

This introductory course is designed to familiarize students with the fundamentals of river behavior and the general principles in fluvial morphology, sedimentation, and hydraulics and stream bank erosion. Applications of these principles are shown utilizing a stream classification system. Problem solving techniques for watershed management, stream restoration, non-point source pollution and integration of ecosystem concepts in watershed management are presented. A combination of both lecture and field applications are provided. (F, AY)

GEOL 370 Environmental Geology

3.000 Credits

Prerequisites: GEOL 118

Interactions between people and the physical environment. Geological hazards and natural processes, such as earthquakes, volcanism, floods, landslides, and coastal processes. Relationships between geology and environmental health, including chronic disease, water use and pollution, waste disposal, mineral resources, and energy use. Three hours lecture. (AY).

GEOL 372 Energy Resources

3.000 Credits

Prerequisites: GEOL 118 or ESCI 275 or ESCI 301

Origin and development of fossil fuels (petroleum, coal, natural gas) and of radioactive ores used in nuclear power. Renewable and alternative energy sources, including hydro, solar, wind, biomass, and geothermal power. Environmental impacts of energy use. Three hours lecture. (AY).

GEOL 375 Groundwater Hydrology

4.000 Credits

Prerequisites: GEOL 118 Co-requisites: GEOL 375L

Sources, occurrence, and movement of groundwater. Surface and subsurface investigations. Principles of hydrogeology. Groundwater pollution and management. Three hours lecture. (AY).

GEOL 377 Field Methods

1.000 Credits

Prerequisites: GEOL 118

A week-long intensive field course dealing with geological field methods and analysis of geological terrains. Use of Brunton compass and clinometer, recognition and identification of geological structures, preparation and interpretation of geological maps, and use of aerial photographs. May be repeated for credit when destination varies. Organizational meeting followed by one-week trip. (YR).

GEOL 390 Current Topics in Geology

1.000 TO 3.000 Credits Prerequisites: GEOL 118

A course in special topics current to the field of geology. Topics and format for the course may vary. See current Schedule of Classes. (OC).

GEOL 440 Advanced GIS Applications

3.000 Credits

Prerequisites: GEOL 305

This course offers an opportunity for students with a background in the fundamentals of geographic information systems (GIS) to apply the analytical capabilities of geospatial technology to model real-world situations in support of decision making. Particular emphasis is given to data development and management, spatial and statistical analyses, customization, and effective visualization.

GEOL 475 Contaminant Hydrogeology

3.000 Credits

Must be enrolled in one of the following classes:

Senior Junior

Prerequisites: GEOL 375

Advanced lecture treatment of selected topics in subsurface hydrology including contaminant transport and fate of organic and inorganic constituents, aquifer test analysis, and the use of modeling in the analysis of selected case histories. (AY).

GEOL 490 Advanced Topics in Geology

3.000 Credits

Current topics from various areas in pure and applied geosciences will be reported upon by students, faculty and guest speakers. May include extended field trips. (OC).

GEOL 498 Independent Study in Geology

1.000 TO 3.000 Credits

Library research and independent study performed under the guidance of a faculty member. Permission of instructor. (F,W,S).

GEOL 499 Laboratory and Field Research

1.000 TO 3.000 Credits

Directed laboratory or field research performed under the guidance of a faculty member. Four to twelve hours laboratory or field study. Permission of instructor. (F,W,S).

Geospatial Analysis and Mapping (GAM) Certificate

The Certificate in GAM provides students with the experience and knowledge in the theory and application of GAM and remote sensing. Students learn the basic components of GAM and spatial data, understand problems that arise in the data acquisition and analysis, and develop a sound background in cartographic principles. Many students could increase their marketability with a certificate in GAM. This includes (but is not limited to) careers in public health, criminal justice, sociology, economics, social and natural science education, computer engineering, Earth and environmental science or studies. urban and regional studies. anthropology/archeology.

- 1. GEOG302 Mapping Our World
- 2. ESCI/GEOG/GEOL305 Introduction to GIS
- 3. GEOL440 Advanced GIS Applications

Electives (Choose from) 6 hrs

- ENST/GEOL340 Remote Sensing
- GEOL 498 Independent Study⁴
- GEOL 499 Laboratory and Field Research⁵
- ITM310 Information Systems <u>and</u> ITM 311 Management Info Systems Lab
- ITM321 Database Systems I

NOTES REGARDING THE GAM CERTIFICATE PROGRAM:

- A minimum of 2.5 cumulative GPA and sophomore standing are required for admission to the program.
- A maximum of two courses (totaling up to 7 credit hours) used toward a student's major may count toward the minimum 16 credits required for the program.
- A maximum of 7 credit hours of transfer coursework may be counted (upon approval of the program director) toward the minimum 16 credits required for the program.
- 498 (Independent Study) credits can be taken in any discipline but to count toward the certificate, it must be approved by GAM program director by petition.
- 499 (Laboratory and Field Research) credits can be taken in any discipline but to count toward the certificate, it must be approved by GAM program director by petition.
- 6. A minimum 2.0 GPA in the UM-Dearborn courses counting toward the GAM certificate is required at the time of graduation and/or posting of the certificate.

German

(minor or area of focus only, but see International Studies major)

MINOR OR BGS/LIBS AREA OF FOCUS ONLY

A minor or area of focus consists of 12 hours of upper-level credit in German.

German (GER) COURSE OFFERINGS

GER 101 Beginning German I

First course in a two-course elementary German sequence. Listening comprehension, speaking, reading, writing, and culture are emphasized. Course materials promote the use of language to communicate with others and to function in the German-speaking world. (F).

GER 102 Beginning German II

.000 OR 4.000 Credits

Prerequisites: GER 101 or GPL 102 or GPL 201 or GPL

202 or GPL 301 or GPL 302

Second course in the two-course elementary sequence. Continued emphasis on culture and the four skills of listening, speaking, reading, and writing. (W).

GER 105 Conversational German

2.000 Credits

The course is designed to help students develop basic oral communication skills in German. Emphasis is on a maximum use of spoken German in real or simulated everyday situations during each class period. The essentials for grammar will be taught through patterns rather than analytical presentation. May not be used to fulfill the symbolic language requirement.

GER 201 Intermediate German I

4.000 Credits

Prerequisites: GER 102 or GPL 201 or GPL 202 or GPL 301 or GPL 302

An intermediate language course in speaking, reading, and writing German. Class assignments and discussions will be based on a wide variety of material ranging from German language films to anthologies of German prose. There will be a review of grammar, but emphasis is on reading and discussion. (F)

GER 202 Intermediate German II

4.000 Credits

Prerequisites: GER 201 or GPL 202 or GPL 301 or GPL 302

A continuation of GER 201, with an even greater emphasis on reading and speaking. (W).

GER 234 German Conversation

1.000 TO 2.000 Credits Prerequisites: GER 102

Development of conversational skills through discussion of contemporary readings and the use of communicative activities and games. Emphasis will be placed on vocabulary acquisition by students, on improving their pronunciation, and on increasing their overall fluency in German. (OC).

GER 301 Adv Conversation and Comp

3.000 Credits

Prerequisites: GER 202 or GPL 301 or GPL 302

Advanced conversation and composition primarily based on current sources. Frequent essays and oral reports in German. (F).

GER 302 Adv Conversation and Comp

3.000 Credits

Prerequisites: GER 301 or GPL 302

Advanced conversation and composition primarily based on current sources. Frequent essays and oral reports in German. (W).

GER 305 Language of Business

3.000 Credits

Prerequisites: GER 301

The course will familiarize the student with the general vocabulary and form of business correspondence in German, general business conventions in the German-speaking countries as well as with some major specific areas of business such as banking, auto, chemical, tourism, etc. (AY).

GER 306 Cultural Intro to German Bus

3.000 Credits

Prerequisites: GER 301

An in-depth study of current specific business practices as carried on between English and German speaking businesses and agencies. Learning to understand the German's business strategies and business attitudes, the focus is on developing cultural sensitivity towards the needs and national practices of German business. Liaison will be established with German/American businesses in this area. Can be taken with or without GER 305. (OC)

GER 371 Germ Lit: Classic and Romantic

3.000 Credits

Prerequisites: GER 301

Readings include works by Lessing, Schiller, Goethe, Meist, E.T.A. Hoffmann, and Novalis. Analyses in lectures, discussion and writing will try to illuminate the works themselves and the world views of their age. (AY).

GER 372 Introduction to German Lit

3.000 Credits

Prerequisites: GER 301

A survey of German Literature from 19th century realism to the contemporary post-modernism and neo-realism. Writers studied will include both canonical and non-canonical authors, for example, Gerhard Hauptmann, Marie-Luise Fleisser, Georg Kaiser, Irmgard Keun, Bertolt Brecht, Anna Seghers, Ilse Aichinger, and Christa Wolf. The class will be a combination of lecture and discussion with a substantial writing component. (AY).

GER 374 The History of German Cinema

3.000 Credits

Must be enrolled in one of the following Levels:

Undergraduate

May not be enrolled in one of the following Colleges:

No College Designated

Must be enrolled in one of the following classes:

Senior

Sophomore

Freshman

Junior

Prerequisites: GER 301

In this course, we explore the history of German cinema through primary and secondary texts on films from the silent period through unification. Concomitantly, we will read a Mary Fulbrook's history of Germany in order to place these films within the proper historical contexts and in order to enable us to examine the ways in which German history has insinuated itself in all film genres. The film section highlights the major movement in German cinema since its inception and gives particular attention to the representations of German history and the ways in which German history makes itself apparent in a variety of genres. The class will also consider the interactions between German cinema and Hollywood through clips highlighted in lectures and student presentations. (OC).

GER 376 Contemporary German Cultures

3.000 Credits

Prerequisites: GER 301

An exploration of the assumptions which underlie everyday life in German-speaking countries (Federal Republic of Germany, Austria, Switzerland). Topics include social intercourse, school systems, medicine, citizens' understanding of nation, and individuals' relationship to space. (YR).

GER 377 German Culture & Civilization

3.000 Credits Prerequisites: GER 301

An introduction to the civilization of the German-speaking countries of Europe from the Middle Ages to the 20th Century. The course examines the arts, history, culture, and institutions that have shaped the Germanic societies.

GER 380 Praktikum

1.000 Credits

Prerequisites: GER 301

This course will be offered in conjunction with a 300- or 400-level German literature, film, or cultural course in translation taught by a member of the German faculty. The one-credit course will be conducted entirely in German. Students will develop their language skills dealing with the topics of the course in translation. They will also be required to read related texts in German. Students who successfully complete the Praktikum and the corresponding German in translation course can receive four credits of German. The topics will vary depending on the English language content course. Students must be concurrently registered in appropriate 300- or 400-level courses taught by a German instructor. (OC).

GER 385 German Across the Curriculum

1.000 Credits

Prerequisites: GER 202

Course is attached to an upper-level course in another discipline and taken concurrently with it. Course materials in German are related to the subject matter of the second course and are discussed with a German-area faculty member. Materials are also integrated into the assignments of the second course. (F,W).

GER 390 Topics in German

3.000 Credits

Examination of problems and issues in selected areas of German. Title as listed in Schedule of Classes will change according to content. Course may be repeated for credit when specific topics differ. (OC).

GER 398 Ind Studies in German Lit

1.000 TO 3.000 Credits

Readings or analytical assignments in German selected in accordance with the needs and interests of those enrolled. (F,W).

GER 399 Ind Studies in German Lit

1.000 TO 3.000 Credits

Readings or analytical assignments in German selected in accordance with the needs and interests of those enrolled. (F,W).

GER 490 Topics in German Lit and Civ

3.000 TO 4.000 Credits

Examination of problems and issues in selected areas of German studies. Title as listed in the Schedule of Classes will change according to content. Course may be repeated for credit when specific topics differ. (OC).

GER 499 Adv Individual Proj in German

1.000 TO 4.000 Credits

Must be enrolled in one of the following classes:

Senior

Graduate

Advanced individual study project in German language, literature, or civilization may be pursued under the direction of a faculty supervisor. (OC).

Global Cultures

MINOR OR BGS/LIBS AREA OF FOCUS ONLY

The minor or focus area in Global Cultures helps students understand global systems and processes in different world regions. Deeper understanding of global change and the interdependence of the United States with the rest of the world is important to students who wish to be well informed about the contemporary world and prepared for jobs that are affected by global dynamics

A minor in Global Cultures provides a useful complement to students majoring in a number of different areas in any of the four colleges on campus. Students wishing to study or work abroad, students working with populations from different parts of the world, and students simply wishing to expand their horizons to a more global scale, will all benefit from combining their area of study with the Global Cultures minor.

A minor or area of focus consists of 15 hours of upper-level credits from the following:

Core Area I: Choose one course from: GLOC 301 or COMM 340

Core Area II: Choose <u>four</u> courses from at least <u>two groups</u>:

Group 1: Global Mediated Cultures: ANTH 320, 372, 373, 374, 425, 440; COMM 366, 430, 455, 481; GEOG 302; HIST 321, 322, 323, 326, 336, 362, 381, 3511; JASS 381, 387;

LING 484; MCL 353, 401.

Group 2: Gender and Multicultural Issues: ANTH 320, 372, 373, 374, 425, 440, 455; COML 355; COMM 430, 455, 481; ENGL 445; GEOG 310, 315; GLOC 325; HIST 321, 322, 323, 326, 336, 338, 362, 381, 3511; HUM 433; JASS 381; LIBS 364; MCL 401; POL 350, 371, 385, 473; SOC 402, 490G; WGST 408.

Group 3: Migration and Diasporas: AAAS 390G, 490G, 491C; AAST 381; ANTH 455; COML 355; ENGL 445; GEOG 310, 315; GLOC 325; JASS 381; LIBS 364; MCL 455; POL 350, 371, 385, 473; SOC 402, 408, 490G.

Group 4: American Studies in the Global Age: BA 400; COMM 306, 366; COMP 327, 390; ECON 351; ENST 300, 320; EXPS 410; HIST 384, 3632; IB 486; LING 383, 484; MCL 455; MKT 457; SOC 460.

NOTE:

- The same course cannot be used in more than one
- Students studying a foreign language can include up to two of the following upper level courses in the four courses required for Core Area II (however, as noted above, courses from at least two different groups 1-4 above must be included as well) ARBC 305, 331, 332, 335, 350, 351 FREN 305, 306, 332, 336, 337, 338, 339, 375, 388 GER 305, 306, 374, 376, 377, 390, 490

Global Cultures (GLOC) **COURSE OFFERINGS**

GLOC 301 Intro to Global Cultures

3.000 Credits

Must be enrolled in one of the following Levels:

SPAN 305, 356, 357, 358, 450, 465

Undergraduate

Must be enrolled in one of the following classes:

Sophomore

Senior

Junior

The course introduces students to the various concepts and notions attached to the phenomenon known as globalization from several disciplinary approaches including history, political science, economic, cultural geography, environmental sciences, and anthropology. It, then, delves in to an in-depth examination of globalization and its ideologies, particularly the consensus as well as the controversies it engenders. The course particularly focuses on the relation between globalization and culture.

GLOC 325 Political Islam

3.000 Credits Must be enrolled in one of the following classes: Sophomore Senior Junior

This course is designed as an introduction to the main issues and themes in the study of political Islam and Muslim Politics, providing a broad overview of the pertinent key concepts and issues. It provides a historical approach to the study of political Islam, and touches upon the nineteenth century Islamic revivalism. It also explores diversity in contemporary Islamic thought and global Islamist movements.

Greek

(not field of concentration, see Modern and Classical Languages)

Health Policy Studies

The study of social factors and their relationship to the health care system has become increasingly important in recent decades. It is now widely accepted that understanding the social dimensions of health, illnesses, and the health care system is crucial for all the health-related professions and for an informed consumer citizenry as well.

In recognition of its importance, the UM-Dearborn offers a Bachelor of Arts major in Health Policy Studies. This program provides future health professionals with a strong behavioral and social science orientation but also draws on resources in humanities, management, education and engineering. Students study important perspectives that enable them to broaden and deepen their understanding of health care and health systems. The objective is to provide students with analytic frames of reference, as well as research and evaluation approaches that illuminate issues and provide a good basis for approaching problems the health care delivery field. These include the economics and politics of health care delivery, sociological perspectives, cross-cultural comparisons of health care systems, ethical considerations, computer applications, and practical work in aspects of the American system. Much of the course work is developed around a policy orientation.

Students participate in undergraduate coursework that prepares them for health-related work, strengthens their position for admission to graduate programs, and enhances professional socialization. This program is intended for students interested in health services administration, health policy and planning and the health professions such as medicine, dentistry and nursing.

Health Policy Studies (HPS) is not only a major, it is also available as a minor and as an area of focus for the Bachelor of General Studies (BGS) and the Bachelor of Arts in Liberal Studies (LIBS).

JOINT PROGRAMS WITH COMMUNITY COLLEGE DEGREES IN ALLIED HEALTH AND NURSING

Students who have completed an Associate Degree program from an accredited community college in Nursing (RN) or Allied Health (including, inter alia, Health Information Technology, Health Services Manager, Medical Assistant, Pharmacy Therapist Assistant, Technician, Physical Radiography Technician, Respiratory Therapy Assistant, Surgical Technology, and Diagnostic Medical Sonographer), with an overall GPA of 2.5 or higher, may apply for admission to Health Policy Studies through the joint program. Students who have been accepted will be able to transfer up to 62 credit hours of their Associate's Degree program toward an AB in Health Policy Studies.

Students transferring into HPS under the joint program will have to complete distribution requirements, including prerequisites to the major, c major requirements and an HPS track, as set forth in the next sections. The transferred allied health and nursing courses may only be used for the HPS bachelor's degree: that is. a student who comes to UM-Dearborn through the joint program, but subsequently changes majors from HPS will lose many of the 62 transferred credit hours, retaining only those course credits that would otherwise transfer to UM-Dearborn.

PREREQUISITES TO THE MAJOR

The following courses fulfill distribution requirements as well as serve as prerequisite courses for certain HPS core courses.

SOC 200 or SOC 201 ECON 2001 or 201 Any 100 or 200 level PHIL course (PHIL 240 preferred)

MAJOR REQUIREMENTS

The Bachelor of Arts in Health Policy Studies includes three components of requirements: CASL General Education Distribution Requirements (approximately 42 credit hours— HPS students are required to take 6 credit hours in the Behavioral and Social Analysis Area of Inquiry, instead of the usual 9 hours) within which certain prerequisites are taken; Health Policy Studies Core Courses (31 hours) and one of several tracks (15 hours). The degree, like other CASL degrees, requires a minimum of 120 hours, 48 of which are upper division.

Health Policy Studies Core

All HPS majors take 31 hours of core courses. HPS 440 Medical Sociology, should be taken first as it is intended as a gateway course to Health Policy Studies. HPS 410 Social Research Methods, should also be taken early on, as it shows students how to read scientific articles and familiarizes students with basic statistics. HPS 402 Health Policy Studies Senior Seminar is a capstone course for the major, bringing together the various issues raised in the program and looking at both the past and the likely future of the health care system, hence students should enroll for this course after they have taken most of the other HPS courses. HPS 401 Health Policy Studies Internship should be taken in the senior year.

Required Core courses

HPS 440	Medical Sociology	
HPS 410	Social Research Methods	
HPS 364	Health Policy and Administration	
HPS 442	Medical Ethics	
HPS 456	Health Care and the Law	
HPS 403	Medical Information Systems	
HPS 404	Financing the Health and Medical Systems	
OR (by permission of the HPS Director by petition)		
ECON 355	Economics of the Medical Sector	

One course from	om the following group of three courses
HPS 448	Comparative Health Care Systems
OR	
ANTH 430	Medical Anthropology
OR	
PSYC 455	Health Psychology
HPS 401	Internship
OR (by permi	ssion of the HPS Director by petition)
HPS 405	Administrative Culture and Representation
	in Health and Human Services
HPS 402	Health Policy Studies Senior Seminar

Health Policy Studies Tracks

All HPS majors take a 12 credit hour track. These tracks provide training in areas directly applicable to careers in health care services. Increased public interest in the American health care system has created a demand for administrators in hospitals,

neighborhood clinics, long-term care facilities, group practices, ambulatory facilities, managed care entities such as health maintenance organizations (HMO) and preferred provider organizations. Employment in such organizations may require specialized training in management and the social and behavioral sciences.

Students with an eye toward the occupations within these organizations will find an optimal combination of background and skill through completing one of the tracks, below, and thus improve their chances of working successfully in the health care field or enhance their chances of admission to graduate programs.

Some of the courses in the tracks within the College of Business require additional prerequisites, such as accounting courses, ACC 298 and ACC 299; or Principles of Microeconomics, ECON 202; or ITM or CIS introductory courses. Other tracks also include courses that have prerequisites, such as CHEM 225 or BIOL 140.

Health Planning Track

Four courses from the following list

ANTH 415	Nutrition and Human Development
ANTH 430	Medical Anthropology
BIOL 380	Epidemiology
BIOL 390	Topics (when applicable to health planning)
CHEM 352	Introduction to Toxicology
HPS 405	Administrative Culture and Representation
	in Health and Human Services
HPS 412	Principles of Epidemiology
IMSE 334	Organization of Hospital Systems
POL 311	Interest Groups
POL 312	Legislative Process
POL 360	American Policy Processes
PSYC 412	Psychology of Aging
PSYC 455	Health Psychology
SOC 350	Poverty and Inequality
SOC 422	Structure of American Society
SOC 423	American Social Classes
SOC 426	Society and Aging
SOC 450	Political Sociology
SOC 483	Images of Organizations

Health Behavior and Health Education Track

Four courses from the following list			
	ANTH 340	Race and Evolution	
	ANTH 415	Nutrition and Human Development	
	ANTH 430	Medical Anthropology	
	BIOL 380	Epidemiology	
	EDC 300	Educational Psychology	
	HPS 405	Administrative Culture and Representation	
		in Health and Human Services	
	HPS 412	Principles of Epidemiology	
	HPS 430	Fundamentals of Health Behavior and	
		Health Education	
	HPS 475	Diversity Issues in Mental Health	
	SOC 447	Family Violence	
	PSYC 4725	Motivation and Behavior	
No more than <u>one</u> from the following three courses			
	DCX/C 200	T:C C D 1 (1D 11	

N

PSYC 300	Life Span Developmental Psychology
PSYC 302	Psychology of Child Development
PSVC 412	Psychology of Aging

Information Systems Track

ITM 310	Information Systems in Management
AND	
ITM 311	Mgmt Information System Lab
ITD (221	
ITM 321	Database Systems I
ITM 331	Information Systems Development
ITM 351	Networking and Collaborative Computing

Human Resources Track

г	c	41	C 11		1
Four courses	s from	the	toll	owing	list

HRM 305	Human Resource Policy and Administration
HRM 406	Staffing, Training and Development
HRM 407	Compensation and Performance
	Management
HRM 408	Management-Union Relations
LE 452	The Legal Environment of Business
OB 354	Behavior in Organizations
OB 401	Management Skills Development
OB 402	Organizational Change and Development
OB 485	Seminar: Organizational Behavior

Marketing Track

Four courses from the following list

ENT 400	Introduction to Entrepreneurship
LE 452	The Legal Environment of Business
MKT 352	Marketing Principles and Policies
MKT 382	Consumer Behavior
MKT 402	Marketing Management
MKT 436	Business to Business Marketing
MKT 454	Marketing Research
MKT 456	Advertising and Sales Promotion
OR MKT 458	Communications Strategy and New Media

Finance Track

Four courses from the following list

FIN 401	Corporate Finance
FIN 402	Advanced Corporate Finance
FIN 407	Investment Fundamentals
FIN 445	Corporate Financial Models and
	Applications
FIN 484	Seminar: Financial Management
LE 452	The Legal Environment of Business

NOTES:

- The same courses cannot satisfy both major and minor requirements.
- The same courses cannot be used to satisfy both HPS core and track requirements.
- The same course cannot be used in more than one track.
- 4. Upper level courses, particularly in finance, information systems, and health behavior and education tracks, may require additional prerequisites.
- Students not enrolled in the BBA program (in the College of Business) cannot elect and/or transfer more than 30 credits of coursework in disciplines offered by the College of Business.

Health Policy Studies Minor Or BGS/LIBS Area Of Focus

The Health Policy Studies Program offers a specialization called Health Administration for the BGS major. Please see the CASL Advising website for the specific requirements for this program http://www.casl.umd.umich.edu/casl-advising/

The minor or area of focus in Health Policy Studies consists of 15 credit hours of upper level HPS courses (excluding HPS 498 and 499). It is recommended that the minor or area of focus include HPS 440, Medical Sociology and, at a minimum, either HPS 456 Health Care and the Law or HPS 442 Medical Ethics.

Premedical students should consider a minor in Health Policy Studies. The International Organization of Medical Sciences Conference of Medical Education addressed a number of issues, including the question of premedical education. The Conference emphasized the need for colleges to offer courses in the social and behavioral sciences so that future physicians would develop an understanding of the larger health care system and the social factors that influence health and illness. Since that time, other national organizations have continued to recommend that premedical students should take courses in the social and behavioral sciences that have a focus on the health care system and on the experience of health and illness. HPS offers an ideal set of courses that may be taken as a minor for a student planning on attending medical school. Students should contact the HPS Program Director to design a minor that would provide the breadth and depth of a social and behavioral science emphasis related to the delivery of medical care.

Health Policy Studies (HPS) COURSE OFFERINGS

HPS 336 Perspectives in Women's Health

3.000 Credits

May not be enrolled in one of the following Classes: Freshman

Topic: Perspectives in Women's Health. This course examines women's health issues across the human lifespan, using feminist and sociocultural perspectives. Topics to be explored include the social construction of women's sexuality, reproductive options, health care alternatives and risk for physical and mental illness. Attention to the historical, economic, and cultural factors that influence the physical and psychological well-being of women is an underlying theme. (F,W,Y)

HPS 364 Health Policy and Admin

3.000 Credits

A survey of the structure and processes of health administration in America, including analysis of current issues in health policy. (F, W, S).

HPS 390 Topics in Health Policy Stds

3.000 Credits

Special topics course taught periodically. (F,W,S)

HPS 401 Health Pol Studies Internship

3.000 TO 6.000 Credits

Must be enrolled in one of the following classes: Senior

A practical experience; volunteering is done in a health care delivery setting combined with a support seminar to develop an understanding of health care system issues and problems.

HPS 402 HPS Senior Seminar

3.000 Credits

Must be enrolled in one of the following classes:

Focus on current issues and practical problems in health care organization, delivery, and financing. Use of the case method (where appropriate) to demonstrate and discuss real problems and approaches in functioning health care institutions in Southeastern Michigan. Taught primarily from the point of view of individuals responsible for administering or advising such institutions. (F,W,S).

HPS 403 Medical Information Systems

3.000 Credits

Must be enrolled in one of the following Levels:

Undergraduate

May not be enrolled in one of the following Classes:

Freshman

Medical Information Systems deals with how information is created, stored, and used in health care settings. Areas of interest for this course include fundamentals of computers and data management, medical information documentation in the form of paper and electronic medical records, health data privacy issues, disease classification and scoring systems, quality assurance in health care delivery, commonly used health care statistics, reimbursement methodologies, health care monitoring by internal processes and external review agencies, and vital statistics and disease surveillance systems. The course also includes some hands-on computer applications instruction to familiarize students with commonly used software platforms utilized in health care administration. Students cannot receive credit for both HPS 403 and HPS 503. (W)

HPS 404 Financing Health & Medical Sys

3.000 Credits

Must be enrolled in one of the following Levels:

Undergraduate

May not be enrolled in one of the following Classes:

Freshman

Prerequisites: ECON 201

The American health care system faces two problems: access to health services and high and rising costs. This course looks at the problems of uninsured citizens as well as the strains placed on health care facilities in providing services for them. Europeans have dealt with problems of access and cost controls through universal health care coverage and the course takes up various models in use today. The course also looks at American health insurance and "managed care" programs such as HMOs and PPOs as methods of providing health coverage as well as controlling costs. The course introduces students to services provided by the government including Medicare, Medicaid and State Children's Health Insurance Program (SCHIP). Students will learn the basics of creating a budget under constraints such as contractual limitations and Diagnosis-Related Groups (DRGs). Offered once a year, ordinarily in the Winter semester. Students cannot receive credit for more than one of the following: HPS 404, HPS 451, HPS 504, HPS 551, or PADM 451.

HPS 405 Healthcare Administration

3.000 Credits

Must be enrolled in one of the following classes:

Senior Junior

Prerequisites: HPS 440

This course introduces students to administrative models and skills that can be used at a supervisory level. These conceptions include strategic planning, marketing, organizational communications, quality assurance, project management and team skills, supervision and evaluation, conflict resolution and office cultures and politics. A critical and historical perspective is used to understand the origins and meanings of these conceptions and the extent to which they correspond with the service mentality of health and human services. Applications to the health and human services will be central to the course.

4.000 Credits

Prerequisites: SOC 200 or 201

An introduction to methods of data collection and analysis. Elementary statistics data are analyzed using computerized statistics programs. A discussion of research design and the philosophy of social science is also included. Students cannot receive credit for both HPS 410 and HPS 510. (F,W,S).

HPS 412 Principles of Epidemiology

3.000 Credits

Must be enrolled in one of the following Levels:

Undergraduate

May not be enrolled in one of the following Classes:

Post-baccalaureate NCFD

Graduate

Prerequisites: (SOC 410 or HPS 410 or CRJ 410)

The study of the frequency and distribution, as well as the causes and control, of disease in human populations. Using data analysis tools, one can identify causes of disease and the effects of prevention and treatment. This course is an application of research design to determine the extent to which environment (toxins, for instance), heredity, childhood development, and lifestyle influence morbidity and mortality rates.

HPS 430 Health Behavior & Health Educ

3.000 Credits

May not be enrolled in one of the following Classes: Freshman

This course provides an overview of social and behavioral science theories that guide the development of health education and promotion interventions aimed at preventing, reducing, and eliminating public health problems. Part one of the course describes the relationship between behavior and health, through a review of several current health problems faced by people in the United States. Part two presents a survey of health behavior theories ranging from those aimed at individual behavioral change to community health education promotions. The final part of the course looks at the application of theory to real-world health promotion and education interventions. Students will learn how social and behavioral theory informs intervention design, implementation, and evaluation.

HPS 440 Medical Sociology

3.000 Credits

Prerequisites: SOC 200 or 201

An analysis of health and illness behavior from the point of view of the consumer, as well as medical professionals, the structure, strengths and weaknesses of the medical care delivery system in the U.S.; the impact of culture and personality on illness behavior; and a study of the institution of medicine and activities of health care professionals. Students cannot receive credit for both HPS 440 and HPS 540. (F).

HPS 442 Medical Ethics

3.000 Credits

Prerequisites: PHIL 100 or PHIL 120 or PHIL 233 or PHIL 234 or PHIL 240 or PHIL 301 or PHIL 302 or PHIL 303 or PHIL 304 or PHIL 305 or PHIL 310 or PHIL 315 or PHIL 320 or PHIL 340 or PHIL 350 or PHIL 355 or PHIL 365 or PHIL 369 or PHIL 370 or PHIL 371 or PHIL 375 or PHIL 380 or PHIL 390 or PHIL 441 or PHIL 445 or PHIL 485 or PHIL 490

An examination of moral issues in medicine. Among the problems to be considered are truth-telling and paternalism in the doctor-patient relationship, psychosurgery and behavior control, death and euthanasia, the allocation of scarce resources, and genetic counseling and control. Specific attention will be given to ethical theories and to philosophical concepts such as rights, autonomy, and justice. Students cannot receive credit for both HPS 442 and HPS 542. Prerequisite(s): any previous course in Philosophy or permission of instructor. (F,W,S).

HPS 448 Comparative Health Care System

3.000 Credits

Must be enrolled in one of the following Levels: Undergraduate

Prerequisites: SOC 200 or SOC 201

An introduction and overview of the English, Swedish, and People's Republic of China health care systems. Focus on cultural and other organizational characteristics, unique features, approaches, and ability to solve problems. Emphasis on how the three systems help us understand the American health care system. Students cannot receive credit for both HPS 448 and HPS 548. (F,W,S)

HPS 456 Health Care and the Law

3.000 Credits

Prerequisites: SOC 200 or SOC 201 or POL 364

A sociological study of legal issues in health care, including regulation of hospitals, consent for treatment, confidentiality, experimentation, family planning, children's rights, access to health care. The emphasis will be on the organizational and personal consequences of legal requirements. Junior/Senior standing is a requirement. Students cannot receive credit for both HPS 456 and HPS 556. (F).

HPS 475 Diversity Iss in Mental Health

3.000 Credits

Prerequisites: WGST 303 or ANTH 303 or HUM 303 or SOC 303 or PSYC 303 or WGST 336 or HPS 336

Diversity Issues in Mental Health explores varied cultural descriptions and models of mental illness. By focusing on the ways that culture shapes how people experience, and respond to, mental illness this class explores cultural representations of mental illness, ranging from discrete illness resulting from a chemical imbalance to a profound threat to order. We seek to understand the cultural, personal, and political underpinnings of mental illness and medical practices in societies throughout the world. The course utilizes an interdisciplinary perspective, drawing from multiple sources of information regarding mental health issues, including feminism, psychiatry, history, sociology, and literature. Issues raised throughout the course include the ways gender, race, culture, religion, and stigma influence the diagnosis of mental illness, patterns of help-seeking behavior, formation of comprehensive mental health policy, and treatment options.

HPS 498 Independent Study

1.000 TO 3.000 Credits

Readings or analytical assignments in accordance with the needs and interests of those enrolled and agreed upon by the student and instructor, which shall not duplicate a formal course offering. (F,W,S)

HPS 499 Independent Study

1.000 TO 3.000 Credits

Readings or analytical assignments in accordance with the needs and interests of those enrolled and agreed upon by the student and instructor, which shall not duplicate a formal course offering. (F,W,S)

Hispanic Studies

Of the thousands of languages in the world today, Spanish ranks among the top five in the number of speakers. Spanish is the native language of some 300,000,000 persons who live in Spain, Mexico, and eighteen other countries of the Caribbean and Central and South America. In addition, there are some 36,000,000 native Spanish-speakers in the United States. The study of the Spanish language and its cultures is quite practical. Given the Hispanic presence in the United States and the proximity of our Spanish-speaking neighbors in Latin America, proficiency in Spanish is increasingly advantageous and even necessary for numerous professions and careers.

Students interested in pursuing the study of Spanish language and culture for professional and career reasons, for teaching, or for graduate studies can enroll in one of two majors: Hispanic Studies or International Studies (see International Studies major). Students may also use Spanish as a minor or area of focus.

HISPANIC STUDIES MAJOR

PREREQUISITES TO THE MAJOR

Students desiring to major in Hispanic Studies must successfully complete SPAN 202 or exhibit equivalent Spanish language proficiency.

MAJOR REQUIREMENTS

A minimum of 24 credit hours in upper level Spanish classes must be completed as outlined below.

Advanced Conversation and Composition I			
Advanced Conversation and Composition II			
nguage course from the following 3 hrs			
Language of Business			
Inro to Hispanic Linguistics3 hrs			
One civilization/culture course from the following			
Spanish Civilization and Culture			
Latin American Civilization and Culture			
Spain in the Twentieth Century			
One literature course from the following			
Masterpieces of Latin American Literature			
Masterpieces of Spanish Literature			
Latino Literature			

Two 400-level lang	guage courses from the following4-5 hrs
SPAN 406	Advanced Written Expression
SPAN 409	Oral Expression
SPAN 420	Introduction to Translation
SPAN 421	Advanced Translation
SPAN 450	Hispanic Cinema
SPAN 451	Spanish Film
SPAN 465	Contemporary Spanish Literature

Other Spanish area offerings......4-5 hrs

Majors must take at least one course that deals specifically with Spanish (peninsular) topics such as SPAN 351, 356, 358, 451 or 465 and at least one course that deals specifically with Latin American topics such as SPAN 350, 353, or 357.

Majors are encouraged to spend a semester or year in one of the many approved study-abroad programs.

Cognates 6hrs Upper level courses from the following disciplines: AAAS, ANTH, ARTH, COMM, COML, ECON, ENGL, ENST, GEOG, GLOC, HIST, HUM, JASS, LIBS (excluding LIBS 300, 395, 396), MCL, PHIL, POL, RELS, SOC, WGST.

NOTES:

- 1. A maximum of 54 hours in SPAN may count in the 120 hours required for graduation.
- At least 18 of the 24 upper level hours in French must be elected at UM-D.
- A maximum of 3 credits of HUM 485 internship can be used in the cognate area.

MINOR OR BGS/LIBS AREA OF FOCUS

A minor or area of focus consists of 12 hours of upper-level credit in Spanish.

Spanish (SPAN) **COURSE OFFERINGS**

SPAN 101 Beginning Spanish I

.000 OR 4.000 Credits

First course in the two-course elementary Spanish sequence. Listening comprehension, speaking, reading, writing, and culture are emphasized. Course materials promote the use of language to communicate with others and to function in Hispanic culture. (F,S).

SPAN 102 Beginning Spanish II

.000 OR 4.000 Credits

Prerequisites: SPAN 101 or SPL 102 or SPL 201 or SPL 202 or SPL 301 or SPL 302

Second course in the two-course elementary Spanish sequence. Continued emphasis on culture and the four skills of listening, speaking, reading, and writing. (F,W,S).

Intermediate Spanish I **SPAN 201**

.000 OR 4.000 Credits

Prerequisites: SPAN 102 or SPL 202 or SPL 301 or SPL 302 or SPL 201

An intermediate-level course designed to increase the proficiency in listening, speaking, reading, and writing within a cultural context. Emphasis is placed on acquiring new vocabulary and expanding the use of grammar structures. Course materials promote the use of language to communicate with others and to function in Hispanic culture. (F).

SPAN 202 Intermediate Spanish II

.000 OR 4.000 Credits

Prerequisites: SPAN 201 or SPL 202 or SPL 301 or SPL

Continuation of SPAN 201 with emphasis on the development of all language skills. (W).

SPAN 254 Spanish Conversation

2.000 Credits

Prerequisites: SPAN 102

This course provides extensive oral practice to reinforce vocabulary and grammar concepts and to improve pronunciation. Conversational skills are developed through discussion and use of communicative exercises, activities, and games. (OC).

SPAN 301 Adv Conversation and Comp I

3.000 Credits

Prerequisites: SPAN 202 or SPL 301 or SPL 302

An advanced course in conversion, composition, and syntax designed to strengthen existing skills. An intensive review of grammar combined with pronunciation and vocabulary exercises should enable the student to make progress in composition and conversation. Oral and written assignments will be based on readings from contemporary sources. (F).

SPAN 302 Advan Conversation Comp II

3.000 Credits

Prerequisites: SPAN 301 or SPL 302

Continuation of SPAN 301 with emphasis on the command of conversational and writing skills. (W).

SPAN 305 Language of Business

3.000 Credits

Prerequisites: SPAN 301

An introduction to the language and practices of the Hispanic world of business. Particular emphasis will be placed on learning the terminology used in typical business correspondence and documents. A variety of businesses will be examined and practice in reading and composing business letters will be provided. (AY).

SPAN 310 Intro to Hispanic Linguistics

3.000 Credits

Must be enrolled in one of the following Levels:

Undergraduate Prerequisites: SPAN 301

This class provides students with a systematic overview of key areas of Spanish linguistics, including the sound system, forms of words, syntactic patterns, the development of the language, and regional, social and contextual variation.

SPAN 350 Masterpiece of Latin Amer Lit

3.000 Credits

Prerequisites: SPAN 301

A survey of Latin American literature from the colonial period to the present. Emphasis will be placed on such influential and outstanding contemporary authors as Borges, Garcia Marquez, Paz, Poniatowska, Rosario, Ferre, and Rulfo. (AY).

SPAN 351 Masterpieces of Spanish Lit

3.000 Credits

Prerequisites: SPAN 301

An overview of Spanish Peninsular literature beginning with the Medieval period. Students read and discuss outstanding works from a variety of literary periods and genres. Works by authors such as Cervantes, Lope de Vega, Calderon, Galdos, Unamuno, Lorca, and Goytisolo are included. (AY).

SPAN 353 Latino Literature

3.000 Credits

Prerequisites: SPAN 301

The course offers a selection of literary representations from a range of Latino groups with an emphasis on Cubans, Dominicans, Mexicans, and Puerto Ricans in the United States. Students examine these minority groups and the realities of their migrations through a variety of literary periods and genres.

SPAN 356 Spanish Civilization and Cult

3.000 Credits

Prerequisites: SPAN 301

A survey of Spanish civilization from its origins to the present. The course explores the achievements of the Spanish people in art, architecture, music, literature, and the sciences and examines aspects of contemporary Spanish institutions and society.

SPAN 357 Latin American Civiliztn Cult

3.000 Credits

Prerequisites: SPAN 301

A survey of Hispanic culture in the Americas from its inception to the present. The course examines the contributions of the Latin American ethnic groups and explores the relationship between Latin America's past and contemporary achievements and problems.

SPAN 358 Spain in the Twentieth Century

3.000 Credits

Prerequisites: SPAN 301

A cultural study of the institutions, issues, and values of Spanish society in the twentieth century as seen in art, architecture, music, literature, film, and the media. Special emphasis is placed on contemporary Spain from the end of the Franco era through the development of a democracy. (OC).

SPAN 385 Spanish Across the Curriculum

1.000 Credits

Prerequisites: SPAN 202

Course is attached to an upper-level course in another discipline and taken concurrently with it. Course materials in Spanish are related to the subject matter of the second course and are discussed with a Spanish-area faculty member. Materials are also integrated into the assignments of the second course. (OC).

SPAN 390 Topics in Spanish

3.000 Credits

Prerequisites: SPAN 301

Examination of problems and issues in selected areas of Spanish. Title as listed in Schedule of Classes will change according to content. Course may be repeated for credit when specific topics differ. (OC).

SPAN 398 Independent Studies in Spanish

1.000 TO 6.000 Credits

Readings or analytical assignments in Spanish in accordance with the needs and interests of those enrolled and agreed upon by the student and instructor. Students may receive a maximum of six credit hours for a combination of SPAN 398 and SPAN 399. (F,W).

SPAN 399 Independent Studies in Spanish

1.000 TO 6.000 Credits

Readings or analytical assignments in Spanish in accordance with the needs and interests of those enrolled and agreed upon by the student and instructor. May be repeated for a maximum of 6 credit hours. (F,W).

SPAN 406 Advanced Written Expression

2.000 Credits

Prerequisites: SPAN 302

Through the reading and analysis of authentic materials students will develop and improve their writing skill in various narrative styles such as dialogue, description, essay or research paper. Writing as a process involving editing and revision will be emphasized. (AY).

SPAN 409 Oral Expression

2.000 Credits

Prerequisites: SPAN 302

A course designed to increase the conversational skills of advanced-level students. A variety of activities and assignments will help students refine their oral accuracy and expand upon the number of social situations in which they can function. (AY).

SPAN 420 Introduction to Translation

3.000 Credits

Prerequisites: SPAN 302

An introduction to the history, theory and practice of English-to-Spanish and Spanish-to-English translation. Emphasis will be placed on material selected from the fields of business and commerce, the legal system, and brief passages of literature. Class projects will include translations of advertisements, brochures, and documents provided by area businesses. (AY).

SPAN 421 Advanced Translation

3.000 Credits

Prerequisites: SPAN 305 and SPAN 420

The course will continue to apply the translation theory and techniques introduced in SPAN 420, and it will continue to focus on English-to-Spanish and Spanish-to-English non-literary translation. Emphasis will be placed on materials selected from the fields of business, advertising, and legal discourse. Class projects will include translation of advertisements, legal documents, and business brochures. (AY,W).

SPAN 450 Hispanic Cinema

3.000 Credits

Prerequisites: SPAN 301

An introduction to the history and critical analysis of representative Hispanic films of major directors from Spain and Latin America. Emphasis will be placed on the historical, political, and cultural content of these films as they reflect the problems, customs, and contradictions of Hispanic culture. (AY).

SPAN 451 Spanish Film

3.000 Credits

Prerequisites: SPAN 301

An introduction to the history and critical analysis of representative Spanish films of major directors from Spain. Emphasis will be placed on the historical, political, social and cultural content of these films as they reflect the problems, customs, and contradictions of Spanish culture.

SPAN 465 Contemporary Spanish Lit

3.000 Credits

Must be enrolled in one of the following classes:

Sophomore Senior Junior

Prerequisites: SPAN 301

Spanish 465 provides students with an overview of Contemporary Spanish Peninsular literature and culture through the analysis of narrative texts. Selected readings provide the basis for stylistic and textual analysis. Fostering critical thinking through an analysis of texts is the primary focus of the class. The course specifically examines narrative works that belong to the Spanish literary canon produced after the end of an almost forty year dictatorial regime in 1975. The literary works are deeply rooted in Spain's social and cultural history. Consequently, they describe the contemporary socio-political scene in which they were produced and look at the uncertain future of this reborn nation.

SPAN 490 Topics in Spanish

3.000 Credits

Examination of problems and issues in selected areas of Spanish language, literature, culture and/or civilization. Title as listed in the Schedule of Classes changes according to content. Course may be repeated for credit when specific topic differs. (OC).

History

History is the art and science of understanding humanity in time; it seeks to recreate the context of changing human activities, be they cultural, economic, political, or social. Because of its special concern for time, history is a valuable field of study for those who want an understanding of where humanity has been and where it is going, and of the world and their own place in it. Furthermore, this field provides a solid background for those who seek a career in teaching, government work, law, or business, honing skills of critical thinking and analysis. In its role bridging disciplines of the social sciences and the humanities, history also enriches an individual's personal life and environment.

PREREQUISITES TO THE MAJOR

Students desiring to concentrate in history are required to elect three of the following courses as prerequisites. The faculty strongly advises that students take these courses during their freshman or sophomore year:

HIST 101	Ancient World
HIST 102	Medieval World
HIST 103	Modern World
HIST 104	Chinese Civilization
HIST 105	Japanese Society and Culture
HIST 106	African Past
HIST 108	Latin America: The Colonial Era

HIST 109	Latin America: The Modern Era
HIST 111	American Past I
HIST 112	American Past II
HIST 113	Islamic Civilization

Current or former CASL Honors students may use HIST 261, 262, 263 and/or 264 to fulfill these requirements.

MAJOR REQUIREMENTS

HIST 3121

HIST 3130

HIST 3131

For a major in history, students are required to complete 27 hours in history from the following:

hours in history from the following:				
Required courses				
	e Study of History			
	S. History6 hrs			
HIST 304	Studies in Detroit Culture 3 hrs			
HIST 305	Society and the Arts in Detroit 3 hrs			
HIST 316	African American History			
HIST 318	Early American Republic			
HIST 319	Civil War & Reconstruction 3 hrs			
HIST 349	Thomas Edison and his Era 3 hrs			
HIST 354*	The United States and Vietnam 3 hrs			
HIST 355	Eng. Colonies in America 1607-1763 3 hrs			
HIST 356	American Revolution 1763-1815 3 hrs			
HIST 358	Emerg of Modern U.S. 1876-19 3hrs			
HIST 359	Era of World Wars: 1916-1946 3 hrs			
HIST 360	The U.S. Since 1946			
HIST 3601	Michigan History			
HIST 3602	Comparative American Identities 3 hrs			
HIST 361	United States Economic History 3 hrs			
HIST 363	Religion in Amer Hist: 1607-1865 3 hrs			
HIST 3632*	The U.S. in the Middle East 3 hrs			
HIST 3634	History of Islam in the U.S 3 hrs			
HIST 3635	The 1960's in America			
HIST 364	Religion in Amer Hist II: 1865-Present 3 hrs			
HIST 3651	Women Leadership/Social Change 3 hrs			
HIST 3665	Automobile in American Life 3 hrs			
HIST 3666	Henry Ford and His Place 3 hrs			
HIST 3671	Intro to Arab American Studies 3 hrs			
HIST 3676	Arab Americans Since 1890 3 hrs			
HIST 368	Black Exp in U.S.: 1865-Present 3 hrs			
HIST 369	Civil Rights Movement in America 3 hrs			
HIST 3695	American City			
HIST 370	Women in Amer Hist Perspective 3 hrs			
HIST 371	American Ideas 1607-1865 3 hrs			
HIST 374	History of Industrial Technology 3 hrs			
HIST 383	Labor in America			
HIST 384	Immigration in America 3 hrs			
HIST 386*	Compar History of Technology 3 hrs			
HIST 465	The Family in History			
HIST 4600	Seminar in U.S. Cultural History 3 hrs			
HIST 4650	Seminar in U.S. Women's History 3 hrs			
HIST 4677	Arab American Identities			
HIST 4678*	Mid East Diasporas Europe and Am 3 hrs			
*Note: May count as U.S. or Non U.S., but not both				
Three courses in Non-U.S. History9 hrs				
HIST 302	Russian Intellectual History			
	The Birth of Civilization			
HIST 303				
HIST 306	20th Century Russian Intel Hist			
HIST 307	Early Russian History			
HIST 308	Imperial Russia			
HIST 309	The Russian Revolutions			

Polish History Since 1800......3 hrs

Armenia Ancient Medieval World...... 3 hrs

Armenia in the Soviet Period................................. 3 hrs

HIST 3132	Armenians in the Modern World	3	hrs
HIST 314	England: Tudors and Stuarts	3	hrs
HIST 315	Modern Britain	3	hrs
HIST 321	Late Imperial China	3	hrs
HIST 322	Traditional China	3	hrs
HIST 323	History of Modern China	3	hrs
HIST 325	Traditional Japan		
HIST 326	Modern Japan		
HIST 329	Medieval Society	3	hrs
HIST 330	The Renaissance	3	hrs
HIST 331	The Reformation Era 1500-1648	3	hrs
HIST 333	Europe in Age of Revol 1750-1815	3	hrs
HIST 334	Europe in Age of Imp 1815-1914	3	hrs
HIST 335	20th Century Europe	3	hrs
HIST 336	The Contemp. World 1945-Present	3	hrs
HIST 337	Islamic Move. Mid East Hist	3	hrs
HIST 338	Women & Islam in Mid East to 1900	3	hrs
HIST 339	Ottoman Empire in 19th Century		
HIST 340	Freud's Vienna 1866-1920	3	hrs
HIST 343	Germany Before Hitler		
HIST 345	West Africa Since 1800		
HIST 3511	Modern Mid East, 1918-1945	3	hrs
HIST 3512	Modern Mid East, 1945-1991	3	hrs
HIST 3520	Lebanon in Modern Mid East	3	hrs
HIST 354*	The United States and Vietnam	3	hrs
HIST 362	Europe and Intern'l Econ History	3	hrs
HIST 3632*	The U.S. in the Mid East	3	hrs
HIST 365	Honors Seminar	3	hrs
HIST 378	History of Consciousness	3	hrs
HIST 379	Language, Myth and Dreams	3	hrs
HIST 381	Intell History of Modern Europe	3	hrs
HIST 385	Modern France	3	hrs
HIST 386*	Compar History of Technology		
HIST 387	Aspects of the Holocaust	3	hrs
HIST 389	Nazi Germany	3	hrs

*Note: May count as U.S. or Non U.S., but not both

NOTES:

- 1. A maximum of 44 hours in HIST may count in the 120 hours required for graduation.
- 2. At least 15 of the 27 upper level hours in History must be elected at UM-D.
- History Internship (HIST 485) cannot be used to fulfill major requirements.

PORTFOLIO

In order to graduate with a degree in history, students must compile a portfolio of papers written in history courses. Students beginning a portfolio on or after September 1, 2013 must complete an electronic portfolio. The Portfolio is an archive of at least four significant papers from upper-division history courses taken at UM-Dearborn. It must include the HIST 300 paper and at least one paper from a capstone (400/4000 level)

course, along with a capstone reflection essay that highlights those papers that best demonstrate mastery of learning outcomes for history concentrators.

MINOR OR AREA OF FOCUS

A minor or area of focus consists of 12 hours of upper-level credit in history (at least six credit hours of U.S. history and six credit hours of non-U.S. history)

ADVISING

History majors should consult with an adviser before the beginning of each semester.

History (HIST) COURSE OFFERINGS

HIST 101 Ancient World

3.000 Credits

This course is an introductory survey of world history from the close of the Ice Age to ca. 1000 CE. We will compare world civilizations and examine the connections among them.

HIST 102 Medieval and Renaissance World

3.000 Credits

An introductory survey of world civilizations from c.1000 CE to 1750 CE. The course explores global patterns of trade, technology and expansion, the role of geography, climate and catastrophe in shaping human societies, and the relationship between warfare and the rise of the nation state. Topics include the rediscovery of classical traditions in the Renaissance, the rise of the Gunpowder Empires in Asia and the Middle East, and cross-cultural interactions between the European West and the American 'New World'.

HIST 103 Modern World

3.000 Credits

An introductory course in modern history beginning in the eighteenth century. Emphasis on social, political and economic trends, including the impact of nationalism, imperialism, industrialization, dictatorships, and democratic institutions. (YR).

HIST 104 Chinese Civilization

3.000 Credits

A broadly based introductory study of China that exposes the student to a culture very different from our own and helps that student to understand Chinese institutions and values. It explores essential elements of Chinese civilization in comparative reference to the development of western civilization. Recommended for freshmen and sophomores. (YR).

HIST 105 Japanese Society and Culture 3.000 Credits

A survey of Japanese society and culture in the traditional and modern periods, treated within the comparative framework of the history of the western world. It examines the development of traditional culture under Chinese influence and the subsequent interaction with modern western nations. Recommended for freshmen and sophomores. (YR).

HIST 106 An Intro to the African Past

3.000 Credits

Survey of the social, economic, political, intellectual and cultural heritage of the African peoples from prehistory to the present. Emphasis on internal dynamics of African society through five millennia, as well as the impact of external forces on African life. Themes of particular interest: the roots of African culture, the trans-Atlantic slave trade and the African diaspora in the New World, the European Conquest, and the character of the colonial order and the ongoing struggle to end the legacy of alien domination. (YR).

HIST 108 Latin America: The Colonial Era

3.000 Credits

This course will examine the colonial period in Latin American history from the Spanish and Portuguese contact and conquest to the early nineteenth-century wars for independence. It will focus on the background of European colonization, the process of interaction between Natives and Europeans, the growth and development of colonial society, the shifting uses of land and labor, and the roots of the nineteenth-century revolutionary movements. (OC).

HIST 109 Latin America: The Modern Era

3.000 Credits

This course examines the modern era in Latin American history from the early nineteenth-century wars for independence to the present day. The course will focus on the formation of the Latin American states, the development and growth of Latin American culture and society, the legacy of slavery, the transition to capitalism in the region, the growth of export economies and dependency, and the rise of nationalism and revolutionary movements in the region. (OC).

HIST 111 The American Past I

3.000 Credits

A survey of the economic, social, and political developments in America from the colonial era to the Civil War.

HIST 112 The American Past II

3.000 Credits

A survey of the economic, social, and political developments in America from the conclusion of the Civil War through the present.

HIST 113 Islamic Civilization

3.000 Credits

This course is an introductory historical survey of Islamic societies and cultures from the rise of Islam in the 7th Century to the present day.

HIST 114 Islamic Civ: 1500 to Present

3.000 Credits

Beginning in the 16th Century, this course will cover the "gunpowder empires" in the Greater Middle East, the spread of Islam globally, and the encounter with European global hegemony. Also covered are movements calling for political, social and religious reform in the Islamic World from 1800 to the present day.

HIST 261 Western Culture I

3.000 Credits

Prerequisites: HIST 365

First of a series of four courses. An interdisciplinary course on the nature of the Western classical and Biblical traditions. It examines Western values, attitudes, history, art history, the roots of scientific thought, logic and social institutions such as the family and the state. Included are works of literature, history, philosophy, and art history. (YR).

HIST 262 Western Culture II

3.000 Credits

Prerequisites: HIST 365

Second of four courses on Western Civilization required of all Honors Students. The course covers the period of the Middle Ages, Renaissance, and Reformation. Focus is on the ways in which Biblical and Classical traditions are preserved, adapted, transformed, or discarded under the pressures of new social and political formations. Materials are drawn from literature, philosophy, political theory, art. (W).

HIST 263 Western Culture III

3.000 Credits

Prerequisites: HIST 365

This course covers the period from the 17th to 19th centuries. Focus is on the emergence of scientific thought, enlightenment political theory, romantic individualism, and the great 19th-century intellectual revolutions of Darwinism, Marxism, and feminism. Materials are drawn from literature, philosophy, and political and scientific writings. Third of four courses on Western Civilization required of all Honors Students. (YR).

HIST 264 Western Culture IV

3.000 Credits

Prerequisites: HIST 365

Fourth of four courses required of all Honor Students. This course covers the period from late 19th-century to the present. Focus is on selected major issues of Western civilization in the modern era: science and human values, bureaucratic and totalitarian societies, psychoanalytical thought, feminism, nihilism, and existentialism. (YR).

HIST 290 Topics in History

3.000 Credits

Problems and issues in selected areas of history. Title listed in Schedule of Classes changes according to content. Courses may be repeated for credit when specific topics differ. (OC).

HIST 291 Topics in History

3.000 Credits

Problems and issues in selected areas of history. Title listed in Schedule of Classes change according to content. Courses may be repeated for credit when specific topics differ. (OC).

HIST 300 The Study of History

3.000 Credits

Prerequisites: HIST 101 or HIST 102 or HIST 103 or HIST 104 or HIST 105 or HIST 111 or HIST 112 or HIST 113 or HIST 114

A study of the theories of historical analysis, styles of historical writing, and approaches to historical research. For history majors who should elect it as soon as they declare their concentration. (F,W).

HIST 302 Russian Intellectual History

3.000 Credits

Examines the historical myths that supported traditional Russian institutions, the literature that expressed these myths in symbolic form, the relationships between the social classes, and the conflict of values and goals in 19th-century Russia. Through the literature of the period the course explores social, intellectual, and political movements. The material is organized to consider both revolutionary and reactionary ideologies, origins of each, and the dynamics between them. (AY).

HIST 303 The Birth of Civilization

3.000 Credits

Course examines the nature of the intellectual structure of the ancient Egyptians, Mesopotamians and Hebrews, and the social structures and historical developments of those cultures. Emphasis is on the evolution of civilization, the contrasts between Egypt and Mesopotamia, and most importantly, the shifts from mythical to philosophical thinking and discourse. (OC).

HIST 304 Studies in Detroit Culture

3.000 Credits

A modern cultural history of Detroit. Usually taught by two faculty members, the course emphasizes the role of literature, art, and music, and architecture in the city's history. (YR).

HIST 306 20th-C Russian Intel History

3.000 Credits

Study of the relationships between revolutionary philosophies and actions; the dilemma of the Russian Revolution and the dilemma of its "success"; the interaction of art, literature, and revolutionary movements. The course examines historical developments through novels, poetry, and philosophy. (AY).

HIST 307 Early Russian History

3.000 Credits

A history of Russia from its prehistoric origins to the beginning of the 19th century, focusing on political and economic development, cultural and religious dynamics, foreign relations, and expansion in Asia. Stress is placed on political dynamics, including the forces of democracy in Russia's past. (AY).

HIST 308 Imperial Russia

3.000 Credits

A history of Russia from the time of Peter the Great to the Russian revolutions of 1917. Attention is given to internal affairs, economic development, foreign relations, the failure of reforms, and the emergence of the revolutionary movement. (AY).

HIST 3085 History Internsip

3.000 TO 6.000 Credits

The internship offers students experience in types of work available to liberal arts graduates. Regular meetings between the Internship Coordinator and the intern are required. Credit applies to the degree as a general elective and does not apply to any concentration.

HIST 309 The Russian Revolutions

3.000 Credits

Provides a broad overview of Russian history leading to the Russian revolutions of 1917, and a more detailed analysis of the revolutions of 1905 and 1917 and the subsequent development of the Soviet Union up to the present. Roots of present Soviet behavior will be sought in Russia's past. (AY).

HIST 3121 Polish History Since 1800

3.000 Credits

This class offers students a chance to study 19th and 20th century Polish history. We look at how the most prominent ideals of what it means to be Polish framed as a discussion between the Romantics and Positivists; the Fighters/Insurgents and Realists; the Old and New affected the perceptions on honor, heroism, and Polish patriotism. A critical evaluation of these models leads us to evaluate the most important historical events in the last two centuries of Polish history a country with impressive history of openness and multiculturalism as well as grim chapters of xenophobia. Centered on the role of individuals in shaping history, this class also reflects on the identity of Poles citizens of a country located at the cross-roads of Eastern and Western Europe.

HIST 3130 Armenia Ancient Medieval World

3.000 Credits

Must be enrolled in one of the following classes:

Senior

Sophomore

Freshman

Junior

The course is a general survey of Armenian history and culture from the pre-historic period to the early sixteenth century, with emphasis on Armenias political, economic and cultural interrelationships with other countries and peoples in the Near and Middle East, Europe and Central Asia. The course analyzes how the major political and demographic shifts in world history impacted Armenia and the Armenians. Each era of Armenia history is discussed in terms of developments in the surrounding countries. Attention is given to politics, international relations, trade, religion, literature, art, and architecture.

HIST 3131 Armenia in the Soviet Period

3.000 Credits

HIST 3131 will study the history of the Soviet Republic of Armenia, when it was ruled by Communists and was part of the USSR in 1920-1991. It will chronicle the broad political, economic, social and cultural developments throughout 70 years of Soviet history and will then study in detail how these developments affected life in Armenia, one the fifteen union republics of the USSR, and relations between Soviet Armenia and the Armenian Diaspora outside the USSR, including the Armenian American community. The course will help students to better understand the Soviet experience by focusing on developments not only in the political center in Moscow, but in the southernmost and territorially the smallest of all the Soviet republics. It will also help students to better comprehend the historical background to some contemporary developments in Transcaucasia (the South Caucasus), Turkey, Iran and the Arab states of Western Asia.

HIST 3132 Armenians in the Modern World

3.000 Credits

Must be enrolled in one of the following classes:

Senior

Sophomore

Freshman

Junior

The course is a general survey of Armenian history and culture from the early sixteenth century to the present, with emphasis on political, economic and cultural interrelationships with other countries and peoples in the Near and Middle East, Europe and the Americas. The course analyzes how the major political shifts in world history impacted Armenia and the Armenians. Therefore, each era of Armenian history covered in this course is discussed in terms of developments worldwide and especially in the surrounding countries. Studying Armenia and the Armenian people gives students an understanding of what happens to, in, and around small countries as they find themselves in a regularly changing international political environment. Attention is given to politics, international relations, economics, religion, literature, art, and architecture. Modern Armenian history and culture is discussed in relation to Ottoman, Iranian, Russian, West European, North America, and other civilizations.

HIST 314 England: Tudors and Stuarts

3.000 Credits

A political, economic, and social survey of England from 1485 to the end of the 17th century. Focus is on the interrelation of society and politics as well as on the rise of England to major international status. (AY).

HIST 315 Modern Britain

3.000 Credits

Course focuses on Great Britain from the time of the Industrial Revolution to the present. Major problems considered are industrialization, the British empire and its disintegration, the democratization of British political life, the creation of the welfare state, and Britain's role in the contemporary world. (AY).

HIST 316 African American History

3.000 Credits

This course traces the experience of African Americans from their first landing in Virginia in 1619 through slavery and the Civil War. Emphasis will be placed on the origins of racism, the development of the slave system in the United States and the historical developments that led to the Civil War. (YR).

HIST 318 Early American Republic

3.000 Credits

This course examines the history of the United States from the ratification of the Federal Constitution through the Presidency of Andrew Jackson. Particular attention is given to the process of political party formation, the impact of the "market revolution" upon life, the origins and ramifications of the Second Great Awakening, the antebellum reform movements, and slavery. (YR).

HIST 319 Civil War & Reconstruction

3.000 Credits

This course examines America's pivotal middle period, a period of rising sectional tensions, bloody civil war, and protracted debate about the promise and limits of equality in the United States. Among the topics covered are the meaning of freedom in antebellum America, territorial expansion and the development of slavery as a political issue, the collapse of the national party system and the secession crisis, the meaning of the American Civil War, and the postwar settlement of reconstruction. (YR).

HIST 321 Late Imperial China

3.000 Credits

Explores key issues in Chinese society and culture from around 900 CE to around 1800 CE, considering demography, family life and lineage organization, gender relations, farming and handicraft industries, intellectual trends, ethnic relations, popular culture, education, social stratification, and social control under imperial bureaucracy. (AY).

HIST 322 Traditional China

3.000 Credits

Examines Chinese history from ancient times to around 900 CE, stressing key developments in society, culture, and government that produced enduring cultural traditions, bureaucratic government, and distinctive patterns cultural exchange in Eastern Eurasia. (AY).

HIST 323 History of Modern China

3.000 Credits

Studies China's historical evolution from around 1800 to recent events in the People's Republic; assesses China's distinctive path to modernity from traditional ideals and patterns of order, including demographic transformations, Western impact, rebellions and wars, nationalism and revolutions, and recent economic growth and social change. (YR).

HIST 325 Traditional Japan

3.000 Credits

Traditional Japan from ancient times to around 1800; emphasis is placed on the evolution of Japanese institutions under the cultural influences of China. (AY).

HIST 326 Modern Japan

3.000 Credits

Japan from around 1850 to present. The course considers the impact of foreign contacts on the Tokugawa system, the emergence of Japan as a modern state, Westernization and nationalistic reaction, the rise of militarism, the Pacific War, economic growth and social changes after the war, and changes in the U.S.-Japan relations. (OC).

HIST 329 Medieval Society

3.000 Credits

An analysis of social institutions and ideas from the High Middle Ages through the discussion of original sources. (AY).

HIST 330 The Renaissance

3.000 Credits

This interdisciplinary study of Renaissance culture focuses on its preeminent center, Italy, in the 15th and 16th centuries. The course investigates major aspects of art, music, literature, and philosophy and their relationships to social, economic, and political structures.

HIST 331 The Reformation Era: 1500-1648 2.000 TO 3.000 Credits

A study of the nature, course, and impact of the Protestant Reformation in Europe, Humanism, the Counter-Reformation, and the cultural and social implications of Protestantism also receive attention. (YR).

HIST 333 Europe in Age of Rev:1750-1815

3.000 Credits

Must be enrolled in one of the following classes:

Sophomore Senior Junior

Prerequisites: HIST 365

History of Europe during a period when established patterns of thought, social structure, and institutions were violently challenged. (AY).

HIST 334 Europe in Age of Imp:1815-1914

3.000 Credits

Europe in the age of nationalism, industrialism, imperialism, and democracy; background and origins of World War I. (YR).

HIST 335 20th-Century Europe, 1890-1945

3.000 Credits

Europe before, during, and after World War I; the rise of communism and fascism; World War II. (AY).

HIST 336 The Contmp World, 1945-Present

3.000 Credits

The post-war world, U.S.-Soviet rivalry, European/Japanese renaissance, the Chinese Revolution; decolonization and the emergence of the Third World. (OC).

HIST 337 Islamic Movemnts Mid East Hist

3.000 Credits

Will compare several Islamic movements in Middle Eastern history, starting with the rise of Islam in Mecca and Medina. Later impulses toward Islamic revival all looked back to the first movement, and hoped to capture both its spirit and its success. With this as background, the course will move to address two questions: How did later Islamic movements understand the history of the rise of Islam? How have later Islamic movements had to adapt their methods and their ideology to different historical circumstances? (AY).

HIST 338 Women&Islam Mid East to 1900

3.000 Credits

This course covers the historical development of Islam's normative stance towards women and gender roles in the Middle East from the rise of Islam to the earliest stirrings of feminist activism.

HIST 339 Ottoman Empire in 19th Century

3.000 Credits

The course is general survey of the history of the Ottoman Empire from the treaty of Kucuk Kaynarca in 1774 until the abolition of the caliphate in 1924. The course will examine such topics as modernization; imperialism; the rise of ethnic nationalisms among the empire's Christian and Muslim subjects; democracy; ideologies like Ottomanism, pan-Islamism, Islamic modernism, and pan-Turkism; and changing ideas about gender.

HIST 340 Freud's Vienna: 1866-1920

3.000 Credits

An analysis of the place of Vienna in the cultural history of the modern west; particular attention is given to the Vienna of Franz Josef (1848-1916) through the disciplines of history, art, architecture, music, literature, philosophy and psychoanalysis. Included are works by Freud, Schnitzler, Kraus, and Zweig. (AY).

HIST 341 Hist, Lit, & 20th Century Iran

3.000 Credits

This course will examine the formation of modern Iranian culture through both historical documents and the creative works of mainly 20th Century Iranian poets and authors. The focus of the course will be the period between Iran's Constitutional Revolution of 1905-1906 and the revolution of 1977-1979.

HIST 343 Germany Before Hitler

3.000 Credits

An analysis of the cultural and intellectual life during one of Germany's greatest eras. Lectures and discussions are based on German literature, art, film, philosophy, architecture, and history. The background of Weimar culture and the rise of Hitler's Germany are also considered. (YR).

HIST 345 West Africa Since 1800

3.000 Credits

A history of the West African peoples since 1800, which focuses on their unique cultural heritage. Themes include: West Africa before the advent of alien domination, the European Conquest, West Africa under the Colonial regimes, and the liquidation of colonial rule and the reassertion of West African independence. (AY).

HIST 349 Thomas Edison and his Era

3.000 Credits

This course will introduce students to the life and work of Thomas Edison. Breaking with the stereotype of the lone inventor/genius, we will examine how Edison helped shape and was in turn shaped by the context of the Gilded Age America - when the United States emerged as an urban, industrial nation. Lectures and discussions will be supplemented by slides, films, and visits to the Edison-related sites at the Henry Ford. Throughout the course the following themes will be explored: invention and the labor process, the significance of manufacturing and marketing, and the origins of modern consumer culture. (OC).

HIST 3511 Modern Middle East, 1918-1945

3.000 Credits

Must be enrolled in one of the following classes:

Senior Sophomore

Freshman

Junior

Prerequisites: COMP 106 or COMP 220 or COMP 270 or COMP 280 or CPAS 40

This course surveys the history of major political events and social changes in the Middle East from 1918 to 1945. Among the topics covered are the struggle of Arab States for independence, the rise of Kemalism, and the rise of the Phalavi Dynasty.

HIST 3512 Modern Middle East, 1945-1991

3.000 Credits

Must be enrolled in one of the following classes:

Senior

Sophomore

Freshman

Junior

Prerequisites: COMP 106 or COMP 220 or COMP 270 or COMP 280 or CPAS 40

This course surveys the history of major political events and social changes in the Middle East from 1945 to 1991. Among the topics covered are the "Arab Cold War," the Palestinian-Israeli conflict, the struggle for democracy, and the resurgence of "Islamist" politics.

HIST 3520 Lebanon in Modern Middle East 3.000 Credits

HIST 3520 will study the modern history of Lebanon and the country's involvement in broader Arab and Middle Eastern politics from the period when the country's modern boundaries were established in 1920 to the end of its fifteen-year-long civil war in 1990. The course will focus on the relations of the Lebanese state, its various ethno-confessional communities and political groupings with the Great Powers like France, the United Kingdom, the Soviet Union and the United States of America, as well as with the influential Arab states in the region, in particular Egypt, Syria, Saudi Arabia and Iraq. Particular attention will be paid to the impact of the Arab-Israeli conflict and the presence of Palestinian refugees on internal Lebanese politics. The course will also analyze the diverse, sometimes contrasting, visions among Lebanon's various local elites towards the country's place in the region and the world and how these visions underwent change in light of evolving internal social and external political developments. (YR)

HIST 354 The United States and Vietnam 3.000 Credits

The Vietnam War was a major turning point in U.S. history. This course focuses on French rule in Indo-China; U.S. interests in the region; U.S. involvement after 1945; the military, economic, and social nature of that intervention; and the consequences of the war. (OC).

HIST 355 Eng Colonies in Amer, 1607-1763 3.000 Credits

European expansion into North America; colonial societies, ideas, and institutions; imperial policy and administration, and accompanying changes in Amerindian and African cultures, and New World ecologies. (YR).

HIST 356 American Revolution, 1763-1815 3.000 Credits

The causes, character, and consequences of the American Revolution, and the shaping of a new nation through the War of 1812. (YR).

HIST 358 Emerg of Modern U.S., 1876-1916 3.000 Credits

An intensive study of the history of the United States from the end of Reconstruction to America's entry into World War I. Particular attention is paid to the social, economic, and intellectual aspects of the period and to the origins of 20th-century America. (OC).

HIST 359 Era of World Wars: 1916-1946 3.000 Credits

An intensive study of the history of the United States from 1916 to 1946. Topics include World War I and its aftermath, the Depression, the New Deal, World War II, and post-war settlements and problems. (OC).

HIST 360 The U.S. Since 1946 3.000 Credits

This course focuses on the era bracketed by the Truman through the present administrations. Particular attention is given to the New Deal, the Truman policy of containment, the Cold War, relations with China, McCarthyism, the Korean War, the civil rights movements, the New Frontier, involvement in Vietnam, and the problems of contemporary America. (AY).

HIST 3601 Michigan History

3.000 Credits

This course covers some of the major trends and developments in the history of the state of Michigan from its aboriginal past to the present day. The course will focus upon placing the state's history within a broader national and international context and will focus upon such topics as aboriginal settlement and culture, colonization, American settlement and statehood, industrialization, immigration and political development. (YR)

HIST 3602 Comparat. American Identities

3.000 Credits

Must be enrolled in one of the following Levels:

Undergraduate

Prerequisites: COMP 106 or CPAS 40 or COMP 220 or

COMP 270 or COMP 280

This course will confront and complicate the following key questions: what does it mean to be an American? What is American culture? Participants in this course will respond to the questions central to the American Studies field by reading and discussing historical, sociological, literary, artistic, material culture, political, economic and other sources. Students will use this interdisciplinary study to examine the multiple identities of Americans - as determined by factors such as gender, race, class, ethnicity and religion. While emphasizing the diversity of American culture, participants will consider some core values and ideas uniting America both in historical and contemporary society. Students will be invited to seek out and share fresh narratives of the American experience. (OC).

HIST 361 United States Economic History

3.000 Credits

Prerequisites: ECON 201 and ECON 202

A survey of the processes of development of the United States economy, their social implications, and the sources of today's economic problems. (F).

HIST 362 Eur and Intern'l Econ History

3.000 Credits

Prerequisites: ECON 201 and ECON 202

A survey of the processes of industrialization in the major non-American industrial economies, with a focus on their relevance and implications. (AY).

HIST 363 Rel in Amer Hist: 1607-1865 3.000 Credits

A survey of the religious movements and trends in America from the 17th century to the Civil War, with emphasis on Puritanism, 18th-century revivalism, and 19th-century denominationalism and social reform. (AY).

HIST 3632 The US in the Middle East

3.000 Credits

HIST 3632 will examine the involvement of the US in the Middle East from the late 18th Century to modern times. The relationship between domestic politics and foreign policy (both in the US and in the Middle East) will be examined as US involvement in the Middle East grows from irregular missionary and commercial activity in the 19th century, to the establishment full diplomatic relations, to the complexities related to the globalization of the oil industry, Cold War interventions and, ultimately, the establishment of US hegemony in the region. Students will examine a number of "case studies" in US-Middle East relations as a platform for their own research into other episodes of American involvement in the Middle East. (YR)

HIST 3634 History of Islam in the US

3.000 Credits

Must be enrolled in one of the following classes:

Senior

Sophomore Graduate

Junior

This course traces the long history of Islam and of Muslims in the United States (1730s-present), paying careful attention to the interaction among Muslims across the dividing lines of race, gender, immigrant generations, sect, political orientation, and class, and between Muslims and other Americans.

HIST 3635 The 1960s in America

3 000 Credits

This course aims to interweave the civil rights movement, the Vietnam War, the student movements, the women's movement, and other developments of the period to place them in an historical context of a complicated era of change. The course compels students to critically evaluate social movements, political developments, cultural trends, and foreign policies by close examination of primary documents as well as critical evaluations of the various ways that scholars have interpreted the period. (AY).

HIST 364 Rel in Am Hist II: 1865-Present

3.000 Credits

A survey of American religion from the Civil War to the present, with emphasis on ethnicity and religion and post-World War II revivals of religion. (AY).

HIST 365 Honors Seminar

3.000 Credits

Must be enrolled in one of the following classes:

Freshman

To teach habits of informed criticism based on critical analysis of primary and secondary texts. This course will give Honors students the opportunity to learn reflective, critical listening and inquiry skills, which are essential to informed discussion of the Honors core course material. The content of specific courses will vary from semester to semester according to individual instructors. (YR).

HIST 3651 Women Leadership/Social Change

3.000 Credits

May not be enrolled in one of the following Classes:

Prerequisites: HIST 112 or WST 275 or WGST 303 or PSYC 303 or ANTH 303 or SOC 303 or HUM 303 or ANTH 275 or PSYC 275 or ANTH 275 or SOC 275 or HUM 275 or WGST 275 or WGST 275

The purpose of this seminar is to examine women's leadership in movements for social change. We will approach this topic through the study of historical examples, drawn primarily from the twentieth-century United States, and including movements for economic justice, race relations, sexual identity, peace, gender equality, public health, and social welfare. (W).

HIST 3665 Automobile in American Life

3.000 Credits

The course will explore a wide array of distinct, though interconnected, subjects such as: the manufacturing, engineering and design of the automobile and its relation to industrial and technological developments and consumer trends; the

automobile's role in America's industrial growth and the impact that industrialization had upon American society; the automobile's role in urbanization and urban sprawl; the mass marketing of the automobile and its connection to broader social constructions of class, race, and gender; the environmental impact of the automobile; and the automobile's use and meaning as a cultural symbol and its relation to the American identity. Through the use of diverse mediums such as personal recollections, popular music, film, photographs, advertisements, automobile ephemera, literature, poetry and more traditional written sources the course will examine America's ongoing fascination with the automobile. (OC)

HIST 3666 Henry Ford and His Place

3.000 Credits

Using the biography of Henry Ford as a touchstone, the course will examine the trajectories of historical change and regional development between 1870 and 1950. Of fundamental concern will be southeastern Michigan's transformation from a 19th century outpost on the Great Lakes to the nation's "engine of change" in the 20th century. Henry Ford was the major player in that revolutionary transformation. This course examines his role in history and mythology as well as the causes and implications of that transformation. (OC).

HIST 3671 Intro to Arab American Studies

3.000 Credits

Must be enrolled in one of the following classes:

Senior

Sophomore

Freshman

Junior

This course explores the local, national, and global conditions through which Arab American identity and its alternatives take shape. It introduces students to humanities and social science approaches to the field of Arab American Studies.

HIST 3676 Arab Americans Since 1890

3.000 Credits

This is a survey of immigration from the Arab Middle East from 1890 to the present. Readings from available scholarship, discussions, and reports facilitate exploring the Arabic-speaking immigrants early and recent experiences as art of U.S. society, including settlement, work, worship, military service, leisure, intellectual life, and primary and formal affiliations across the U.S.

HIST 368 Black Exp in U.S.:1865-Present

3.000 Credits

The history of blacks in America is traced from the Reconstruction era and the rise of Jim Crow segregation to the Civil Rights movement of the 1960's and the current period. Special attention is paid to the migration of blacks to the north and the social-economic situation which they encountered there. Specific topics to be addressed include formation of the NAACP. (YR).

HIST 369 Civil Rights Movement in Amer

3.000 Credits

A survey of race relations and civil rights activity from the late 19th century to the present. The principal focus, however, is on the period since World War II, especially on the mass-based Southern civil rights movement (1955-1965) and the various policy debates and initiatives of the past thirty years, most notably affirmative action and busing. We also examine critiques of non-violence and integrationism. (AY).

HIST 3695 American City

3.000 Credits

This course examines the development of urban America from the European-style port cities of the colonial period through the edge cities of today. The bulk of the course will focus on the late 19th and 20th century urban environment with an eye towards understanding the diverse residents, cultures, economies, and geographies that have shaped American cities. We will cover everything from developments in transportation, architecture, business, and technology to immigration, politics, and urban culture. Broad concerns and constituencies have shaped the urban public sphere, the physical development of cities and the experience of living as an urbanite and, consequently, they will receive much of our attention. American patterns of development will then be placed in context with those of other nations and cultures. (AY).

HIST 370 Women in Am-Hist Perspective

3.000 Credits

A survey of women's role in American society from colonial times to the present, emphasizing both change and continuity in women's experience. (YR).

HIST 371 American Ideas, 1607-1865

3.000 Credits

Ideas about God and humanity, nature and society, which constituted the spirit of the age from the 17th century to the Civil War. (OC).

HIST 3730 Bible in History

3.000 Credits

In this course we will try to examine the historical circumstances and contexts surrounding the writing of The Hebrew Bible. Roughly speaking, we will begin by exploring three aspects of the subject: Historical context of the writing of the Bible-i.e. during the organizing and communicating of each segment. History of the canonization: the ideas and rationale behind including some books but not others. History in the Bible. In more specific terms, this will entail examining who wrote the Bible, when and why. The narrative incorporates the movement from an oral tradition to a written one and will demand some focus on certain pivotal moments, e.g., Ezra's reading (cf. Ezra-Nehemiah), or the historical events in Kings and Chronicles, or the defeat of the northern kingdom of Israel in 722 B.C.E. (BC) and of the southern kingdom of Judah in 589 B.C.E.

HIST 374 History of Industrial Technigy 3.000 Credits

Focusing on Western Europe and the United States since the Industrial Revolution, this course will examine the history of manufacturing technologies and will include the following topics: mechanization and the rise of the factory; mass production; the process of innovation; design and diffusion of new technologies; technologies; technology and the changing nature of work; automation and lean production systems. Through readings, class discussions, and examination of artifacts (actual tools and machines), students will consider the central role played by technology in the making of modern society. (OC).

HIST 375 Heterodox Economics

3.000 Credits

Prerequisites: ECON 201 and ECON 202

This course introduces students to alternative perspectives on economic theory and method. These alternatives include: Marxian and radical political economics, institutional and evolutionary economics, behavioral economics, post-Keynesian economics and feminist economics. (OC).

HIST 378 History of Consciousness

3.000 Credits

Traces changes in the way people have viewed themselves, the world and changes in the forms or orders of thinking: in other words, changes in consciousness and concepts of the unconscious. The mode is intellectual history and involves studies of the ideas of philosophers, psychologists and literary artists. The class will examine ancient and "primitive" consciousness as well as forms of society. (AY).

HIST 379 Language, Myth & Dreams

3.000 Credits

An examination of the relationships between language, myth, dreams, and thinking processes; considers the work of such scholars as Ernst Cassirer, Noam Chomsky, and Freud; studies the nature of the mind from philosophical, psychological and literary perspectives. (AY).

HIST 381 Intell Hist of Modern Europe

3.000 Credits

An examination of the intellectual currents from the scientific revolution, the Enlightenment, the currents of 19th and 20th century thought including romanticism, conservatism, liberalism, socialism, Darwinism. Includes analysis of the reactions to World War I, the Russian Revolution, and World War II. Readings include works by Descartes, Rousseau, Marx, Darwin, Zola, Freud, Kafka and Koestler. (AY).

HIST 383 Labor in America

3.000 Credits

A survey of urban workers from colonial times to the present. Among the topics covered are changing standards of living, the experiences of industrial work, labor organization, and workingclass politics. (YR).

HIST 384 Immigration in America

3.000 Credits

A survey of the "immigrant experience" in the United States, from the early 19th century to the present. Particular attention is given to enduring problems of economic adjustment and cultural assimilation, and to the impact of immigration on the host society. (AY).

HIST 385 Modern France

3.000 Credits

A history of France from the French Revolution to the present. The major emphasis is on the political evolution of France with some attention to social and economic development. (AY).

HIST 386 Compar History of Technology

3.000 Credits

This course will examine the history of technology from a comparative perspective: studying the development and impact of technology in different societies during various historical eras. Topics include: irrigation control and the rise of ancient empires; technology's role in the industrial revolution; technological innovation and the pace of social change. Current issues and various analytical perspectives in the history of technology will also be examined. (OC).

HIST 387 Aspects of the Holocaust

3.000 Credits

A survey of how and why millions of Jews, Gypsies, Slavs, and political and "racial" enemies of the Reich were so quickly and determinedly slaughtered. (YR).

HIST 389 Nazi Germany

3.000 Credits

History of National Socialism, its goals and structure. Also addressed are the nature of the dictatorship; the role of the historian in interpreting the era and the use and evaluation of historical documents. (YR).

HIST 390 Topics in History

3.000 Credits

Problems and issues in selected areas of history. Title as listed in Schedule of Classes changes according to content. Course may be repeated for credit when specific topics differ. (OC).

HIST 391 Topics in History

3.000 Credits

Examination of problems and issues in selected areas of history. Title as listed in Schedule of Classes will change according to content. Course may be repeated for credit when specific topics differ. (OC).

HIST 398 Independent Studies in History

1.000 TO 3.000 Credits

Readings or analytical assignments in history in accordance with the needs and interests of those enrolled and agreed upon by the student and instructor. (OC).

HIST 399 Independent Studies in History

1.000 TO 3.000 Credits

Readings or analytical assignments in history in accordance with the needs and interests of those enrolled as agreed upon by the student and instructor. (F,W).

HIST 4312 European Encounters, 1400-1800

3.000 Credits

Must be enrolled in one of the following Colleges:

Coll of Ed, Health, &Human Ser Coll of Arts, Sciences&Letters

Must be enrolled in one of the following classes:

Senior Junior

Prerequisites: HIST 300

During the early modern period, merchants, explorers and travelers set out from the European West in unprecedented voyages of discovery, intensifying interaction between cultures and initiating contact with previously unknown civilizations. In this advances seminar we examine original documents (in English) as well as current scholarship about encounters between groups of Europeans and inhabitants of other parts of the world from the perspective of both sides. Comparing these contradictory (and often incompatible) accounts of the same events, provides a more comprehensive understanding of the process of European expansion, and of the strengths (and limitations) of historical sources. Additional assignments will distinguish the undergraduate and graduate versions of this course.

HIST 4401 Seminar: African Diaspora

3.000 Credits

May not be enrolled in one of the following Classes:

Graduate Sophomore Freshman

Prerequisites: HIST 300 or AAAS 275 or HIST 345 or

AAAS 345

Research seminar on the history of the African Diaspora in the Atlantic World. This course covers examples of classic texts in the field, as well as significant new scholarship, with an emphasis on critical reading, analysis, and the development of an independent research project. Students gain a deeper understanding of the significance of the African Diaspora in the New World, derived from lectures and discussions providing an overview of this subject, as well as the micro views gleaned from sharing classroom presentation about students' individual research topics. The graduate version of this course includes weightier readings and assignments, with a research paper for potential publication.

HIST 4505 Fminism & Mod. Mid. East

3.000 Credits

May not be enrolled in one of the following Classes:

Sophomore Freshman

Prerequisites: COMP 106 or HIST 101 or HIST 300

This course provides an analysis of the history, historiography, and sources for the study of feminism in the Middle East since 1800.

HIST 4515 Culture& Hist. in Mod. Iran

3.000 Credits

May not be enrolled in one of the following Classes:

Sophomore

Freshman

Prerequisites: COMP 106 and (HIST 101 or HIST 113 or

HIST 3511 or HIST 3512) and HIST 300

Alongside the most influential academic studies of Iran, this course uses cultural sources (such as literature and film) as windows on the pivotal social and political movements in Iranian history since 1800. This study of cultural change factors in cultural debates inside Iran, the growth of the Iranian Diaspora, and the increased presence of Iranian culture in electronic media. Additional assignments distinguish the graduate version of this course from the undergraduate version.

HIST 4600 U.S. Cultural History

3.000 Credits

May not be enrolled in one of the following Classes:

Sophomore Freshman

Prerequisites: HIST 300

The seminar concentrates on scholarly interpretations of U.S. history through a cultural lens. It features close analysis of classic texts in American cultural history as well as significant new works of scholarship, with an emphasis on critical reading, analysis, and historiography of the field. Students gain a deeper understanding of the cultural aspect of U.S. history and a familiarity with this mode of analysis, its guiding theories, newest trajectories and scholarly debates, and impact on the field of history as a whole. Additional assignments will distinguish the undergraduate and graduate versions of this course. Cannot receive credit for both HIST 490A and HIST 4600.

HIST 465 The Family in History

3.000 Credits

An analysis of the emergence of the modern family from the 16th century to the present with focus on the history of childrearing, family size and structure, intra-familial and intergenerational relationships and population patterns. (OC).

HIST 4650 Sem in US Women's History

3.000 Credits

May not be enrolled in one of the following Classes:

Sophomore Freshman

Prerequisites: HIST 300

Seminar on the historiograpy and key primary sources related to U.S. Women's History. The course covers examples of classic texts in the field as well as significant new works of scholarship, with an emphasis on critical reading, analysis, and historiography of the field. Students gain a deeper understanding of the field, its guiding concepts, foundational texts, newest trajectories, and impact on the field of history as a whole. The graduate version of this course includes weightier readings and assignments.

HIST 4677 Arab American Identities

3.000 Credits

Must be enrolled in one of the following Levels:

Undergraduate Prerequisites: HIST 300

Extensive discussions and critical analysis of the main markers of Arab American identity formation from late nineteenth century to present. This seminar provides in-depth assessments of immigrant narratives from various sources and disciplinary approaches on specific racial, ethnic, and gender experiences within the larger U.S. context. Additional assignments distinguish the graduate version of this course from the undergraduate version.

HIST 4678 Middle Eastern Diasporas

3.000 Credits

May not be enrolled in one of the following Classes:

Sophomore Freshman

Prerequisites: AAST 3150 or HIST 300

This course explores the diasporas of Arabs, Turks, Assyrians, and Iranians living in Europe and the Americas that have occurred since the 1880s. It pays careful attention to how "aspects of diaspora" shape, mimic, transect, and undermine the political and economic regimes of which they are part. The reception of Middle Eastern communities in different national contexts and historical periods receive special attention as do their adaptive strategies as religious, ethnic, gendered, and racialized minorities. Those enrolled in the graduate level of the course pursue additional readings and assignments.

HIST 485 History Internship

3.000 TO 6.000 Credits

Must be enrolled in one of the following classes:

Sophomore

Senior

Junior

The internship offers students experience in types of work available to liberal arts graduates. Regular meetings between the Internship Coordinator and the intern are required. Credit applies to the degree as a general elective and does not apply to

any concentration. Maximum total hours credit: 12. Graded Pass/Fail. (F,W).

HIST 490 Sel Topics Seminar in History

3.000 Credits

Prerequisites: HIST 300

Examination of problems and issues in selected areas of history. Title as listed in Schedule of Classes changes according to content. Course may be repeated for credit when specific topics differ. Primarily, but not exclusively, for undergraduate history concentrators. Students are introduced to current issues in the area of historical research and learn how to appreciate selected writings, which represent the best of recent scholarship. (OC).

HIST 498 Senior Honors Thesis

3.000 Credits

Must be enrolled in one of the following Major fields of study:

History

Must be enrolled in one of the following classes:

Senior Graduate

Two successive semesters of independent work on a major research paper under the direction of a member of the discipline and the program coordinator. (F,W).

HIST 499 Advanced Ind Studies in Hist

1.000 TO 4.000 Credits

Must be enrolled in one of the following Levels:

Undergraduate

Readings and analytical writing in history, in accordance with the interests of the student and approval of the instructor. Students must submit a written proposal of study for approval. (OC).

HIST 4999 Senior Research Seminar

3.000 Credits

Must be enrolled in one of the following Major fields of study:

History

Must be enrolled in one of the following classes:

Senior

Prerequisites: HIST 300

This seminar is required for the completion of an undergraduate degree in history. Students will develop an independent research paper that is well-grounded in the appropriate academic literature and using advanced research methodology. History concentrators may not use credit for both this course and HIST 497 or HIST 498 to meet their capstone requirement.

Humanities

The Humanities major is an interdisciplinary program. Students design an individualized course of study combining several disciplines in the Language, Culture, and Communications Department and in the Literature, Philosophy and the Arts Department, as well as History and other college-wide programs.

The major allows students to explore a variety of fields that cannot be covered within the confines of a single major, as the Humanities major has a strong interdisciplinary focus. Students follow a rigorous course of study while enjoying the stimulus of a program tailored to their special interests and goals.

PREREQUISITES TO THE MAJOR

Required courses2	0 hrs
French, German, or Spanish 201 and 202 or MCL 205 &	ž
206	8 hrs
Four courses, from two different disciplines, 100-200 l	level,
from the following areas:	
Art History Communication Comparative Litera	tura

MAJOR REQUIREMENTS

9 hours (upper level) each in any three of the following areas...:27 hrs

African American Studies, Arabic Studies, Art History, Communication, Comparative Literature, English, Journalism and Screen Studies, French Studies, German, Hispanic Studies (Spanish), History, Linguistics, Music History, Philosophy, Women's Studies,

9 additional hours in one of the two following tracks

NOTES

- 1. A maximum of 44 hours in any single discipline may count in the 120 hours required for graduation.
- 2. At least 15 of the 36 upper level hours in History must be elected at UM-D.
- HUM/HIST 485 Internship cannot be used to fulfill major requirements.

MINOR OR BGS/LIBS AREA OF FOCUS

A minor or area of focus consists of 12 hours of upper-level credit in the courses labeled "Humanities" (HUM).

Humanities (HUM) COURSE OFFERINGS

HUM 100 Introduction to Humanities

3.000 Credits

An introduction to the visual arts, music, and drama in western and world societies. Through study of individual works, the course teaches appreciation of the arts in their aesthetic and technical qualities, and understanding of the arts as expressions of diverse societies, varied historical conditions, and shared human experiences. (YR).

HUM 170 Studies in Humanities

3.000 Credits

An interdisciplinary examination of selected key ideas in contemporary western thought. Emphasis will be placed upon how the issues and problems in question manifest themselves in popular and high culture. (YR).

HUM 171 Styles in 19th Century

3.000 Credits

An introduction to the two principal styles of the 19th century, romanticism and realism, viewed within the general evolution of European civilization. After reading works of the classical tradition, the class will study masterpieces that illustrate the romantic and realist movements. (OC).

HUM 200 The Human Condition

3.000 Credits

The human condition as seen in selected works of philosophy and literature. Typical issues: the meaning of life, the existence of God, moral responsibility for human actions, and the role of society in promoting or hindering human excellence. (YR).

HUM 201 Religions of the World

3.000 Credits

A study of religion in essence, in manifestation, and in relationship with the other dimensions of culture; a treatment of man's religious interests and the various ways in which he has sought to pursue these interests. Surveys major world religions. (OC).

HUM 221 Great Books I: Ancient World

3.000 Credits

Introduction to masterpieces of Western world literature from the ancient world. Readings include the Bible, Iliad, Odyssey, Greek drama, and Roman authors. (YR).

HUM 222 Gr Bks II: Midd Ages and Ren

3.000 Credits

Introduction to masterpieces of Western world literature from the Middle Ages and Renaissance. Readings include Dante, Chaucer, Wolfram, Cervantes, Shakespeare, Moliere, and Racine. (YR).

HUM 223 Gr Bks III: Modern Era

3.000 Credits

Introduction to masterpieces of Western world literature from the Modern Era. Readings include Swift, Voltaire, Rousseau, English romantic poets, fiction and drama of the 19th and 20th century. (YR).

HUM 240 Film and Society

3.000 Credits

A survey of the major genres of film, chiefly in historical and political perspective, but also in light of important intellectual frameworks (e.g., feminism, psychoanalytical theory). The films selected, both Western and non-Western, will be examined both for their visual codes of meaning and for their wider role in developing a powerful social language in various cultural contexts. (OC).

HUM 248 Introduction to Screen Studies

3.000 Credits

This course will introduce students to the development of world cinema by integrating the aesthetics of film with its technology, and its social and economic milieu. It will train the students in analyzing the formalist qualities of the medium, and in understanding the evolution of its various genres and styles. (YR).

HUM 261 Honors: West Cult I: Origins

3.000 Credits

Prerequisites: HIST 365

First in a series of four courses. An interdisciplinary course describing the nature of the Western classical and Biblical traditions. Will examine Western values, attitudes, history, art history, the roots of scientific thought, logic, and social institutions such as the family and the state. Included will be works of literature, history, philosophy, and art history. (YR).

HUM 262 Honors: Western Culture II

3.000 Credits

Prerequisites: HIST 365

Second of four courses on Western Civilization required of all Honors students. Course covers the period of the Middle Ages, Renaissance, and Reformation. Focus is on ways in which the Biblical and Classical traditions are preserved, adapted, transformed, or discarded under the pressures of new social and political formations. Materials will be drawn from literature, philosophy, political theory, and art of the period. (YR).

HUM 263 Honors: Western Cult III

3.000 Credits

Prerequisites: HIST 365

Third of four courses on Western Culture required of all Honors students. Course covers period from 17th to 19th centuries. Focus is on the emergence of scientific thought, Enlightenment political theory, Romantic individualism, and the great 19th-century intellectual revolutions of Darwinism, Marxism, and feminism. Material will be drawn from literature, philosophy, and political and scientific writings of the period. (YR).

HUM 264 Honors: West Cult IV: Mod Era

3.000 Credits

Prerequisites: HIST 365

Fourth of four courses in Western Culture required of all Honors students. Course covers period from late 19th century to present. Focus is on selected major issues of Western civilization in the modern era: science and human values, bureaucratic and totalitarian societies, psychoanalytical thought, feminism, nihilism, existentialism. (AY).

HUM 270 Intro to Africana Studies

3.000 Credits

This gateway course in the AAAS Minor will engage the students in the intellectual issues, historical perspectives and cultural debates in African and African American Studies. Using a trans-disciplinary approach the AAAS faculty teaching this course as a team will draw from the disciplinary strengths of the Humanities, the Social Sciences and the Behavioral Sciences. Texts will include literature, film, music, art, theater, and other forms of popular and folk culture. The course will routinely invite speakers and performers to the class and engage the campus community in these events. (YR)

HUM 290 Topics in Humanities

1.000 TO 3.000 Credits

Examination of problems and issues in selected areas of the humanities. Title as listed in Schedule of Classes will change according to content. Course may be repeated when specific topics differ. (OC).

HUM 303 Intro to Women's & Gender Stud

3.000 Credits

May not be enrolled in one of the following Classes: Freshman

This course provides an interdisciplinary overview of the key theories and topics in Women's and Gender Studies. Special attention is given to how gender intersects with class, race, nationality, religion and sexuality to structure women's and men's lives. Students are also introduced to methods of gender analysis and will begin to apply these methods to topics such as women and health, gender roles in the family, violence against women, and gendered images in the mass media.

HUM 304 Studies in Detroit Culture

3.000 Credits

This course is an attempt to define a modern cultural history of Detroit. Taught by two faculty members, the emphasis of the course will vary but the following aspects of the city's cultural history will be covered in some detail: its literature, arts, music and architecture; its social conditions and broader American culture context. (OC).

HUM 311 Art of China

3.000 Credits

Prerequisites: ARTH 101 or ARTH 102 or ARTH 103 or ARTH 104 or ARTH 106 or HUM 100 or HUM 150 or HUM 170 or HUM 171 or HUM 200 or HUM 201 or HUM 221 or HUM 222 or HUM 223 or HUM 240 or HUM 261 or HUM 262 or HUM 263 or HUM 264 or HUM 275 or HUM 290

An introduction to the civilization of traditional China through the historical presentation of its art forms, literary achievements, and philosophical structures. The course will survey the Buddhist, Daoist, and Confucian content of Chinese art and culture from the Shang to the Qing dynasties.

HUM 312 Art of Japan

3.000 Credits

Prerequisites: ARTH 101 or ARTH 102 or ARTH 103 or ARTH 104 or ARTH 106 or HUM 100 or HUM 150 or HUM 170 or HUM 171 or HUM 200 or HUM 201 or HUM 221 or HUM 222 or HUM 223 or HUM 240 or HUM 261 or HUM 262 or HUM 263 or HUM 264 or HUM 275 or HUM 290

An introduction to Japanese culture through the historical presentation of its varied art forms. Drama, music and the fine arts are studied within the context of Buddhist and Shinto religious practices.

HUM 313 Chinese Painting

3.000 Credits

Prerequisites: ARTH 101 or ARTH 102 or ARTH 103 or ARTH 104 or ARTH 106

A historical survey of the painting of China from the earliest examples found in tombs through works influenced by the West from the modern period. Students will be introduced to Eastern philosophy and relevant literary genres which provide a context for the development of the Chinese painting tradition.

HUM 315 Early Chinese Art and Archaeol

3.000 Credits

Prerequisites: ARTH 101 or ARTH 102 or ARTH 103 or ARTH 104 or ARTH 106

An examination of the art and architecture of early China (Neolithic through Eastern Han). Recent excavations that have

significantly changed our view of the early period will be given emphasis. Students will analyze relevant literary and philosophical texts in translation to enhance understanding of the cultural context.

HUM 321 Popular Culture

3.000 Credits

This course examines the art forms of contemporary popular culture, including rock 'n roll, movies, television, advertising design, and commercial architecture. Our critical inquiry emphasizes the development of the aesthetics and the myths of our modern mass media environment, as well as relationships between popular and "high" culture. (AY).

HUM 3335 Intro to Gospel Music

3.000 Credits

This course explores the history and aesthetics of Black sacred music within cultural context. Major figures (Thomas A. Dorsey, Mahalia Jackson, The Winans Family, Kirk Franklin), periods (slavery, Great Migration, Civil Rights movement), and styles (folk and arranged Negro spirituals, congregational songs, and gospel songs - traditional to contemporary) will be studied through recording, videos, film and at least one field experience. Underlying the course is the theory (Mellonee Burnim and Pearl Williams-Jones) that gospel music is an expression of African American culture that fuses both African and European elements into a unique whole. (OC).

HUM 335 Women in Medieval Art

3.000 Credits

Prerequisites: ARTH 101 or ARTH 102 or ARTH 103 or ARTH 104 or ARTH 106 or WGST 275 or WGST 303 or HUM 275 or HUM 303 or ANTH 275 or ANTH 303 or PSYC 275 or PSYC 303 or SOC 275 or SOC 303 or WST 275

Women have often been regarded as the second sex of the middle ages due to the misogynistic attitudes of that era. Recent scholarship, however, has unearthed a significantly more complex picture. Through a study of visual representations of women in medieval art, this course will examine women's roles in the creation and patronage of art and literature, economic and family issues, and women's participation in new and innovative forms of religious piety.

HUM 337 Women Musicians/West Mus Hist

3.000 Credits

May not be enrolled in one of the following Classes: Freshman

Prerequisites: MHIS 100 or MHIS 120 or MHIS 130 or MTHY 100 or WGST 275 or PSYC 275 or HUM 275 or SOC 275 or ANTH 275 or WGST 303 or ANTH 303 or SOC 303 or PSYC 303 or HUM 303 or WST 275

Through a historical survey of female musicians from the Middle Ages to the present day, this course takes a critical look at theories of creativity and professionalism as they relate to female musical production. The course deals with women in European "art music" traditions and also in jazz and poplar music. Social and cultural norms dictating appropriate female involvement with music are examined. The historical approach will serve to reveal ways in which terms such as professionalism and virtuosity have continually shifted and changed in reference to female musical performance. The course challenges students to re-think many of the commonly accepted gender-based descriptions of particular genres and elements of music through listening and musical analysis.

HUM 343 Opera

3.000 Credits

Prerequisites: MHIS 100 or MHIS 120 or MHIS 130 or MHIS 311 or MHIS 312 or MHIS 313 or MHIS 331 or MHIS 340 or MHIS 341 or MHIS 342 or MHIS 390 or MTHY 100 or MTHY 101 or MTHY 102 or MTHY 301 or MTHY 302 or MTHY 390

An introduction to the study of the musical genre of opera through consideration of major operas based upon literary and dramatic works. Covers examples of operas of all eras, from the time of Monteverdi to present. (OC).

HUM 3435 Adaptations of Literary Texts

3.000 Credits

May not be enrolled in one of the following Classes:

Prerequisites: (ENGL 200 or ENGL 230 or ENGL 231 or ENGL 232 or ENGL 233 or ENGL 235 or ENGL 236 or ENGL 237 or ENGL 239) and (COMP 106 or COMP 220 or COMP 270 or COMP 280)

This course explores the adaptation of literary texts in a variety of literary genres (poetry, drama, fiction) to other artistic mediums (film, graphic novels/comics, paintings, etc.). Moving beyond limited comparisons of "good" originals and "bad" adaptations, this course focuses on the dialogue among multiple versions of the same story across a range of historical periods, asking how and why adaptations modify their sources in a particular manner. This course addresses the difference between adaptation and appropriation as well as imitation, quotation, allusion, pastiche, and parody.

HUM 346 Bible and Western Tradition

3.000 Credits

An examination of Biblical literature in various English translations, with emphasis on genres and the use of Biblical materials in European and American literature, art, and music. (OC).

HUM 348 Warriors, Lovers, and Saints

3.000 Credits

Prerequisites: (COMP 106 or COMP 220 or COMP 270 or COMP 280 or CPAS 40) and (ENGL 200 or ENGL 230 or ENGL 231 or ENGL 232 or ENGL 233 or ENGL 235 or ENGL 236 or ENGL 237 or ENGL 239)

An in-depth examination of various personalities of the Middle Ages, both historical and fictional, who are distinctive for their martial prowess, their reputation as lovers, their piety, or some combination of these traits. Attention to these figures (e.g., Roland, Tristan, St. Augustine, and Abelard) will enable the class to consider important medieval norms of behavior, such as chivalry, courtly love, and Christian faith.

HUM 349 Bible In/As Literature

3.000 Credits

Prerequisites: (COMP 106 or COMP 220 or COMP 270 or COMP 280 or CPAS 40) and (ENGL 230 or ENGL 231 or ENGL 232 or ENGL 233 or ENGL 235 or ENGL 236 or ENGL 237 or ENGL 239 or ENGL 200)

This course will study selected readings from the Bible, first in regard to their own literary, historical, and cultural contents, and then in regard to their reception, interpretation, and reapplication by later literary tradition. Biblical selections may cover both the Old and New Testaments as well as Apocryphal traditions, while readings from later non-biblical texts will be drawn from various literary periods.

HUM 355 Urban Voices: France and Italy

3.000 Credits

Must be enrolled in one of the following Classes: Freshman

This course is an interdisciplinary approach to the concepts of urban development and literary, visual and cultural responses to the process of urbanization mainly in Rome and Paris. The readings will illustrate how the city shaped the writers' creativity, as well as how their works interpret urbanization.

HUM 356 Reading Urban Monstrosity

3.000 Credits

Prerequisites: (COMP 106 or CPAS 40 or COMP 220 or COMP 280 or COMP 270) and (ENGL 200 or ENGL 230 or ENGL 231 or ENGL 232 or ENGL 233 or ENGL 235 or ENGL 236 or ENGL 237 or ENGL 239)

This course questions the literary techniques and forms the English writers developed between 1660 and 1900 to characterize and imagine London to be a unified community and to counter the growing perception of London as a "monstrous city." This image of "the English-speaking City" as an uncontrollable monster may be explored in writings by Daniel Defoe, Jane Austen, Elizabeth Gaskell, Robert Louis Stevenson, Charles Dickens, Thomas Hardy, and Joseph Conrad.

HUM 357 National Cinemas

3.000 Credits

Prerequisites: FILM 240 or HUM 240 or FILM 248 or HUM 248 or ENGL 248

This course will introduce students to the national cinema of a select country. In contrasting the evolution of global cinema with the dominant genres and conventions of Hollywood, the course will enable students to critically examine non-Hollywood narratives; the interaction of various nationalist movements within the institution of cinema; and the ways in which world cinema has been inflected by various indigenous performance practices and other visual representations. (OC).

HUM 371 Philosophy in Literature

3.000 Credits

Prerequisites: PHIL 100 or PHIL 120 or PHIL 233 or PHIL 234 or PHIL 240 or PHIL 301 or PHIL 302 or PHIL 303 or PHIL 304 or PHIL 305 or PHIL 310 or PHIL 315 or PHIL 335 or PHIL 340 or PHIL 350 or PHIL 365 or PHIL 369 or PHIL 370 or PHIL 371 or PHIL 375 or PHIL 380 or PHIL 390 or PHIL 411 or PHIL 442 or PHIL 485 or PHIL 490

An exploration of philosophical problems as they are encountered in works of literature. Students electing this course must have successfully completed a previous course in philosophy or have permission of the instructor. (OC).

HUM 385 Black Cinema

3.000 Credits

The course will examine selected films from African American and African film traditions in order to analyze how their cultural production is responsive to the conditions of social oppression, economic underdevelopment, and neo-colonialism. How film traditions define "Black aesthetics" will also be discussed. (AY).

HUM 388 W. African Music: Trad.&Glob.

3.000 Credits

Prerequisites: MHIS 100 or MHIS 120 or MHIS 130 or MTHY 100 or AAAS 106 or AAAS 275 or HUM 100 or **HUM 270**

West African popular music contains a unique mixture of African, Cuban, European and American influences. With the advent of radio and recording, music that was once locally based is now part of a national and international popular music industry. This course offers an overview of modern West African music, both traditional and popular. The course begins with an introduction to traditional West African instruments and musical genres. Next, there is an exploration of the fusion of traditional African styles with European, Cuban and American styles during and after the colonial era. The course culminates with an examination of the contributions of West African musicians to the World Music scene, focusing on issues of representation and Fair Trade.

HUM 389 Nazi Germany

3.000 Credits

The course traces the development of the Nazi movement from its ideological roots to Hitler's dictatorship, 1933-1945. Political events are interpreted in their social and cultural context to provide a comprehensive view of National Socialism. (OC).

HUM 390 Topics in Humanities

1.000 TO 3.000 Credits

Three Writers, Three Worlds: The Poetry of Eliot, Cesaire and Neruda. This course offers upper division students an intensive study of the works and lives of three poets who are considered among the greatest in their respective cultures and in the world: Pablo Neruda, Aime Cesaire, and T. S. Eliot. This will be an exploration of the artistic and aesthetic sensibilities of these poets, their development as intellectuals, the experiences that shaped their worldviews, and their engagement with significant historic movements or moments of the 20th Century.

HUM 395 Japanese Art I

4.000 Credits

Japanese art from prehistoric Jomon period to end of Edo period, including painting, sculpture, architecture, and applied arts. Cultural developments on Asian mainland will be treated to provide proper placement of Japanese art within greater East Asian cultural context. Taught at the Japan Center for Michigan Universities, Hikone, Shiga Prefecture, Japan. (F).

HUM 396 Japanese Art II

4.000 Credits

Prerequisites: HUM 395

Continuation of Japanese Art I. Historical development of Japanese painting from Asuka to Edo periods. Approach both chronological and thematic in nature. Secular and religious painting will be discussed. Taught at the Japan Center for Michigan Universities, Hikone, Shiga, Prefecture, Japan. (W).

HUM 3975 Humanities Thesis/Project

6.000 Credits

Must be enrolled in one of the following classes:

The Humanities Thesis/Project is the culmination of the Humanities concentration, normally completed in the Senior year. Students will develop either a thesis or a research project designed to integrate and deepen their study of the three disciplines chosen for their concentration. The thesis will be done under the direction of one or more faculty members in their areas of concentration. The research project will normally be done in collaboration with a faculty member or with an external organization, as approved by the student's project supervisor. Restricted to students in the Humanities concentration who have completed nine hours of upper-division courses with a "Humanities" listing. (F,W,S).

HUM 398 Independent Studies in Hum

1.000 TO 3.000 Credits

Readings or analytical assignments in the humanities in accordance with the needs and interests of those enrolled and agreed upon by the student and advising instructor. (F,W).

HUM 399 Independent Studies in Hum

1.000 TO 3.000 Credits

Readings or analytical assignments in the humanities in accordance with the needs and interests of those enrolled and agreed upon by the student and advising instructor. (F,W).

HUM 409 Feminist Theories

3.000 Credits

Prerequisites: WGST 275 or WST 275 or SOC 200 or SOC 201 or PSYC 275 or SOC 275 or ANTH 275 or HUM 275 or WGST 303 or PSYC 303 or SOC 303 or ANTH 303 or HUM 303

This course examines the different perspectives that feminist theorists have offered to analyze the unequal conditions of women's and men's lives. Students taking this course will develop an understanding of how theory functions as a way to know, understand and change the world. They will also be provided with a lens for comparing the assumptions and implications of alternative theoretical perspectives. A particular emphasis of this course is on theorizing the interrelationships among gender, race, class, sexuality and nationality. Course material includes applications of feminist theory to issues such as gender identity formation; sexuality; gender, law and citizenship; women and work; and the history and politics of social movements. Students will not receive credit for both HUM 409 and HUM 509. (AY)

HUM 415 Existentialism and Its Sources

3.000 Credits

Prerequisites: PHIL 100 or PHIL 120 or PHIL 233 or PHIL 234 or PHIL 240 or PHIL 301 or PHIL 302 or PHIL 303 or PHIL 304 or PHIL 305 or PHIL 310 or PHIL 315 or PHIL 320 or PHIL 355 or PHIL 340 or PHIL 350 or PHIL 365 or PHIL 369 or PHIL 370 or PHIL 375 or PHIL 380 or PHIL 390 or PHIL 441 or PHIL 442 or PHIL 445 or PHIL 485 or PHIL 490

An exploration of existentialism through the study of literary and philosophical texts. Particular themes such as freedom, commitment, alienation, and death will be considered in an attempt to formulate an existential conception of the human condition. (OC).

HUM 433 Writing Women in Renaissance

3.000 Credits

Must be enrolled in one of the following Levels: Undergraduate

This course will be taught in English, and will focus on the influence of Italian literary models for the construction of female literary types as well as female voices in France and Italy from 1300 to about 1600. Italian authors studied include three very influential Florentines, Dante, Petrarch and Boccaccio, as well as Castiglione and Ariosto. We will read women poets, patrons, prostitutes and queens from Italy and France such as Veronica Gambara, Isabella di Morra, Vittoria Colonna, Christine de Pizan, Louise Labe, and Marguerite de Navarre. At issue will be

women's roles and women's images in city and court culture during the early modern period, and the interaction of their writings with the literary canons of Italy and France. (OC).

HUM 434 Renaissance and Baroque Rome

3.000 Credits

Prerequisites: ARTH 101 or ARTH 102 or ARTH 103 or ARTH 104 or ARTH 106

The return of the papacy in 1420 initiated the reemergence of Rome as a major cultural center. This course examines painting, sculpture, architecture, and urban planning in Rome from the 15th to the 17th century, including the work of Raphael, Michelangelo, Bernini, Borromini, and Caravaggio. Topics to be explored include the birth of Renaissance archaeology and antiquarianism; humanism and the papal curia; urban renewal and conservation; pilgrimage and sacred topography; the myth of Rome; architecture of churches, villas, and palaces; tourism and the city as spectacle. This course is structured as a seminar that is writing and research-intensive. It is an interdisciplinary course that includes readings in literature, religion, urbanism history of art and architecture, and intellectual history.

HUM 457 American Cinema

3.000 Credits

Prerequisites: ENGL 248 or HUM 248 or FILM 248 or JASS 248

This course will analyze how Hollywood as the nation's dream factory has manufactured fantasies and cultural myths that have constructed the image of American citizenship, both for Americans and non-Americans. It will establish the ideological function of Hollywood texts as providing unifying symbols for a fragmented society. (YR).

HUM 467 Script-Writing Workshop

3.000 Credits

Prerequisites: JASS 310 or COMM 310 or COMP 310 or ENGL 310

This writing intensive course will train students to compose a film script, focusing on the substance, structure, and style of an original screenplay. The course will be conducted as a workshop in which students will first study classic scripts (and films based on these) of the film-school generation of directors, then model scenes and sequences of their own scripts on the principles of the above texts, and finally, write their own respective film stories in accordance with an appropriate narrative structure and design. (YR).

HUM 4705 Black Women / Lit, Film, Music

3.000 Credits

Must be enrolled in one of the following Levels:

Undergraduate

Must be enrolled in one of the following Colleges:

Coll of Arts, Sciences&Letters

May not be enrolled in one of the following Classes:

Freshman

Prerequisites: FILM 240 or FILM 248 or FILM 385 or AAAS 239 or AAAS 275 or WST 275 or WGST 275 or WST 370 or WGST 370 or HUM 221 or HUM 222 or HUM 223 or ENGL 231 or ENGL 232 or ENGL 233 or ENGL 237 or ENGL 239 or ENGL 248 or ENGL 200 or ANTH 275 or HUM 275 or PSYC 275 or SOC 275 or ANTH 303 or HUM 303 or PSYC 303 or SOC 303 or WGST 303

This course will examine works produced by Black women authors, activists, filmmakers and musical performers in order to determine the methods they have incorporated in order to challenge and eradicate the prevailing stereotypes about Black women while advancing their own personal and racial agendas. It will also focus on the extent to which race, gender, and class have shaped the creative work of Black women. Students will be required to read, discuss, analyze and write their own responses to the works of such firebrands as author Zora Neale Hurston, activist Ida B. Wells, filmmaker Julie Dash, and singer Billie Holliday.

HUM 477 Ethnographic Film

3.000 Credits

Prerequisites: FILM 248 or ENGL 248 or HUM 248 or ANTH 101 or JASS 248

This course will analyze ethnographic films as a medium for the construction of meaning in and across cultures. It will teach students to understand how the putatively "real" content of documentary film creates a mixture of fantasy, news and "science." Covering texts as varied as National Geographic photographic layouts, traditional ethnographic films made by anthropologists, and auto-ethnographies of cultural groups such as native Americans and the Trobriand Islanders of Papua, New Guinea, the course will aim to deconstruct such oppositions as indigene vs. alien, us vs. them, and self-vs. other. Students cannot receive credit for both HUM 477 and HUM 577. (YR).

HUM 485 Internship

3.000 TO 6.000 Credits

Must be enrolled in one of the following classes:

Sophomore Sopior

Senior Junior

The Humanities Internship offers students experience in types of work available to liberal arts graduates. Regular meetings between the Humanities Internship Coordinator and the intern are required. Credit applies to the degree as a general elective and does not apply to any concentration. Maximum total hours credit: 12. Graded Pass/Fail. (F,W).

HUM 490 Topics in Humanities

3.000 TO 4.000 Credits

Examination of problems and issues in selected areas of the humanities. Title as listed in Schedule of Classes will change according to content. Course may be repeated for credit when specific topics differ. (OC).

HUM 497 Independent Studies in Hum

1.000 TO 3.000 Credits

Readings or analytical assignments in humanities in accordance with the needs and interests of those enrolled and agreed upon by student and advising instructor. (YR).

HUM 499 Directed Research

1.000 TO 3.000 Credits

See Humanities Concentration Advisor for more information.

Integrated Science

Integrated Science is a degree designed for students seeking to teach science in high schools. The sixty credit hour degree meets the State of Michigan's requirements for 12 credit hours

each in Biology, Chemistry, Earth Science and Physics. An additional 12 credit hours in any one of these areas provides the required minor in science. Students successful completing this program and passing the Michigan Test for Teacher Certification in Integrated Science (secondary) will meet the standards for the 'highly qualified' designation. This degree is only for those students who are also seeking a certificate in secondary education from the College of Education, Health, and Human Services. It is also a degree intended for students who wish to teach in smaller school districts. Students seeking employment in large districts should consider majoring in Biology, Chemistry, Earth Science or Physics and minoring in another of these 4 areas.

The degree requires that certain courses in each of the four areas be taken. The remaining hours will consist of electives from the list of courses below. Other courses may be possible. Students should consult with their advisor about course selection. In addition to regularly offered courses in Natural Sciences, students must also elect at least one of the NSCI 331, 332 or 333 courses. These latter courses will also count towards the 12 hrs for the minor.

Students will need to consult with advisors in the College of Education, Health, and Human Services in order to meet the certification requirements for teaching in secondary schools.

Integrated Science core (48 credit hours)

Biology (12 credit hours)

Biology (12 creat	nours)
BIOL 130	Introduction to Organismal and
	Environmental Biology
BIOL 140	Introduction to Molecular and Cellular
	Biology
One or more course	es from the list below to complete 12 hrs
BIOL 301	Cell Biology
BIOL 304	Ecology
BIOL 306	General Genetics
BIOL 320	Field Biology
BIOL 324	Invertebrate Zoology
BIOL 333	Plant Biology
BIOL 385	Microbiology
BIOL 419	Behavior and Evolution
NSCI 333a	Inquiry: PBL in Life Science 3 hrs
	1. 7.
Chemistry (12 cre	edit hours)
CHEM 134 or	
CHEM 144	General Chemistry I
CHEM 136 or	
CHEM 146	General Chemistry II
CHEM 225	Organic Chemistry I
One or more course	es from the list below to complete 12 hrs
CTTT1	
CHEM 226	Organic Chemistry II
CHEM 227	Organic Chemistry Lab
CHEM 303	Inorganic Chemistry I
CHEM 344	Quantitative Analysis
NSCI 331 a,b	Inquiry: Physical Science II 3 hrs
Earth Science (12	credit hours)
GEOL 118	Physical Geology
GEOG 203	Climatology
PHYS 130	Introduction to Astronomy
PHYS 131	Astronomy Lab
11115151	

GEOG 310	Economic Geography	3 hrs
GEOL 218	Historical Geology	4 hrs
GEOL 305	Introduction to GIS	4 hrs
GEOL 340	Remote Sensing	4 hrs
GEOL 342	Oceanography	
GEOL 370	Environmental Geology	3 hrs
GEOL 372	Energy Resources	
GEOL 377	Field Methods in Geology	
NSCI 332 a	Inquiry: MI Earth Science	
	1 3	

Physics (12 credit hours)

PHYS 125 or	
PHYS 150	Introductory or General Physics I 4 hrs
PHYS 126 or	
PHYS 151	Introductory or General Physics II 4 hrs

One or more courses from the list below to complete 12 hrs

PHYS 305	Contemporary Physics	3 hrs
PHYS 360	Instrumentation for Scientists	4 hrs
PHYS 401	Mechanics	3 hrs
PHYS 403	Electricity and Magnetism	3 hrs
PHYS 405	Optics	3 hrs
PHYS 406	Thermal and Statistical Physics	3 hrs
NSCI 331 a,b	Inquiry: Physical Science II	3 hrs

Minor in one of the four areas above (12 credit hours)

Students will select 12 additional upper level credit hours in one of the four areas listed above. Any upper division courses accepted for credit towards a degree in the area will meet this requirement.

Notes:

Up to three credit hours of independent study in one of the four areas listed above may be applied towards the minor.

- ^a At least one course from NSCI 331, NSCI 332, or NSCI 333 must be elected.
- ^b The credits for NSCI 331 can be attributed to both Chemistry and Physics.

International Studies

The interdisciplinary major in International Studies combines foreign language and cultural studies with a thorough grounding in a professional area such as business and management, economics, computer programming, communication, or political science. The major is designed to prepare students for careers in international relations and business or other fields with an international dimension.

The major consists of three components at the 300/3000, 400/4000 level:

- Foreign Language and Cultural Component (18 hours) devoted to foreign language, culture, and civilization (including optional study abroad)
- II. Professional Component (generally 15 hours plus lower division prerequisites) devoted to the basic skills of art administration, business and management, communications, computer and information science, economics, engineering environmental studies, natural sciences, or political science (international affairs)
- III. Cognates (nine hours) devoted to studies (and optional internship experiences) which will provide the larger international context and additional useful skills to coordinate the subjects of Components I and II.

This program is also eminently suitable as a second major for students who want to add a strong international component to their major field of interest. In this case, courses taken for their first major may also fulfill "Professional Component" requirements in International Studies; e.g., students majoring in art administration, business and management, communications, computer and information science, economics, engineering environmental studies, natural sciences, or political science (international affairs) can add International Studies as a second major by fulfilling requirements of Components I (Foreign Languages and Culture) and III (Cognates) and counting their first major as Component II (Professional)

PREREQUISITES TO THE MAJOR

For prerequisites check Components I and II under requirements for major.

MAJOR REQUIREMENTS

Component I. Foreign Language and Culture

(French, German or Spanish)

Prerequisite

Fourth-semester proficiency (202 level) or equivalent in French, German or Spanish

Language 301 and 302 Advanced Conversation and Composition I and II

Language 305 or 306 (or SPAN 310 for SPAN 305; FREN 408 for FREN 305) Language of Business.

One culture and/or civilization course: FREN 336, 337, 338, 339 GER 376, 377, 390 (by petition)

SPAN 356, 357, 358

Two additional upper-level courses in language, civilization/culture or literature

A literature course in the chosen language is highly encouraged.

Notes

Students are encouraged to spend a semester or year in one of the many approved study-abroad programs.

Students who wish to study two foreign languages within the framework of the International Studies Program should see the International Studies Director to design an acceptable balanced curriculum.

Normally students will not be permitted to count the Humanities Internship (HUM 485) as a part of the above concentration requirements. They are encouraged to elect an internship as part of their Support Studies.

Component II. Professional Studies

Option A. Business and Management

Prerequisites	
ACC 298	Principles of Accounting 3 hrs
ECON 201	Principles of Macroeconomics 3 hrs
ECON 202	Principles of Microeconomics 3 hrs
ITM 310	Info Sytems in Management 3 hrs
ITM 311	Mgmt Information Sys Lab 1 hr
MATH 104	Precalculus: Management, Life, and Social Sci
OR	
MATH 105	Pre-calculus

Required course BE 401	s	Required course	es
MKT 352	Marketing Principles and Policies 3 hrs	Pick four courses	from four different areas 12 hrs
OB 354	Behavior in Organizations 3 hrs	Asian/Non-West	ern
OD 334	Beliavior in Organizations 3 ins	ARTH 311	Art of China
Two courses from	n: 6 hrs	ARTH 312	Art of Japan
BA 330	Managerial Communication	ARTH 313	Chinese Painting
BA 400	Corporate Responsibility	ARTH 315	Early Chinese Art & Archeology
COMM 340	Professional Communication	ARTH 313	Islamic Architecture
COMM 430	International Communication	ARTH 385	Decorative Arts of the Islamic Mid East
IB 486	Seminar in International Business		
MKT 457	International Marketing	ARTH 416	Early Mod Jpn Paint & Wood Prints
WIKT 437	memational warketing	Ancient and Clas	
Option B. Comp	uter and Information Science	ARTH 319	Egyptian Art
D	16 hrs	ARTH 321	Greek Art
		ARTH 322	Roman Art
MATH 115	Calculus I	ARTH 327	Myth and Ritual in Classical Art
CIS 150	Computer Science I	ARTH 425	Women in Classical Antiquity
OR	•	ARTH 426	City of Ancient Rome
CCM 150	Computer Science I	ARTH 427	Greek Architecture
GIG 075	•	ARTH 428	Roman Art and Memory
CIS 275	Discrete Structures	Medieval	
CIS 200	Computer Science II4 hrs	ARTH 331	Early Christian and Byzantine Art
		ARTH 332	Early Medieval and Romanesque Art
Required Course	es	ARTH 333	Gothic Art and Architecture
CIS 350	Data Structures	ARTH 334	The 14 th Century
		ARTH 335	Women in Medieval Art
	CIS upper-level courses (300-level or above	Renaissance & B	
excluding CIS 39	99 and 499) 9 hrs	ARTH 341	Early Renaissance Art
0.41.00.0		ARTH 342	High Renaissance Art
Option C. Econo	omics	ARTH 343	Northern Renaissance Art
Prerequisites	13 hrs	ARTH 343 ARTH 344	Italian Renaissance Sculpture
ACC 298	Principles of Accounting	ARTH 344 ARTH 351	
ECON 201	Principles of Macroeconomics		Southern Baroque
ECON 201 ECON 202		ARTH 352	Northern Baroque
ECON 202	Principles of Microeconomics 3 hrs	ARTH 434	Ren. & Baroque Rome
MATH 104	Pre-Calculus: Management, Life and Social	ARTH 454	Rembrandt
	Science 4 hrs	Modern	
OR		ARTH 360	Art of Glass
MATH 105	Pre-Calculus	ARTH 361	American Art
		ARTH 362	Impressionism and Post-Impressionism
Required course	s 15 hrs	ARTH 363	Early Twentieth-Century Art
ECON 447	International Finance	ARTH 364	Later Twentieth-Century Art
ECON 448	International Trade	ARTH 365	Modern Architecture
0 111:0 1	6 4 611 : 21	ARTH 366	The Modern Print
	ourse from the following 3 hrs	ARTH 367	Contemporary Art
ECON 442	Economic Development	ARTH 368	American Photography
ECON 444	Economics of the Middle East	ARTH 375	Urban Design Perspectives
ECON 362	European and International Economic	ARTH 469	Collage, Montage, Assemblage
	History		
m 1100 1	C 4 C11 : (1	Also required	
	ourses from the following 6 hrs	ARTH 410	Art Administration Seminar I 3 hrs
ECON 301	Intermediate Macroeconomics	Ontion E. Politic	cal Science (International Affairs)
ECON 302	Intermediate Microeconomics	-	
ECON 305	Economic Statistics	-	
ECON 442	Economic Development	POL 201	Introduction to Comparative Government3 hrs
ECON 362	European and International Economic	ECON 201	Principles of Macroeconomics 3 hrs
	History	ECON 202	Principles of Microeconomics 3 hrs
ECON 4015	Introduction to Econometrics	One of the follow	ving courses 3 hrs
	a		
Option D. Muser	ım Studies		g: CIS 150 or CCM 150
Proroquisitos	12 4	Analysis: PO	
	Western Art before 1400 3 bro	Statistics: M.	ATH 363 or PSYC 381
ARTH 101	Western Art before 1400	Required course	es
ARTH 102	Western Art after 14003 hrs	Five of the follo	wing 3-hour courses or other Political Science
, n.mrr			early international dimension:
ARTH 103	Arts of Asia	POL 341	Canadian Politics
OR	a	POL 350	Politics of Developing Areas
ARTH 106	Survey of Western Architecture3 hrs	POL 355	Religion and Politics

POL 361	American Foreign Policy
POL 371	Problems in International Politics
POL 375	The Great Powers in Competition and
	Conflict
POL 385	Middle East Politics
POL 387	Southern Africa
POL 450	Revolution
POL 451	Peace and War
POL 471	American Foreign Policy I
POL 472	American Foreign Policy II
POL 473	International security Affairs
POL481	Terrorism and National Security
LIBS 364	The European Union

Note: Normally, students will not be permitted to count a Political Science Internship (POL 494-497) as part of the above concentration requirements. They are encouraged to elect an internship as part of their Support Studies.

Option F. Environmental Studies

Prerequisites 9 hrs
3 courses to be chosen from at least two of the following areas
ESCI 275 Introduction to Environmental Science
OR
ESCI 301 Environmental Science
ENST 201, 203, 204; GEOL 118
One computing course from the following: CIS 112 or CIS/CCM 150 (or other CIS course by petition)

Required courses.		15 hrs
	Concepts of Environmentalism	
ENST 305	Environmental Instrumentation	
	and analysis	3 hrs

Three additional courses from the following	9 hrs	following	the	from	courses	additional	Three
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ı	ee additional co	ourses from the following 9 hrs
	ENST 300	Urban Geography
	ENST 325	Environmental Politics
	ENST 330	Land Use Planning
	ENST 340	Remote Sensing
	ENST 350	Environmental Law
	ENST 351	Environmental Economics
	ENST 365	Environmental Psychology
	ENST 385	Environmental Internship
	ENST 390	Topics in Environmental Studies
	ENST 474	The Environment as an Educational
		Resource
	ENST 486	Environmental Interpretation

Note: By petition, courses in Environmental Science (some of which have additional prerequisites) may be substituted.

Option G. Natural Sciences

Required courses

Fulfillment of all requirements for a minor in any natural science program (i.e., a minimum of 12 upper-level hours plus all lowerdivision prerequisites),

OR

Fulfillment of all major requirements in any natural science program.

Option H. Engineering

Required courses

Fulfillment of all requirements for a degree in any of the Engineering disciplines will satisfy all Component II (Professional) requirements for the International Studies major.

Due to the high number of prerequisites needed to get into upper-

level engineering classes, there is no regular 15-hour (professional) component for the various engineering disciplines.

Option I. Communication

Prerequisite

SPEE 101 Principles of Speech Communication... 3 hrs

Required courses

COMM 430 International Communications................................. 3 hrs

Plus twelve hours taken in two different tracks listed below. Six hours must be taken in one of the four tracks. The remaining six hours must be taken from a second track. Of the 12 upper-level hours, three hours must be in a speech course and three hours in a Communications writing course.

*Indicates a Communications writing course.

Track A: Organizational and Professional Communication

COMM 317*	Case Studies in Technical Writing	
COMM 340*	Professional Communication	
COMM 440	Writing for the Organization	
COMM 450	Principles of Organizational Communication	
COMM 477	Professional Communication Ethics	
SPEE 400	Speech Skills for Professionals	
rack B: Journalism and Media Studies		
JASS 3015*	Advanced Reporting	

JASS 302	Media Law and Ethics
JASS 310*	Narrative Journalism
JASS 330*	Feature Writing
JASS 370	Narratives of Film and Literature

JASS 401* Interpretive Journalism JASS 402* Investigative Reporting **COMM 420** Critical Media Studies Gender and Media Studies COMM 455 COMM 481* Gender and Globalization

Track C: Speech

SPEE 320 Advanced Public Speaking	
STEE 320 Travancea Tablic Speaking	
SPEE 330 Argumentation and Debate	
SPEE 340 Theory of Persuasion	
SPEE 430 Small Group Communication	

Track D: Electronic Media

JASS 315*	Writing & Prod Electronic Media
JASS 345	Audio Production
JASS 350	Television Production
JASS 403	Issues in Cyberspace
JASS 405	Web Design

Other approved courses

1		
	COMM 300	Communication Research Methods
	COMM 390	Topics in Communication
	COMM 398	Independent Study in Communication
	COMM 464	Contemporary Rhetorical Theory
	HUM 485	Humanities Internship
	LING 375	Psychology of Language
	POL 328	Public Opinion and Pressure Groups
	POL 329	Politics and the Media
	PSYC 421	Introduction of Group Dynamics
	SPEE 399	Independent Study in Speech

Component III. Cognates

This component is designed to enhance the international dimension of the major and to coordinate the language and culture studies with professional preparation. Students will take three courses (9 hours, 300+ level) in fields such as anthropology, art history, business and management, economics, foreign cultures, history, and political science. Courses should be selected in accordance with students' particular needs. See CASL Advising website for the approved list of courses.

NOTES:

- Majors should obtain from the INST Program Director information on courses that are especially recommended for the Cognates Component.
- Students may elect the Humanities Internship (HUM 485) for a maximum of three hours and avail themselves of on-the-job experience in a business, governmental, or cultural institution. See the INST Program Director for Internship Guidelines.
- Students with appropriate background in political science may elect one of the various political science internships (POL 494-497) for a maximum of three hours.
- 3. Students may use upper-level courses, especially culture/civilization, literature, or film courses, in another foreign language for Cognate credit. Students may not use courses in the same foreign language designated as Component I for Cognates credit.
- Students may not use identical areas for both Components II and III, e.g., students with Professional Studies (Component II) in Business and Management may not select Business and Management courses for Cognates (Component III) credit.
- Students' course choice in Components II and III must include a minimum total of two courses with a clearly international dimension; a greater number is highly desirable.
- 6. Students may transfer no more than 6 upper level hours in Components I, II, and III combined.

ADVISING

International Studies majors are urged to consult with faculty in the foreign languages, management, and the other professional areas before the beginning of each semester.

Students with a high school background of three to four years study of French, German or Spanish would be able to begin their studies of the same foreign language at UM-Dearborn with the 201, 202, or even 301 foreign language class. The curriculum for such students would be more flexible than that previously described. Students with a high school foreign language background would have an additional 8-11 hours for electives in areas of their special interests.

Japanese (JPN) COURSE OFFERINGS

JPN 128 Beginning Japanese I

5.000 Credits

Japanese instruction at the beginning level. Taught at the Japan Center for Michigan Universities, Hilone, Shiga, Japan. Seven contact hours per week. (F).

JPN 129 Beginning Japanese II 5.000 Credits

Continuation of JPN 128. Taught at the Japan Center for Michigan Universities, Hikone, Shiga, Japan. Seven contact hours per week. (W).

JPN 178 Accelerated Japanese I

5.000 Credits

A demanding course that brings a student with little or no knowledge of Japanese through the beginning level into the intermediate level. Taught at the Japan Center for Michigan Universities, Hikone, Shiga, Japan. Seven contact hours per week. (F).

JPN 225 Accelerated Japanese II

5.000 Credits

Continuation of JPN 128. Taught at the Japan Center for Michigan Universities, Hikone, Shiga, Japan. Seven contact hours per week. (F).

JPN 228 Intermediate Japanese I

5.000 Credits

Japanese instruction at the intermediate level. Taught at the Japan Center for Michigan Universities, Hikone, Shiga, Japan. Seven contact hours per week. (F).

JPN 229 Intermediate Japanese II

5.000 Credits

Continuation of JPN 228. Taught at the Japan Center for Michigan Universities, Hikone, Shiga, Japan. Seven contact hours per week. (W).

JPN 230 Contemp Iss Japanese Politics

3.000 Credits

This course introduces students to modern Japanese politics. It combines a comprehensive survey of Japanese political systems and structures with an introduction to some of the key areas of controversy and debate in Japan today ranging from debates about the environment to Japan's place in the world.

JPN 231 Intro. to Japanese Lang. & Cul

3.000 Credits

During the first three weeks of the program, students participate in a beginner-level Japanese language and culture course. This course integrates classroom learning with practice of new language skills and cultural knowledge during cultural activities, field trips and other activities.

JPN 232 Comparative Health Care

3.000 Credits

This course acquaints students with Japan's unique health care system and how it compares to other models. Team-taught by professionals from Japan and the U.S., the course is augmented with a variety of site visits and guest lecturers.

JPN 233 Observ. Health Care Exp.

2.000 Credits

Coordinated and supervised by the Shiga University of Medical Science (SUMS), students will spend a week in the SUMS teaching hospital observing and learning from doctors, nurses, graduate students, researchers and professors in their field of interest. Past observational studies have included experiences in nursing, radiology, physical therapy, intensive care, surgical units and more.

JPN 395 Japanese Society & Culture I 4.000 Credits

Focused on modern Japan, the course will include Japanese geography and ethnography, with an emphasis on the Japanese idea of homogeneity. Japan's role in the international context will also be examined. Classroom work will be combined with field trips, in a writing-intensive approach. Taught at the Japan Center for Michigan Universities, Hikone, Shiga Prefecture, Japan.

JPN 396 Japanese Society & Culture II

4.000 Credits

The prehistoric and historic roots of Japan. Political economy of contemporary Japan and future directions for the country. Classroom work will be combines with field trips, in a writing-intensive approach. Taught at the Japan Center for Michigan Universities, Hikone, Shiga Prefecture, Japan.

JPN 397 Cross-Cult Busness Comm/Japan

3.000 Credits

Must be enrolled in one of the following classes:

Senior Sophomore Freshman Junior

This course is to immerse students in cross-cultural communications with in a Japanese context. The students explore the dimensions of culture through classroom/community activities, case studies, worksites, panel discussions, peer-led activities and simulations. Taught at the Japan Center for Michigan Universities.

Journalism and Screen Studies (JASS)

The Journalism and Screen Studies (JASS) discipline is dedicated to storytelling—its forms, techniques, and technologies. We offer individual courses on the genres, including news, features and photojournalism; narrative journalism/creative nonfiction; documentary and feature film. In all courses, JASS stresses convergent media, interdisciplinary, and the underlying research and writing skills that connect us as journalists, documentarians and filmmakers. The program looks at storytelling as a means to both inform and entertain.

The ability to analyze and interpret work in a specific medium and to view it within a variety of interpretive contexts provides a foundation for all forms of storytelling, from news reportage to feature films. While we offer individual courses in each medium, all courses include analytical components and assignments, and all stress the interdependency of theory and practice, form and content.

JASS makes current and emerging technologies available to all its students, emphasizing these technologies, not as ends in themselves but as tools of intellectual and creative expression.

Experiential Education (internship, Co-op, or Senior Thesis)

All JASS students are required to participate in an internship, co-op or senior thesis. There is a seminar component to both the internship and the co-op.

The senior thesis is available only to students who have prior JASS industry experience.

JOURNALISM AND SCREEN STUDIES REQUIREMENTS

Required Prerequisites: 6 hrs

JASS 2015 Fundamentals of Journalism JASS 248 Introduction to Screen Studies

Required Experiential Education HUM 485 (internship) OR LIBS 300 and 395 (co-op) OR		
JASS 497 (senior thesis)		
Required Narrative Writing Course JASS 310 Narrative Journalism		
SELECT ONE AREA OF STUDY: Option A Journalism or OPTION B Screen Studies		
OPTION A: JOURNALISM		
Required Core Area I: Media Tools		
Choose 4 courses from the following:		
JASS 303: Communication Design JASS 3015: Advanced Reporting		
JASS 307: Copy Editing		
JASS 330: Feature Writing for Magazines and Newspapers		
JASS 331: Online Research, Reporting and Writing		
JASS 345: Audio Production		
JASS 350: TV Production		
JASS 401: Interpretive Journalism JASS 402: Investigative Reporting		
JASS 402: Investigative Reporting JASS 405: New and Emerging Media		
JASS 423: Comm Design for Web & Mobile		
Required Core Area II: Genres, Modes, & Contexts of Storytelling		
Choose 3 courses from the following:		
JASS 302: Media Law and Ethics		
JASS 332: Graphic Novel		
JASS 333: Sports Reporting and Writing		
JASS 334: Science and Environmental Reporting JASS 338: Business and Automotive Reporting		
JASS 370: Narratives of Film and Literature		
JASS 380: History of Journalism		
JASS 390: Topics in Journalism and Screen Studies		
JASS 398: Independent Study		
JASS 403: Issues in Cyberspace		
JASS 406: History and Theory of Documentary JASS 413: Photojournalism and Digital Photography		
JASS 436: Memoir and Travel Writing		
JASS 497: Thesis		
COMM 430: International Communication		
HUM 485: Second Internship		
OPTION B: SCREEN STUDIES		
Required Core Area I: Media Tools		
Choose 4 courses from the following:		
JASS 303: Communication Design		
JASS 315: Writing & Producing for Digital Media JASS 331: Online Research, Reporting, and Writing		
JASS 345: Audio Production		
JASS 350: TV Production		
JASS 405: New and Emerging Media		
JASS 410: Advanced Media Production		
JASS 423: Comm Design for Web & Mobile		
JASS 467: Scriptwriting Workshop		
Required Core Area II: Genres, Modes, & Contexts of Storytelling		
Choose 3 courses from the following:		
JASS 332: Graphic Novel		
JASS 335: Multimedia and Music		
OR		
JASS 336: Film and Music JASS 357: National Cinemas		
JAMA 2.27 INAHOHAL CHICHIAS		

JASS 370: Narratives of Film and Literature

JASS 381: European Cinema

JASS 385: Black Cinema

JASS 387: Film and Feminisms

JASS 390: Topics in Journalism and Screen Studies

JASS 398: Independent Study

JASS 403: Issues in Cyberspace

JASS 406: History and Theory of Documentary

JASS 413: Photojournalism and Digital Photography

JASS 436: Memoir and Travel Writing

JASS 457: American Cinema

JASS 477: Ethnographic Film

JASS 497: Thesis

HUM 485: Second Internship

Notes

- 1. A maximum of 63 hrs of JASS may count toward the 120 hrs required for graduation.
- At least 15 of the 27 upper level hours in the COMM major must be elected at UM-D.
- The Thesis option (JASS 497) is only available to students who have significant professional experience in their area of specialization within Journalism or Screen Studies and requires the approval of the JASS faculty advisor.
- Students wishing to undertake an independent study (JASS 398) must first secure the approval of the JASS faculty member willing to serve as advisor
- 5. A maximum of 6 credits of internship (HUM 485) or co-op (LIBS 300, 395, 396) may count toward the major (3 credits to fulfill the experiential education requirement and 3 credits as a second internship/co-op taken in a term separate from the first internship/co-op and may apply toward the Genres, Modes, and Contexts area II.

MINOR OR BGS/LIBS AREA OF FOCUS

A minor or area of focus in Journalism and Screen Studies consists of fifteen hours of approved upper-level courses. At least two of the courses (6 credits) must be in the "Media Tools" area and at least two courses (6 credits) must be in the "Genres, Modes and Contexts of Storytelling" area. The remaining course (3 credits) may be any 300+ level JASS course:

Prerequisites: JASS 2015 or 248

Media Tools - Choose two from:

JASS 303, 307, 315, 330, 331, 345, 350, 3015, 401, 402, 405, 410, 423, 467

Genres, Modes, and Contexts of Storytelling - Choose two from:

JASS 302, 332, 333, 334, 335 **or** 336, 338, 357, 370, 380, 381, 385, 387, 390, 398, 403, 406, 413, 436, 457, 477; COMM 430

3 credit hours of HUM 485 (internship) may count toward the 15 credits in the JASS minor.

Journalism and Screen Studies (JASS)

COURSE OFFERINGS

JASS 2015 Fundamentals of Journalism

3.000 Credits

Prerequisites: COMP 106 or COMP 220 or COMP 270 or CPAS 40 or COMP 280

Study and practice in newspaper reporting and news gathering, interview techniques, and basic newswriting skills. Students will also discuss libel law, ethics, and the use of the Freedom of Information Act. (YR).

JASS 240 Film and Society

3.000 Credits

A survey of the major genres of film, chiefly in historical and political perspective, but also in the light of important intellectual frameworks (e.g., feminism, psychoanalytical theory). The films selected, both Western and non-Western, will be examined both for their visual codes of meaning and for their wider role in developing a powerful social language in various cultural contexts. (YR).

JASS 248 Introduction to Screen Studies

3.000 Credits

This course will introduce students to the development of world cinema by integrating the aesthetics of film with its technology, and its social and economic milieu. It will train the students in analyzing the formalist qualities of the medium, and in understanding the evolution of its various genres and styles. (YR)

JASS 3015 Advanced Reporting

3.000 Credits

Prerequisites: COMM 2015 or JASS 2015

Advanced study and practice in news reporting and writing. Students will gain experience with in-depth reporting through coverage of developing news stories. Longer articles of publishable quality are required. (OC).

JASS 302 Media Law and Ethics

3.000 Credits

The basis of reportorial journalism is its foundation in the First Amendment. This course examines the legal restrictions and freedoms governing print media and explores the ethical responsibilities of print journalists. Specific topics covered include First Amendment law, the clear and present danger standard, defamation and libel, privacy, obscenity, free press/fair trial, access, shield laws, and journalism ethics.

JASS 303 Communication Design

3.000 Credits

May not be enrolled in one of the following Classes:

Graduate

Undergraduate NCFD

Post-baccalaureate NCFD

Specialist

Undergrad Certification only

Doctorate

Post-baccalaureate Cert only

This course covers both theory and practice of design as it relates to the field of mass communications and media production. Through classroom and computer exercises, students become familiar with a variety of tools and techniques for planning and executing design projects across platforms. This includes exposure to digital imaging technology and desktop publishing software. Students may not receive credit for both JASS 303 and JASS 250. (F,W,S).

JASS 307 Copy Editing

3.000 Credits

Prerequisites: COMP 106 or COMP 220 or COMP 270 or CPAS 40 or COMP 280

Course covers manuscript and electronic editing of news and feature stories, editing for libel and taste, fact-checking, writing headlines and captions, and use of reference books. Includes a review of grammar and work usage, punctuation, spelling, and style.

JASS 310 Narrative Journalism

3.000 Credits

Prerequisites: COMP 106 or COMP 220 or COMP 270 or CPAS 40 or COMP 280

Students learn to identify, understand and use the techniques of fiction in the service of nonfiction material. While studying the texts as literature, students are also encouraged to view them as models for writing. Assignments include the writing and revising of articles, based on research and interviews, and writing in story form, drawing on literary techniques. (YR).

JASS 315 Writng&Prod Electronic Media

3.000 Credits

Prerequisites: COMP 106 or COMP 220 or COMP 270 or CPAS 40 or COMP 280

This course focuses on the basics of electronic journalism, including broadcast concepts, terminology, writing, producing and scripting. The emphasis will be on building solid writing skills and applying them to different electronic media, including broadcast news, commercial, corporate, multimedia and webbased formats. Students will be exposed to a variety of strategies for developing ideas, researching them, creating copy and following projects through the production and evaluation process. (AY).

JASS 330 Feature Writing

3.000 Credits

Prerequisites: COMP 106 or COMP 220 or COMP 270 or CPAS 40 or COMP 280

An introduction to the writing of feature stories for newspapers and magazines. Students study methods of gathering information and of preparing a manuscript for publication. (AY).

JASS 331 Online Reprting, Rsrch, Writing

3.000 Credits

Prerequisites: COMP 106 or COMP 220 or COMP 270 or CPAS 40 or COMP 280

Course introduces the technical, social, legal and ethical practice of online research, focusing specifically on reporting (i.e. research and interview) skills required by journalists and others. Students use new media technology to generate ideas, to research subjects, and to develop general-audience writing projects in their areas of interest. Course covers the use of Web search engines, directories and databases; finding sources and interviewing people online; evaluating the credibility of online sources and information; using Lexis-Nexis to access archives and public records; and using spreadsheet and database programs.

JASS 332 Creating the Graphic Novel

3.000 Credits

Must be enrolled in one of the following classes:

Senior Sophomore Freshman Junior

Prerequisites: ART 202 or ART 206

This course focuses on the creation of an original graphic novel from inception to fully developed story. Students work on character, plot development, dialogue, drawing style, and layout planning, and are encouraged to introduce any cross-disciplinary techniques such as digital applications when appropriate. Lectures and readings consider contemporary media.

JASS 333 Sports Reporting and Writing

3.000 Credits

Must be enrolled in one of the following classes:

Senior Sophomore Freshman Junior

Prerequisites: JASS 2015

In this course, students not only learn how to write a sports story and report it across a variety of media, they also examine and write about relevant issues, from race and gender to sportsmanship and hero worship. In addition to assigned class readings, students read and report on one sports-related film and one book, chosen from a list of classics posted on CTools, and write a final paper in which they address an issue relevant to sports reporting. Local and national practitioners contribute their thoughts on a variety of subjects throughout the term.

JASS 334 Science and Environmental Jour

3.000 Credits

Must be enrolled in one of the following classes:

Senior Sophomore Freshman Junior

Prerequisites: JASS 2105

This course introduces the practice and theory of science and environmental journalism. Students report and write short science and environmental articles across a variety of media. They also examine the history, ethics and politics of environmental and science journalism and isolate a relevant issue as the focus of a research project, which will later generate a longer science/environment feature story. After instructor critique, students revise all work and submit a final ePortfolio.

JASS 335 Multimedia and Music

3.000 Credits

Prerequisites: MTHY 100 or MTHY 101 or MTHY 102 or MHIS 100 or MHIS 120 or MHIS 130 or MHIS 150

In this course, students will explore case studies of music created, performed, and distributed in combination with other media from the 1960s to the present. Multimedia is understood as any context in which several media are integrated, but particular focus will be paid to technological and creative innovations (such as video games, computers, and phones). The use of music will be considered in such media as film and television, multimedia performance and installation art, and international developments in multimedia production and distribution.

JASS 336 Film and Music

3.000 Credits

Prerequisites: MHIS 100 or MHIS 120 or MHIS 130

In this course, students will be introduced to the varieties of music used in film from c. 1900 to the present. Topics covered include a basic introduction to the musical features of Western European dramatic music; the role of music in the early decades of the 20th century; the growth of film and musical sound in the "classic era" of Hollywood film; the use of music in specific genres such as film noir, science-fiction, epic, and musicals; and the use of popular song in film. Prerequisite: previous completion of MHIS 100, 120, 130, or by permission of the instructor.

JASS 338 Business/Automotive Reporting

3.000 Credits

Prerequisites: JASS 2015

This course covers two inter-related areas: finance and automotive journalism. Students learn how to cover the economy and business community, focusing on areas such as Wall Street, economic indicators, stocks and bonds. Since the University of Michigan-Dearborn is located in the heart of the world automotive industry, the course also emphasizes the skills necessary for a career in automotive journalism, specifically how to read and report auto-related financial, environmental, safety, labor, finance and manufacturing documents. An introductory course in Economics is recommended.

JASS 345 Audio Production

3.000 Credits

Prerequisites: ENGL 248 or HUM 248 or JASS 248 or FILM 248

This hands-on course will introduce students to the basic theories of audio and audio program production, including the fundamentals of digital audio and studio and remote recording. The course is designed to instill upon students the importance of sound in the electronic media and how its use or misuse can enhance or detract from media productions. Readings, lectures and projects are designed to teach students how to discern good audio from bad and how to avoid pitfalls media producers and directors commonly make. Through the practical application of audio concepts in the radio laboratory and through critiques of radio projects and programs, students will gain the insight and experience they will need to successfully design and execute audio strategies for the electronic media.

JASS 350 Television Production

3.000 Credits

Prerequisites: (ENGL 248 or HUM 248 or JASS 248 or FILM 248)

Television production skills taught in the context of the history, aesthetics, and technology of television. Purpose of the course is to provide students with a working knowledge and critical awareness of the medium through classroom instruction and studio training. Course counts toward minor in Communications. (YR).

JASS 357 National Cinemas

3.000 Credits

Prerequisites: HUM 240 or JASS 240 or FILM 240 or ENGL 248 or HUM 248 or JASS 248 or FILM 248

This course will introduce students to the national cinemas of a select country In contrasting the evolution of cinema in the East, with the dominant genres and conventions of Hollywood, the course will enable students to critically examine non-Hollywood narratives; the interaction of various nationalist movements within the institution of cinema; and the ways in which world cinema has been inflected by various indigenous performance practices and other visual representations. (OC).

JASS 370 Narratives of Film and Lit

3.000 Credits

Prerequisites: ENGL 248 or HUM 248 or JASS 248 or FILM 248

Explores the narrative conventions of literary and filmic fictions in a cultural, historical and psycho-analytical context. The course

goes beyond a discussion of the relative merits of novels and their respective film adaptations and examines the more complex interchanges between the two narrative forms; the ideological function of narrative in contemporary society; and the effect of the medium of a fictional text on the reader/viewer. (OC).

JASS 380 History of American Journalism

3.000 Credits

Prerequisites: COMP 106 or COMP 220 or COMP 270 or CPAS 40 or COMP 280

This course surveys the history of American journalism from the Colonial period to the present. Topics explored include the development of print journalism, the rise of the reading public, the growth of advertising, photojournalism, and the tabloid press, and the evolution of electronic journalism from radio and television through the computer age. (YR).

JASS 381 Postwar European Cinema

3.000 Credits

Must be enrolled in one of the following classes:

Senior

Sophomore

Freshman

Junior

The course will concentrate on a series of films from various European countries with a focus on the socio-political issues, historical events and cultural preoccupations that have defined and also challenged European societies from WWII to the present. Zeroing in on the construction of European identities, the course will analyze and compare modes of narrating national, class, racial, sexual and social differences in different European nations. Themes such as memories of war and the Holocaust, new conflicts, class, immigration, women's rights, gender, and East-West relations will be addressed. The course will thus privilege a cinema that offers a "rcit," a story. Particular attention will be given to discourses on otherness and on the ways in which film culture has reflected, reinforced. reshaped and, in some instances, contested Europe's past and current dominant ideologies, and identities. Readings by cultural historians and analysts will provide the context for an understanding of the films. The course will conclude with a discussion of the possible existence of a specific postwar European Cinema.

JASS 385 Black Cinema

3.000 Credits

This course will examine selected films from African American and African film traditions in order to analyze how their cultural production is responsive to the conditions of social oppression, economic underdevelopment, and neo-colonialism. How film traditions define "Black aesthetics" will also be discussed. (AY).

JASS 387 Film and Feminisms

3.000 Credits

Prerequisites: HUM 240 or JASS 240 or ENGL 248 or HUM 248 or JASS 248 or FILM 240 or FILM 248 or WGST 275 or WGST 303 or ANTH 275 or ANTH 303 or PSYC 275 or PSYC 303 or SOC 275 or SOC 303 or WST 275 or HUM 275 or HUM 303

This course will establish the role of mainstream cinema in the construction of female gender roles in contemporary Western society. The course will engage with debates in feminist film theory and the role of avant-garde and non-Western cinema in challenging the gender ideology of mainstream cinema. (AY).

JASS 390 Topics in JASS

3.000 Credits

Must be enrolled in one of the following classes:

Senior

Junior

Examination of problems, issues, technology and critical issues in advanced subject areas in journalism and screen studies. Title as listed in schedule of classes changes according to content. Course may be repeated for credit when specific topics differ.

JASS 398 Independent Study in JASS

1.000 TO 3.000 Credits

Must be enrolled in one of the following Colleges:

Coll of Arts, Sciences&Letters

Must be enrolled in one of the following classes:

Senior

Junior

Readings, supervised practice or analytical assignments in Journalism and Screen Studies, determined in accordance with the needs and interests of those enrolled. May count toward JASS minor.

JASS 401 Interpretive Journalism

3.000 Credits

A study in the reading and writing of newspaper columns, editorials and reviews. Course prepares students to write newspaper columns as well as reviews and interpretive pieces on the arts. It examines current writing on literature, drama, cinema, graphic arts and music, and includes a study of the newspaper/magazine column.

JASS 402 Investigative Reporting

3.000 Credits

Prerequisites: COMM 2015 or JASS 2015

A course in investigating a subject and writing a publishable story. Course covers the rudiments of investigative reporting: preliminary research, story selection, investigative strategies and resources, interviewing, and evaluation of material. Examines the history and current status of investigative reporting, including its ethics and politics. Students write and edit several articles and focus on two longer investigative pieces. (YR).

JASS 403 Issues in Cyberspace

3.000 Credits

May not be enrolled in one of the following Classes: Graduate

This course will explore some of the current social, political, legal, and technological issues associated with the use of new media technology to move ideas and information in a democratic society. Examples of areas to be explored include the Internet and World Wide Web, privacy, the future of the mass audience, and the meaning of the First Amendment in the 21st Century. Students cannot receive credit for both COMM 403 and COMM 503. (OC)

JASS 405 New and Emerging Media

3.000 Credits

Prerequisites: JASS 250 or COMM 250 or JASS 303

This workshop-oriented course focuses on expanding conceptual and technical skills in emerging forms of media storytelling in an online context, including interactive narrative, collage, database cinema, eBooks, and apps for mobile devices. The course integrates a range of software and interfaces with an emphasis on the conceptual and creative applications of these tools. Students may not receive credit for both JASS 405 and

COMM 405. Students who have taken JASS 405 under the course title Web Designare not allowed to take the course for credit again under the title New and Emerging Media.

JASS 406 History&Theory of Documentary

3.000 Credits

Must be enrolled in one of the following classes:

Sophomore

Senior

Junior

Prerequisites: COMP 106 or COMP 220 or COMP 270 or CPAS 40 or COMP 280

This course surveys the history of European documentary and explores its ethical, legal and economic issues. Students study documentary's central moments, forms and artists; the changing theoretical approaches to documentary making; and the range of documentary purposes (informational, educational, propagandistic, entertainment). The course also provides historical and theoretical background for those students who wish to pursue their interest in documentary in the script-writing and production courses also offered in the Journalism and Screen Studies Discipline.

JASS 410 Advanced Media Production

3.000 Credits

Prerequisites: JASS 350 or COMM 350 or JASS 405 or JASS 406 or JASS 345

The course covers advanced concepts in media production and provides a pre-professional opportunity to direct. Elements include scripting and organization, producing, and post-production editing techniques. Emphasis is placed on individual and small group work in both field and studio settings, leading to the creation of a professional broadcast-quality portfolio program or segment. May be repeated once for credit.

JASS 413 Photojournalism

3.000 Credits

Must be enrolled in one of the following classes:

Sophomore

Senior

Junior

Prerequisites: COMP 106 or COMP 220 or COMP 270 or CPAS 40 or COMP 280

A hands-on digital imaging course in which students learn the basics of photojournalism and photography, including subject selection, composition, cropping, retouching and caption writing.

JASS 423 Comm Design for Web & Mobile

3.000 Credits

Prerequisites: JASS 250 or JASS 303

An introduction to the technology, strategies, and outcomes that drive design development for mobile-friendly web sites and graphics. Instruction in the use of the concepts, design principles and technology to create a working mobile website.

JASS 436 Memoir and Travel Writing

3.000 Credits

Prerequisites: COMP 106 or COMP 220 or COMP 270 or CPAS 40 or COMP 280

A course in narrative non-fiction that focuses on memoir and travel writing. Reading involves several books as well as classic essay-length examples. Assignments include both short analytical papers and the writing and revising of three original articles, based on research, interviews, memory, and observation, and drawing on literary techniques. (YR).

JASS 457 American Cinema

3.000 Credits

Prerequisites: ENGL 248 or HUM 248 or JASS 248 or

FILM 248

This course will analyze how Hollywood as the nation's dream factory has manufactured fantasies and cultural myths that have constructed the image of American citizenship, both for Americans and non-Americans. It will establish the ideological function of Hollywood texts as providing unifying symbols for a fragmented society. (YR).

JASS 467 Script-Writing Workshop

3.000 Credits

Prerequisites: JASS 310 or COMP 310 or ENGL 310 or COMM 310 $\,$

This writing intensive course will train students to compose a film script, focusing on the substance, structure, and style of an original screenplay. The course will be conducted as a workshop in which students will first study classic scripts (and films based on these) of the film- school generation of directors, then model scenes and sequences of their own scripts on the principles of the above texts, and finally, write their own respective film stories in accordance with an appropriate narrative structure and design. (YR).

JASS 477 Ethnographic Film

3.000 Credits

Prerequisites: ENGL 248 or HUM 248 or JASS 248 or ANTH 101 or FILM 248

This course will analyze ethnographic films as a medium for the construction of meaning in and across cultures. It will teach students to understand how the putatively "real" content of documentary film creates a mixture of fantasy, news and "science." Covering texts as varied as National Geographic photographic layouts, traditional ethnographic films made by anthropologists, and auto-ethnographies of cultural groups such as Native Americans and the Trobriand Islanders of Papua, New Guinea, the course will aim to deconstruct such oppositions as indigene vs. alien, us vs. them, and self-vs. other. Students cannot receive credit for both FILM 477 and FILM 577. (AY).

JASS 497 JASS Thesis

3.000 Credits

Must be enrolled in one of the following classes:

Senior Junior

Prerequisites: JASS 2015 and JASS 248 and JASS 310

A thesis project that is the culmination of the Journalism and Screen Studies major. Students choose the project area and write a thesis (40-50 pages) under the direction of a JASS faculty member. The thesis option is available only to students with substantial practical experience in the field of journalism or screen studies, and requires the approval of the JASS faculty. This course is available only to Junior/Senior students majoring in the JASS program.

Latin (LAT)

(not a field of concentration)
COURSE OFFERINGS

LAT 101 Beginning Latin I

4.000 Credits

An introduction to reading and translating Latin. The strong influence of Latin on the formation and meaning of English (as well as French, Spanish, and Italian) will be used to illuminate the

importance of Latin for understanding western languages and thought. Literature appropriate for the level will be read. (F).

LAT 102 Beginning Latin II

4.000 Credits

Prerequisites: LAT 101

A sequel to Beginning Latin I. Literature appropriate for the level will be read. (W).

Law and Society

MINOR OR BGS/LIBS AREA OF FOCUS ONLY

Law and Society is a program of study that is intended for the understanding of law in its historical and social contexts. Through study of the evolution of law from ancient societies to our contemporary day, students are encouraged to see law as a dynamic institution shaped by historical forces and social values. Substantively, emphasis is given to the study of such contemporary legal issues as human freedoms and civil rights, social responsibility and the treatment of criminals, constitutional interpretation and the enunciation of citizen rights.

The Law and Society field takes up studies of the legal environment of various institutional sectors in our society. The health care, the family, and mental health systems all have detailed legal environments setting standards for professional conduct, responsibilities of various participants and enabling legislation of various kinds. Other fields, such as communications media, business enterprises, and the military also have fully elaborated legal environments.

In addition to its role as a source of research into the field of Law and Society, the Program offers an undergraduate CASL-wide minor. The Law and Society Minor is structured as follows:

Two prerequisites

one course from

PHIL 233 Critical Thinking PHIL 234 Symbolic Logic PHIL 350 Symbolic Logic

AND

PHIL 240 Ethics

Core course

SOC 453 Sociology of Law

Four Track courses: two from group A and two from group B

Group A: Legal environments of industries and professions COMM 302, 403, 415; ENST 350; PHIL 442; POL 364; SOC 454, 456, 457; PDED 425; ACC 360; HRM 408; LE 452, 453.

Group B: Structure and process of legal institutions ECON 325, 385, 433, 4021, 4085; PHIL 335, 445; POL 304, 312, 315, 316, 362, 363, 413, 414, 415, 4165; SOC 471.

For more information, students and faculty should contact the CASL College-Wide Programs office, 2036 CB, (313) 593-4925 or visit the Program website at casl.umd.umich.edu/591101/.

Leadership & Communication in Organizations

MINOR OR BGS/LIBS AREA OF FOCUS ONLY15 credits of upper level course work. Include courses from three areas as indicated:

A. Communication Skills – choose two courses from: COMM 317, 340, 430, 440, 450, 460; SPEE 310, 320, 330, 340, 400

- B. Leadership Studies Choose one course from: HIST 3651; COMM 477; BA 330; PSYC 422
- C. Dimensions of Organizational Behavior choose two courses from: OB 354; MKT 360; PSYC 320, 321, 322, 325, 363, 3955, 405,4305, 431, 464, 4725; SOC 403, 441, 442, 460, 483

Liberal Studies

Whereas to major in a traditional field of study implies, among other things, that a student must take at least 24 upper-level credit hours in the field of study chosen and at least six upper-division credit hours of cognates in related fields, a major in Liberal Studies permits the student to choose three areas of focus or concentrations which, together, form a coherent and academically sound program that best responds to the interests, needs, and goals of the student.

This program is designed primarily for students who wish to receive a AB or BS but who prefer a program that offers a higher degree of flexibility than the more structured standard concentrations. The AB in Liberal Studies may also appeal to pre-law and pre-business students.

To meet the requirements for this program, a student must complete at least 48 credit hours in courses numbered 300 or above, of which at least 30 credit hours must be completed in CASL. A student must also choose and officially declare three areas of focus, after consultation with and approval of an adviser at the CASL Office of Advising and Student Records, Room 1039, CB. At least two areas of focus must be from CASL. No credit hours transferred from a community college and no lower-division courses from a four-year institution may be included in the credit hours required for any area of focus. Courses used to satisfy distribution requirements may not be employed to satisfy upper-level area of focus requirements. Further, a student may not select a course on a Pass/Fail basis to fulfill the initial 12 or 15 credit hours in any of the three areas of focus.

For additional information regarding the Liberal Studies major, please contact the CASL Advising Office, 1039 CB.

Note: There may be prerequisites for the upper-level courses. This is especially true for areas of focus in the sciences, mathematics, computer science, and engineering. Consult course descriptions.

The following courses, though offered under the rubric of Liberal Studies, cannot be used to fulfill any of the requirements for the three areas of focus:

Liberal Studies (LIBS) COURSE OFFERINGS

LIBS 101 Foundatns of Academic Success

1. 000 Credits

This course is intended to introduce students to the nature and purpose of higher education, and of academic inquiry. Academic planning, information literacy, bibliographic search techniques and the evaluation of electronic information are discussed.

LIBS 101 Foundatns of Academic Success 1.000 Credits

This course is intended to introduce students to the nature and purpose of higher education, and of academic inquiry. Academic planning, information literacy, bibliographic search techniques and the evaluation of electronic information are discussed.

LIBS 111 To Infinity and Beyond

3.000 Credits

Must be enrolled in one of the following classes:

Freshman

Co-requisites: COMP 105

In this seminar we explore the emergence and evolution of concepts surrounding zero, infinity, and dimension. These mathematical topics are introduced in a historical context as the by-products of human enterprise. Students study foundations of number systems, investigate objects with fractional dimensions, gain an understanding of logic as it applied to proof methodology, and develop visualization skills, creating a tangible experience with abstract mathematical objects and concepts. The supporting material is drawn from selected readings, as well as films and videos. (F).

LIBS 112 Car Culture

3.000 Credits

Must be enrolled in one of the following classes:

Freshman

Co-requisites: COMP 105

A study of the impact of the automobile on contemporary American culture and society using the concepts and approaches of the multidisciplinary field of Science and Technology Studies. The course examines the social contexts and consequences of how cars are designed, assembled, marketed, driven, and regulated; their role in shaping individual, group, and national identity; and their place in the American imagination. (F).

LIBS 113 The World in a Grain of Sand

3.000 Credits

Must be enrolled in one of the following classes:

Freshman

Co-requisites: COMP 105 COMP 106

From a single artifact (an object or a text), students will learn to build an understanding of an entire culture in a given historical moment. First by analyzing the artifact and then by building a larger context in which to interpret the significance of that artifact, students will also build their own academic community. By the end of the course, each student will have mastered the use of all library research resources and have developed a specific expertise in an area of research related to the artifact. By the end of the course, the class will have organized its own academic conference on the artifact in which they will share their research and insights. The professor will be a specialist in the area from which the artifact is selected and will guide you in your mastery of research skills and acculturation to academic life. (F).

LIBS 114 The Roots of American Activism

3.000 Credits

Co-requisites: COMP 105

This course examines the history, rhetoric, and social context of American citizen activism in the nineteenth and early twentieth centuries. Topics will include African American abolitionist and civil rights activism, women's suffrage, the home economics movement, the labor movement, educational reform, and student political involvement on college campuses. We will also pay special attention to how these movements played out locally. Our goal throughout will be to understand how ordinary citizens used language to effect social change - and how we today might do the same. (F)

LIBS 115 Shakespeare: Stage/Page/Screen

3.000 Credits

Must be enrolled in one of the following classes:

Freshman

Co-requisites: COMP 105

This course will expand the study of Shakespeare from its traditional literary medium to its heritage of performance on a variety of stages and to its adaptation to the mediums of film and television. Elucidating Marshall McLuhan's axiom - "the medium is the message" - the course will enable students to understand how a text is inflected by its medium. Students in this seminar are required to participate in a class trip to the Stratford Shakespeare Festival in Ontario, Canada. Costs for the tickets and lodging will be partially subsidized. Likely student costs: food and transportation. For further information contact the instructor. (F)

LIBS 116 Fast Food Nation

3.000 Credits

Must be enrolled in one of the following classes:

Freshman

Co-requisites: COMP 105

This course explores the role of fast food in our society. Fast food is something we take for granted, yet it has helped shape our culture as well as our economy and is a key symbol of the American lifestyle to the rest of the world. In this course we will examine the history of the fast food industry, the nature of work in the fast food sector, the global reach of corporations like McDonald's and Starbucks, the environmental impact of food production, and the rise of the "slow food" movement. The course will introduce students to perspectives from the social and behavioral sciences including economics, sociology, anthropology, environmental studies, science and technology studies, politics, and history. (F)

LIBS 117 The Conscious Brain

3.000 Credits

Must be enrolled in one of the following classes:

Freshman

Co-requisites: COMP 105

This course will use visual perception and its organization in the brain and related phenomena such as attention and memory as tools to explore the issue of where in the brain consciousness is located, and what the necessary and sufficient criteria for consciousness are. A central premise is that consciousness, formerly the sole province of philosophers, can now be studied empirically using scientific methodologies. (F)

LIBS 118 Gender & Relationships

3.000 Credits

Must be enrolled in one of the following classes:

Freshman

Co-requisites: COMP 105

This course will focus on gender and close relationships. We will examine how pop culture (including popular movies and self-help psychology books) tend to construct gender as a naturally occurring dichotomy, emphasizing the "vast" differences between women and men. For example, John Gray's relationship self-help book titled "Men are from Mars, Women are from Venus" has sold millions of copies and has helped to perpetuate the idea that women and men are so different as to be considered different species. The course will introduce students to perspectives from various disciplines including psychology, sociology, communications and gender studies. Using theory and scientific research from these various disciplines, students will learn to critically examine the ways that gender and close relationships are portrayed in our society.

LIBS 119 Culture Wars

3.000 Credits

Must be enrolled in one of the following classes:

Freshman

Co-requisites: COMP 105

This course explores the aspects of the conflict between religion and science in America using the Scopes Trial of 1925 as the primary case study. The trial centered on the teaching of certain ideas generally thought to be part of Charles Darwin's theory of evolution via natural selection. These claims will be evaluated by examining the science of Darwin's "On the Origin of Species". The political debate will be examined first in the context of Thomas Jefferson's writings on democratic policy and science, and then from the perspective of early populist and fundamentalist reaction to Darwinism. The subsequent development of Darwinism patterns in American social, ethical, and literary thought will also be explored, as will the rise of the modern creationist movement. The course will conclude with an analysis of the political, educational, and scientific response to that movement.

LIBS 120 World War II and the Cinema

3.000 Credits

Must be enrolled in one of the following classes:

Freshman

Co-requisites: COMP 105

This course seeks to explore how the Second World War has been depicted to American audiences during the previous half century. It focuses on ten major films. The first half of the course examines a series of themes uppermost in the minds of directors during the conflict; the second half of the course will explore how the legacy of the war has been remembered during the previous half century.

LIBS 121 East Meets West: Global Conn

3 000 Credits

Must be enrolled in one of the following classes:

Freshman

Co-requisites: COMP 105

This seminar will introduce students to the following: (1) key primary sources for China and East Asia that focus on global interconnections and exchanges; (2) key theoretical issues tied to thinking about global interconnections; and (3) suggested further readings in secondary sources. Upon completion, students will be familiar with some of the basic ways to think and to find out about exchanges and interactions in world history, and to incorporate Chinese and East Asian materials (in translation) into their research.

LIBS 122 Writing about College Life

3.000 Credits

Must be enrolled in one of the following classes:

Freshman

Co-requisites: COMP 105

In this class we will look at how our own experiences conform to or challenge popular myths and narratives about the historical and contemporary college experience in America. We will study how college life is constructed in novels, newspapers, diaries, letters, personal interviews, essays, textbooks and films. While reading and writing about the college experience, we will address the intersection between fact and fiction and explore how print and visual representations might shape our perceptions of our world. Overall, students' own stories as college students will be crucial to the class's investigation, assessment and production of college life narratives.

LIBS 123 Cognitive Science Fiction

3.000 Credits

Must be enrolled in one of the following classes:

Freshman

Co-requisites: COMP 105

What does it mean to be human? Can machines fall in love? Can our consciousness be transmitted to another human being or substance? Is language fundamental to communication of thought? If so how would communication with other life forms proceed? These questions have traditionally been the domain of science fiction. However, given advances in technology, scientists are asking these questions with increasing frequency. This course explores the interplay between science and fiction. Each week we will examine a particular question through both science and fiction (book, film, etc.) and see to what extent the science coincides with, or deviates from, the fiction. There will be a heavy emphasis on topics in cognitive science - an interdisciplinary science of mind and intelligence encompassing fields such as cognitive psychology, philosophy, linguistics, neuroscience and artificial intelligence.

LIBS 124 Wireless World

3.000 Credits

Co-requisites: COMP 105

An examination of the impact of current Internet-based services on such fields as journalism, publishing and research. By critically examining such phenomena as blogs, social networking systems (MySpace and Facebook), and Wikipedia, students will develop critical literacy and become more effective readers, writers and researchers.

LIBS 125 Apathy 2 Action: Amer Citznshp

3.000 Credits

Must be enrolled in one of the following Colleges:

Coll of Arts, Sciences&Letters

Must be enrolled in one of the following classes:

Freshman

Co-requisites: COMP 105

An examination of American citizenship as understood and practices in a variety of arenas of public life. We will examine both historical and contemporary perspectives on citizenship, including the ways in which public discourse helps situate Americans' understanding of the idea of citizenship, and by extension, the practice of democracy. In addition to exploring citizenship as it operates in the political arena and civil society, we will emphasize the role of higher education in nurturing active citizenship. This seminar includes an academic service learning requirement. Academic service learning is an educational method that integrates volunteer community service with course material to enhance the learning objectives of the course. Students will be expected to participate in a carefullychosen and instructor-approved civic activity volunteerism, democratic participation, public advocacy) that will highlight different models of citizenship in practice.

LIBS 126 Anthropologists on Campus

3.000 Credits

Must be enrolled in one of the following Colleges:

Coll of Arts, Sciences&Letters

Must be enrolled in one of the following classes:

Freshman

Co-requisites: COMP 105

Anthropology professors have studied the lives of university students (My Freshman Year; Coming of Age in New Jersey). This course turns the tables, inviting new students to conduct field work on the "hidden lives" of professors, university staff

and other students. Through guided practice in ethnographic skills-interviewing and participant-observation-students will come to understand what culture means to anthropologists while exploring the multiple cultures of UM-Dearborn and gaining insights on meanings and functions of higher education.

LIBS 127 Oceans of Data

3.000 Credits

Must be enrolled in one of the following Colleges:

Coll of Arts, Sciences&Letters

Must be enrolled in one of the following classes:

Freshman

Co-requisites: COMP 105

This course will pursue two distinct themes. The first is the triumphs of modern statistical methodology in science during the last hundred years. Definitive studies such as the Salk Vaccine Field Trials and those involving the smoking and lung cancer controversy will be examined in depth. The second theme is the awareness and use of public access databases, which are also used by researchers and policymakers. These include the National Health and Nutrition Examination Survey (NHANES), the Surveillance Epidemiology and End Results (SEER) database of cancer registries, the Statistical Abstract of the United States, and SearchSystems.net Public Records Directory. The course will involve a number of readings and the interpretations of data that will form the basis of classroom discussion and written reports.

LIBS 128 Exploring Race and Identity

3.000 Credits

Must be enrolled in one of the following Colleges:

Coll of Arts, Sciences&Letters

Must be enrolled in one of the following classes:

Freshman

Co-requisites: COMP 105

This seminar will examine a variety of models of mental health in African Americans and racial, ethnic and self-identity development. The impact of Black society, culture, family, racism and poverty on personality growth of African Americans will be explored. The history of Black psychology and the pioneer theorists who have made significant contributions to foundation and continuing study of the thoughts, feelings, behaviors and mental health of African Americans will be discussed.

LIBS 129 Trauma, Text, & the City

3.000 Credits

Must be enrolled in one of the following Colleges:

Coll of Arts, Sciences&Letters

Must be enrolled in one of the following classes:

Freshman

Co-requisites: COMP 105

An exploration of how artists and writers represent urban trauma (terror, violence, destruction, absence) to describe indescribable suffering. In the wake of urban chaos, how do writers make urban community possible? To answer this question, we will examine traumatic events in New York City (9/11) as well as Detroit to understand how emails, photographs, novels, documentaries, and films try to narrate chaos and stabilize urban history. In addition to films that experiment with narrative (such as Memento [2000] and documentaries about 9/11 and Detroit), texts may include writings by psychologists (Freud), urban historians (Sugrue), cultural theorists (Baudrillard), and novelists (Joseph Conrad).

LIBS 130 Liberal Arts & the Professions

3.000 Credits

Co-requisites: EXPS 102

A liberal arts perspective on careers and professions. Topics include the historical relationship between a liberal arts education and professional training, the development of the concepts of "career" and "profession," sociological and psychological understandings of professions and workplaces, and accounts of work in several different professions (such as journalism, teaching, and medicine). Assignments focus on enhancing the connections between academics and career preparation. Students enrolled in Libs 130 must also enroll in Exploratory Studies 102, a one-credit career-planning course that assists students in assessing their interests, skills, and values and in identifying and researching careers.

LIBS 131 Understanding Global Cultures

3.000 Credits

Must be enrolled in one of the following classes:

Freshman

Co-requisites: COMP 105

Globalization is the predominant interpretative concept through which we analyze the state of the planet in general, and the intermingling of cultures in particular. This course proposes a comprehensive examination of cultures around the world to first-year university students. A transdisciplinary approach (history, political science, economics, geography, and anthropology) will introduce students to a wide breadth of content and depth of contextualization, and enhance their understanding of the complexities of the (post)modern world. In addition to readings on the main groups of world cultures, we will analyze several films that address the issues of cultural identity and globality. The question of stereotyping cultures will be discussed through examples of parodic representations of cultures. The course will also address the tensions between local ways of life (historical, linguistic, ethnic, and religious) and today's pressures for transnational and multiple identities, intensified by the communication of ideas and the movement of people around the world. Thus, we will also look at how the cultures of immigrant communities in southeast Michigan have contributed to the local cultural configuration.

LIBS 132 Engaging Communities

3.000 Credits

Must be enrolled in one of the following Colleges:

Coll of Arts, Sciences&Letters

Must be enrolled in one of the following classes:

Freshman

Co-requisites: COMP 105

This course studies concepts of community and service within American culture. It traces the development of civic life in the U. S. by examining the promises and challenges of community and citizenship, especially questions of inclusion and exclusion in American civic life. Students are expected to engage in some form of active citizenship with this question in mind: What individual and collective actions are most effective in making our communities into places in which each person can thrive?

LIBS 133 Jesus and the Gospels

3.000 Credits

Must be enrolled in one of the following Colleges:

Coll of Arts, Sciences&Letters

Must be enrolled in one of the following classes:

Freshman

Co-requisites: COMP 105

Who is Jesus of Nazareth? For centuries people seeking and answer have turned to the four gospels of the New Testament. But how reliable are these texts? Were they written as biographies, histories, or to fulfill other purposes? This course will address these and other questions associated with the quest for the historical Jesus. Students will be introduced to a variety of approaches involved in the literary-historical study of the gospels and New Testament backgrounds, and learn about the methods scholars employ to move from these texts and contexts to an historical portrait of Jesus. Attention will also turn to wide range of gospels not found in the New Testament to see what light they can shed on the Jesus identity.

LIBS 134 Nano-fiction

3.000 Credits

Must be enrolled in one of the following Colleges:

Coll of Arts, Sciences&Letters

Must be enrolled in one of the following classes:

Freshman

Co-requisites: COMP 105

Students in this seminar will explore a collection of extremely short stories-weird and wonderful stories that manage to ignite the imagination and evoke complex realities in just a few pages. Discussion of the stories, guided by provocative questions and thought experiments, will help students develop ways to navigate texts, subtexts, and contexts at a college level; to write more critically and analytically; and to read with more confidence and passion. The seminar will incorporate a series of short, focused writing assignments and some creative research projects. The goal is to discover rich worlds in tiny packages and return safely, if somewhat altered, to the real world.

LIBS 135 Urban Monsters & Suburb Angels

3.000 Credits

Must be enrolled in one of the following Colleges:

Coll of Arts, Sciences&Letters

Must be enrolled in one of the following classes:

Freshman

Co-requisites: COMP 105

If cities are the centers of human civilization, then why have we inherited such horrific stereotypes of urban environments? This course analyzes how writers (screenwriters, dramatists, urban theories, architects novelists, and poets) tried to reimagine cities (both in America and Britain) as both a unified community of English-speaking individuals and a globalizing model of civilized social organization between 1660 and the present. In doing so, the course argues that our understanding the monstrous connotations of cities depends upon our imagining the simultaneous creation of morally angelic middle-class suburbs in both gothic and horror writing and visual art. Reading may include Dracula, Journal of a Plague Year, The Strange Case of Dr. Jekyll and Mr. Hyde, Linden Hills, and The Jungle.

LIBS 191 Returning Adult Learners

1.000 Credits

LIBS 191 is designed to provide returning adult students with the support, skills, and knowledge needed for academic success at the University of Michigan Dearborn. Students will discover productive learning strategies, build a supportive network of peers, and explore campus resources by examining, through selected readings and assignments, the broader social, cultural, and individual context of being a non-traditional student on a university campus.

LIBS 200 Computer Literacy

1.000 TO 3.000 Credits

An introductory course in computing for students who do not intend to become computer programmers or designers. The course explores the nature and origins of computing, and examines its uses and limitations in such applications as teaching/learning, buying/selling and information storage/retrieval. The social implications of the computer revolution will be examined and limited programming will be provided with a small, home computer.

LIBS 275 GIEU: Global Intercultural Exp

3.000 Credits

May not be enrolled in one of the following Classes:

Graduate

Specialist

Doctorate

Global Intercultural Experience for Undergraduates. LIBS 275 is an interdisciplinary experiential introduction to intercultural learning that prepares diverse undergraduate students from various colleges for field experience interactions, and then helps students bring these experiences back to campus in socially and academically productive ways. It is a series of concentrated seminars of orientation, debriefing, and symposium.

LIBS 276 GIEU: Leadership

2.000 Credits

May not be enrolled in one of the following Classes:

Graduate

Specialist

Doctorate

The Global Intercultural Experience for Undergraduates (GIEU) Leadership Seminar provides leadership training and experience for exceptional students nominated by faculty from those having completed LIBS 275. In addition to participating in a group seminar, each student will be matched with a faculty mentor in preparing for and leading an upcoming GIEU field experience. These peer leaders will have two primary responsibilities: to help in team formation for the new field site; and to assist faculty members on site with logistics, peer communication, and organization. In addition to their practical experience, each participant will complete reflection exercises and essays.

LIBS 290 Topics in Liberal Studies

1.000 TO 3.000 Credits

A lower-level topics course. Title as listed in Schedule of Classes will change according to content. Course may be repeated for credit when specific topics differ. (OC).

LIBS 300 Co-Op Education Seminar

1.000 Credits

Required co-op seminar is a corequisite or immediate postrequisite of the initial co-op work assignment (LIBS 395). Course seeks to correlate the off-campus work experience with academic learning and career orientation issues through discussion and evaluation of work experiences as they are likely to be encountered by the liberal arts graduate through analysis of jobseeking information and skills. Evaluation of student performance is based upon discussion and the quality of required assignments.

LIBS 320 Library Research Skills

1.000 Credits

Development of library research skills utilizing periodical and newspaper indexes, reference materials, government documents, biographical sources.

LIBS 330 Innovators-Project Development

3.000 Credits

Must be enrolled in one of the following classes:

Sophomore

Senior

Junior

Must have one of the following Student Attributes:

Honors Transfer Innovators

This course is an introduction to the theory and practice of the Honors Transfer Innovators (HTI) Experience. HTI is a project based, collaborative learning community with a focus on self-transformation, creativity, diversity, leadership, and reflection. We explore these themes through readings, small group projects, and mentorship from senior students in the 400 level course, as well as the use of educational technology, and community engagement. This course is only open to students admitted into the HTI learning community.

LIBS 364 The European Union

3.000 Credits

Must be enrolled in one of the following Levels:

Undergraduate

Prerequisites: COMP 105

This course examines the history and politics of European integration, notably institutional development, decision-making procedures and dynamics, and policy formulation in the European Union. The course will concentrate on the intergovernmental conferences and treaty reform, the relationship between European politics at the subnational, national and supranational levels; the role of national, institutional, and non-state actors; problems of accountability and legitimacy; the economic and monetary union; and enlargement. The course will also address questions of globalization and technology, and the American perception of the EU. (OC).

LIBS 395 Co-op Education Work Assignmnt

1.000 TO 3.000 Credits

Student is eligible to compete for job openings listed with the coop office by employers. After application and interview, employers hire the student best suited to employer's job needs. Study/career-related paid positions are either alternating full-time or parallel part-time. Under a cooperative work agreement the student submits academic learning objectives and evaluations to co-op faculty advisor, who, upon review of employer evaluation, determines credit for co-op learning experience. Students must fulfill the seminar and study term requirements of the program.

LIBS 396 Adv Co-op Work Assignment

1.000 TO 3.000 Credits Prerequisites: LIBS 395

Students who have completed two terms of LIBS 395 may move on to LIBS 396, which offers advanced training in career-related topics, especially leadership. In addition to fulfilling the worksite terms of the placement, students are required to submit leadership goals as part of their Learning objectives and leadership assessment as part of their end of term evaluation. Oral report on how leaderships objectives fared in the workplace will be presented to members of the seminar, LIBS 300. LIBS 395 is a prerequisite for LIBS 396.

LIBS 397 Adv Co-op Work Assignment II

1.000 TO 3.000 Credits

Prerequisites: LIBS 395 and LIBS 396

Students who have completed two terms of LIBS 395 and two terms of LIBS 396 may move on to LIBS 397, in which students assess their placement in the light of research on the topic of good work. In addition to fulfilling the work-site terms of the placement, students are required to conduct informational interviews of professionals in their field, including people on the work site, with special focus on that aspect of professionalism where excellence and ethics intersect. The results of interviews will be reported in the end-of-term placement evaluation. LIBS 395 and LIBS 396 are prerequisites or LIBS 397.

LIBS 430 Innovators Capstone

3.000 Credits

Must be enrolled in one of the following classes:

Sophomore

Senior

Junior

Must have one of the following Student Attributes:

Honors Transfer Innovators

Prerequisites: LIBS 330

LIBS 430 is a three-credit hour practicum based course that serves as the capstone for the Honors Transfer Innovators (HTI) Experience. Students will engage in theoretical, collaborative, and project based learning experiences focused on peer mentoring, project completion, and creative leadership. Based on these experiences, students will identify best practices that are applicable to mentoring HTI 300 level students and develop a set of principles to guide their mentoring relationship. Students in this course will mentor HTI 300 students who will be crafting their project proposals. In addition students in this course will complete an M-Portfolio documenting their HTI experience.

LIBS 442 Medical Ethics

3.000 Credits

Prerequisites: PHIL 240

An examination of moral issues in medicine. Among the problems to be considered are truth-telling and paternalism in the doctor-patient relationship, psychosurgery and behavior control, death and euthanasia, the allocation of scarce resources, and genetic counseling and control. Specific attention will be given to ethical theories and to philosophical concepts such as rights, autonomy, and justice.

LIBS 464 Literature and Science Studies

3.000 Credits

Must be enrolled in one of the following classes:

Senior

An introduction to the humanistic study of science using works of literature and the techniques of literary, historical, sociological, philosophical, cultural, feminist, and rhetorical analysis. Students cannot receive credit for both LIBS 464 and LIBS 564. Student seeking graduate credit should elect LIBS 564.

LIBS 466 Investigating Academic Literacy

3.000 Credits

Must be enrolled in one of the following classes: Senior Intensive investigation of, and practice with, writing and research skills required for graduate-level work. Through regular assignments, guided reading of a variety of texts, and intensive work with instructor/s and one another, students will explore what it means to produce academic discourse, learn its conventions, and develop skills in written analysis. Students cannot receive credit for both LIBS 466 and LIBS 566. Students seeking graduate credit should elect LIBS 566.

LIBS 467 Self in Philosophy/Literature

3.000 Credits

Must be enrolled in one of the following classes: Senior

This course will utilize both philosophical and literary texts to examine the nature of self. We will explore the self's capacity for self-knowledge and self-deception, its relation to others, its connection to gender, its existence as body, and finally its desire to disown and flee itself. The philosophical texts will provide theoretical structures within which to both experience and discuss the literary texts. Students cannot receive credit for both LIBS 467 and LIBS 567. Students seeking graduate credit should elect LIBS 567.

LIBS 471 Science & Phil of Emotions

3.000 Credits

Must be enrolled in one of the following classes: Senior

This course will examine how philosophers, scientists, and psychologists in the past analyzed the emotions in order to set the stage for an examination of more recent work on the emotions currently being produced in philosophy, psychology, and the neurosciences. We will use these analyses to explore the following topics: the mental and physical components of emotions, the relation between reason and emotion, and the understanding of the emotions of others. Students cannot receive credit for both LIBS 471 and LIBS 571. Students seeking graduate credit should elect LIBS 571.

LIBS 480 Gender, Culture, and Identity

3.000 Credits

Must be enrolled in one of the following classes: Senior

This is a course about how scholars analyze women, gender, and feminist theories. It introduces students to key questions about gender and the principal methods for studying them. It will serve as a forum for building and testing theories on the totality of women's experience. Student cannot receive credit for both LIBS 480 and LIBS 580. Students seeking graduate credit should elect LIBS 580.

LIBS 484 Env St: Concepts and Philosophy

3.000 Credits

Must be enrolled in one of the following classes: Senior

An extensive and intensive analysis of the roots of environmental studies. Environmental studies becomes meta-disciplinary as it makes connections between the traditional disciplines in the natural sciences, social sciences, humanities, and technological sciences when dealing with current environmental issues. The students will examine and discuss the philosophical, scientific, social, and religious basis of the environmental movements through classical and contemporary readings. Possible topics will include: views of nature, sustainability, carrying capacity, management of commons, the

environment of cities, and developing a sense of place. Students cannot receive credit for both LIBS 484 and LIBS 584. Students seeking graduate credit should elect LIBS 584.

LIBS 485 Watershed Analysis

3.000 Credits

Must be enrolled in one of the following classes: Senior

An interdisciplinary study of watersheds, the most commonly used bioregional unit. The course will integrate the analysis of many factors which contribute to the character of watersheds, including bedrock and surficial geology, surface and groundwater hydrology, social history, land use history, water quality analysis, biological diversity, laws and regulations, management models, drinking water and wastewater, best management practices, and educational programs. The Rouge River Watershed will serve as the primary case study. Students cannot receive credit for both LIBS 485 and LIBS 585. Student seeking graduate credit should elect LIBS 585.

LIBS 487 Women and Public Spaces

3.000 Credits

Must be enrolled in one of the following classes: Senior

Despite old and persistent myths of a woman's place being in the home, women in America have consistently maintained a presence in public spaces. Their participation, however, was not unfettered. Laws, social mores, familial and religious restraints, etiquette, the threat of violence, lack of funds, and other factors influenced and restricted women's behavior when in public and structured society's reactions to their presence. This course will consider the development of these codes of behavior (formal and informal), how women of different ethnicities, races, sexual orientations, and classes experienced their effects, and the ways in which women sought to temper and undermine the system, particularly in the twentieth century. The course will provide an interdisciplinary approach to historic, social, physical, economic, and cultural geographies through which women have traveled. Students cannot receive credit for both LIBS 487 and LIBS 587. Student seeking graduate credit should elect LIBS 587.

Linguistics

(minor only)

MINOR OR BGS/LIBS AREA OF FOCUS ONLY

Students may earn a minor in LING and use Linguistics as an area of focus for the General Studies or Liberal Studies major completing 12 hours of upper-level credit in Linguistics.

ESL ENDORSEMENT CERTIFICATE:

Students in the English as a Second Language (ESL) Endorsement Program are required to take 15 credit hours of linguistics courses, including three required and two electives. LING 480/580 Concepts in Linguistics is the program prerequisite, and LING 476/576 Sociolinguistics and LING/ENGL474/574 Second Language Acquisition: English are required. LING/ENGL 461/561 Modern English Grammar, LING/ENGL 482/582 History of the English Language, LING/ENGL 484/584 World Englishes, and LING/ANTH 425/525 Language and Society are offered as electives within required linguistics coursework.

LANGUAGE ARTS EDUCATION OR ENGLISH WITH SECONDARY EDUCATION MAJORS:

Students majoring in Language Arts Education and English with Secondary Education are required to take either LING/ENGL461 Modern English Grammar or LING/ENGL 482 History of the English Language, as well as an additional linguistics elective. LING 280 is the prerequisite for both of these courses and covers material examined in the Michigan State Teacher Certification Examination.

COURSES

(Crosslisted courses show code of cross-listing discipline in parentheses to right of course title)

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LING 280	Introduction to Linguistics (prerequisite
	for all upper levels)
LING 281	Language, Thought, and Culture
LING 375	Psychology of Language (PSYC)
LING 383	American English (ENGL)
LING 385	Gender Differences in Language
LING 388	Language Pathologies
LING 390	Topics in Linguistics
LING 399	Independent Studies in Linguistics
LING 425	Language and Society (ANTH)
LING 461/561	Modern English Grammar (required for
	Secondary Education Certification in
	English)
LING 464	Contemporary Rhetorical Theory
	(COMP)
LING 465	Discourse Analysis
LING 474/574	Second Language Acquisition:
	English (ENGL, required for ESL
	Endorsement)
LING 475/575	Arab American English
LING 476/576	Sociolinguistics (required for ESL
	Endorsement)
LING 477/577	African American English
	(AAAS/ENGL/, fulfills CASL Diversity
	Requirement)
LING 480/580	Concepts in Linguistics (required for ESL
	Endorsement)
LING 482/582	History of the English Language (ENGL)
LING 484/584	World Englishes (ENGL)
LING 499	Advanced Independent Studies in
	Linguistics
LING 599	Graduate Independent Studies in
	Linguistics

Linguistics (LING) COURSE OFFERINGS

LING 280 Introduction to Linguistics

3.000 Credits

The basic concepts, scope, and methodology of the descriptive and historical study of the English language. (F,W,S).

LING 281 Language, Thought, and Culture 3.000 Credits

A practical application of linguistic principles to many aspects of human behavior. Some of the topics covered will be language and thought, first and second language acquisition, social dialects, and reading. (OC).

LING 375 Psychology of Language

3.000 Credits

Prerequisites: PSYC 171 or PSYC 170 or LING 280

The nature of human language as seen from the perspective of experimental psychology. The course introduces the student to current developments in linguistic theory. (OC).

LING 383 American English

2.000 TO 3.000 Credits

Prerequisites: LING 280 or LING 281

The development of American English and its dialects interpreted in the light of cultural history and processes of language change.

LING 385 Gender Differences in Language

3.000 Credits

Prerequisites: LING 280 or LING 281

Examines theories of differences between male and female speakers of English, focusing on phonological, syntactic, semantic, stylistic, and conversational features, with analyses of differences in speaking strategies and agendas of male and female speakers, as well as split-gender language situations in the workplace, home, and social settings.

LING 388 Language Pathologies

3.000 Credits

Prerequisites: LING 280 or LING 281

A survey of language pathologies, spoken and written; production and reception; primary and secondary (those arising from other medical dysfunctions: stroke, muscular dystrophy, multiple sclerosis, cerebral palsy, cleft, deafness). Attention to pathologies related to psychoses and neurological disorders. (AY).

LING 390 Topics in Linguistics

3.000 Credits

Examination of problems and issues in selected areas of linguistics. Title as listed in Schedule of Classes will change according to content. Course may be repeated for credit when specific topics differ. (OC).

LING 391 Independent Study

3.000 Credits

LING 399 Independent Studies in Ling

1.000 TO 6.000 Credits

Readings or analytical assignments in linguistics in accordance with the needs and interests of those enrolled and agreed upon by the student and advising instructor. May be repeated for a maximum of 6 credit hours. (F,W).

LING 425 Language and Society

3.000 Credits

Prerequisites: ANTH 101 or LING 280 or LING 281

An examination of the social functions of speech through readings and exercises, emphasizing schools and other applied settings. Topics include ethnic and social class dialects, codeswitching, and the organization of conversation. Students cannot receive credit for both LING 425 and LING 525. (YR).

LING 461 Modern English Grammar

3.000 Credits

Prerequisites: LING 280 or LING 281 or LING 480 or LING 480

The morphological and syntactic analysis of the structure of present day English considered in the light of modern linguistic science. Students cannot receive credit for both LING 461 and LING 561.

LING 464 Contemporary Rhetorical Theory

3.000 Credits

May not be enrolled in one of the following Classes:

Prerequisites: COMM 2015 or COMM 220 or COMM 250 or COMM 260 or COMM 280 or COMM 290 or ENGL 200 or ENGL 223 or ENGL 230 or ENGL 231 or ENGL 232 or ENGL 233 or ENGL 235 or ENGL 236 or ENGL 237 or ENGL 239 or ENGL 240 or ENGL 248 or ENGL 250

An examination of contemporary rhetorical theories through study of representative practitioners and related developments in linguistics, philosophy, psychology, communication, and composition and rhetoric. Students may not receive credit for both LING 464 and LING 564.

LING 465 Discourse Analysis

3.000 Credits

May not be enrolled in one of the following Classes:

Graduate

Prerequisites: LING 280 or LING 281

An examination of the syntactic and semantic devices and structures underlying communication in written texts and oral interaction. Material to be analyzed will vary from term to term (technical reports, scholarly articles, newspaper stories) but examples will be drawn primarily from the written language. Students cannot receive credit for both LING 465 and LING 565. (OC).

LING 474 Secon Lang Acquisition: Engl

3.000 Credits

Prerequisites: LING 280 or LING 281 or LING 480

A survey of fundamental concepts and major concerns in the study of English as a Second Language (ESL). The course examines a variety of psycholinguistic and sociolinguistic issues related to second language acquisition (SLA), ranging from theoretical to pedagogical. A primary focus is on developmental patterns and cognitive processes of SLA and individual variation in ESL speakers in terms of their social motivations and learning strategies. Implications for practical concerns such as the ESL teaching profession, instructional materials and curriculum development will be addressed where relevant.

LING 475 Arab American English

3.000 Credits

Prerequisites: LING 280 or LING 281 or LING 480

The study of the development, features, functions, and significance of varieties of English in the Arab American community. A range of sociolinguistic approaches are explored and applied to the subject matter. Topics to be addressed include code switching, language shift and maintenance, and the role of language in identity formation. Students cannot receive credit for both LING 475 and LING 575.

LING 476 Sociolinguistics

3.000 Credits

May not be enrolled in one of the following Classes: Graduate

Prerequisites: LING 280 or LING 480

An examination of sociolinguistic approaches to the issue of variation in language. Areas to be considered include ways of defining and constructing language, different types of language varieties, how variation is structured in language, the role of sociolinguistic variation in linguistic change, and the significance of linguistic acts of identity. (YR)

LING 477 African American English

3.000 Credits

Must be enrolled in one of the following Levels:

Undergraduate

Prerequisites: LING 280 or LING 281 or LING 480

An examination of the structure, history and use of African-American English. Topics will include the pronunciation, grammar and vocabulary of African-American English, theories of origin, linguistic repertoire and code-switching in African-American communities, the Ebonics controversy, and the role of this variety in education and identity formation. Students cannot receive credit for both LING 477 and LING 577.

LING 480 Concepts in Linguistics

3.000 Credits

May not be enrolled in one of the following Classes: Graduate

An examination of foundational concepts in linguistic and sociolinguistic theory, which explores the intellectual and philosophical problems raised by these concepts. Issues covered include the metalinguistic nature of language studies, the relation of language to the communication systems of other species, the physiological basis of language, language variation, language function and instrumentality, and innate versus learned behavior. Designed for students pursuing the Endorsement in ESL Teaching. (YR)

LING 482 History of the English Lang

3.000 Credits

Must be enrolled in one of the following Levels:

Undergraduate

Prerequisites: LING 280 or LING 480

A thorough grounding in the history and structure of the English language. At issue are the linguistic and ideological origins of the concept of Standard English, and the strengths and limitations of different methods of analyzing the history of the language. The course will emphasize sound change, grammatical change, and their sociolinguistic context. (YR)

LING 484 World Englishes

3.000 Credits

May not be enrolled in one of the following Classes:

Graduate

Prerequisites: LING 280 or LING 480

A study of the origin and significance of different forms of English throughout the world. Contact with other languages, pidginization, creolization, standardization, and the formation of the three circles of English are examined. (YR)

LING 490 Topics in Linguistics

3.000 Credits

Examination of problems and issues in selected areas of linguistics. Titles as listed in Schedule of Classes will change according to content. Course may be repeated for credit when specific topics differ. (OC).

LING 499 Advanced Independent Studies

1.000 TO 3.000 Credits

Prerequisites: LING 280 or LING 480

Advanced research project in accordance with the needs and interests of those enrolled and agreed upon by the student and advising instructor.

Mathematics

Students who desire to major or minor in mathematics do so for a number of reasons. Some of these include

- 1) those who wish specifically to become teachers of mathematics in high school;
- 2) those whose interests lie primarily in the study of mathematics as a science, the purpose of such students being usually to continue their studies at the graduate level;
- 3) those whose interests lie in the field of engineering and/or physics, with emphasis on applied mathematics;
- 4) those whose interests lie in the fields of biology, chemistry, or economics:
- 5) those who wish to study mathematical statistics;
- those whose interests lie primarily in computers and computational mathematics.

PREREQUISITES TO THE MAJOR

Students desiring to major in mathematics are required to have successfully completed MATH 115, 116, 200, 215, 216, 227, and CCM 172 or CIS/CCM 150.

MAJOR REQUIREMENTS

Required courses

A total of at least 30 hours of coursework must be elected in mathematics and cognate areas at the 300/400, 3000/4000levels. Students are required to elect 24 hours of coursework in mathematics including:

- Courses chosen in accordance with one of the following two options:
 - a Algebra Option: elect 412, 413, 451, and at least one of 452, 492 and 455.
 - b **Analysis Option**: elect 412, 451, either 452 or 492, and at least one of 331, 395, 413 and 455.
- 2. At least two applied mathematics courses from 315, 325, 372, 404, 420, 425, 454, 455, 458, 462, 472, 473 and 523.
- 3. Any two other mathematics courses numbered 300 through 499 approved for Mathematics majors.

COGNATES-6 credits upper level (300/400 and 3000/4000) from the following:

CCM; CHEM (including CHEM 225 <u>and</u> 226**); CIS (including CIS 200 <u>and</u> 290**); ECON 305, 415; IMSE (except 334); ME; PHIL 350, 485; PHYS; STAT (Only <u>one</u> of STAT 301, 325, 363 can be used to satisfy this requirement; STAT 363 may be used as a cognate only if a 400/4000 level STAT course is used as the second cognate)

** Courses joined with "and" count together as one course.

NOTES:

1. Students who wish to use graduate-level courses, numbered 500 or higher, as part of the 24 hours of upper-level coursework required for the major, must submit a petition to obtain the approval of the Program Advisor in Mathematics.

- 2. Students seeking secondary teacher certification must take MATH 331, MATH 486, EDD 450 and EDD 451. Also, MATH 395 and a course in statistics are recommended for such students. None of the following MATH courses may be used to fulfill any requirements of either a Mathematics major or a Mathematics minor: 363, 385, 386, 387, 442, 443, 444, 445, 446, 447, 449 and 486.
- 3. Applied Statistics courses (STAT) cannot be used to fulfill the Math major or minor/focus area requirements.
- 4. At least 12 of the 24 upper level hours in mathematics must be elected at UM-Dearborn in order to graduate.
- 5. In order to enroll in a mathematics class, a student must have earned a grade of at least C- in all prerequisite mathematics courses; a grade below C- signals that the student should *immediately repeat* the class in order to build a stronger foundation for subsequent study. The same principle applies when a mathematics course is a prerequisite for courses of other disciplines.

CREDIT BY EXAMINATION

The department grants credit for Calculus I to those students who have received a score of three, four, or five on the AB Exam or a score of three on the BC Exam of the Advanced Placement Program Tests of the College Entrance Examination Board. Credit is granted for both Calculus I and Calculus II to those students who have received a score of four or five on the BC Exam of the Advanced Placement Program Tests. In each case, the student is then eligible to elect the next calculus course in the calculus sequence.

MINOR OR BGS/LIBS AREA OF FOCUS

A minor or area of focus consists of 12 hours in mathematics courses approved for upper-level credit in the mathematics concentration program.

Math (MATH) COURSE OFFERINGS

MATH 080 Introductory Algebra

3.000 Credits

Prerequisites: MPLS 080

Topics include operations with signed numbers, translation from words into mathematical language, introduction to operations with polynomials and factoring polynomials, linear equations and inequalities, graphing, radicals, and quadratic equations. This course is offered as a service to students who need extra preparation in algebra skills as well as students who have never had algebra. The course is graded on an A, B, C, no credit basis. Students intending to elect this course should have taken at least one year of high school mathematics. This course is offered for additive credit. (F,W).

MATH 090 Intermediate Algebra

3.000 Credits

Prerequisites: MATH 080 or MPLS 090

A continuation of introductory algebra. Emphasis is on extending introductory concepts as well as introducing new concepts, functions and functional notation. Factoring polynomials, simplifying rational expressions, solving linear and quadratic equations and inequalities, solving systems of equations, rational exponentials and radicals, and graphing of

parabolas and circles. The course is graded on A, B, C, no credit basis. Students intending to elect this course should have taken at least one year of high school mathematics. This course is offered for additive credit. (F,W,S).

MATH 104 Precalc: Mgt, Life, & Soc Sci

4.000 Credits

Prerequisites: MATH 090 or MPLS 105

Primary purpose of this course is to prepare students for success in MATH 113. Topics include equations and inequalities; linear, quadratic, polynomial, rational, logarithmic, and exponential functions along with their graphs; applications of these functions; systems of linear inequalities. This course does not cover trigonometric functions and cannot be used as a prerequisite for MATH 115. Students electing this course should have taken at least two years of High School Algebra and one year of High School Geometry or MATH 090. Students cannot receive credit for both MATH 104 and MATH 105. (F.W.S)

MATH 105 Pre-Calculus

4.000 Credits

Prerequisites: MATH 090 or MPLS 105

Primary purpose of this course is to prepare students for success in Calculus. Topics include equations and inequalities; linear, quadratic, polynomial, rational, logarithmic, exponential and trigonometric functions along with their graphs; applications of these functions. Students electing this course should have taken at least two years of High School Algebra and one year of High School Geometry or MATH 090. Students cannot receive credit for both MATH 104 and MATH 105. (F.W.S)

MATH 113 Calc I: Mgt, Life and Soc Sci

4.000 Credits

Prerequisites: MATH 105 or MATH 104 or MPLS 115

Primarily a study of the differential and integral calculus of algebraic, logarithmic, and exponential functions of one variable. Topics include limits, continuity, differentiation, integration, graphing, marginal analysis, optimization, related rates, and area. Designed for students in management, social sciences, and some of the biological sciences. (This course does not fulfill the calculus requirements for concentration in chemistry, physics, biochemistry, engineering, or mathematics. Credit cannot be received for both MATH 113 and MATH 115.) (F,W,S).

MATH 114 Calc II:Mgt, Life, and Soc Sci

4.000 Credits

Prerequisites: MATH 113 or MATH 115 or MPLS 116

Multivariable calculus (including partial differentiation and multiple integrals) and some elementary differential equations. Introduction to probability and statistics (including the normal distribution) and sequences and series. Students cannot receive credit for both MATH 114 and MATH 116. (W).

MATH 115 Calculus I

4.000 Credits

Prerequisites: MATH 105 or MPLS 115

Functions and their graphs; limits and continuity of functions, differentiation, algebraic and trigonometric functions, applications of derivatives, definite and indefinite integrals, and applications of definite integral. This course includes computer labs. Students cannot receive credit for both MATH 113 and MATH 115. (F,W,S).

MATH 116 Calculus II

4.000 Credits

Prerequisites: MATH 115 or MPLS 116

Transcendental functions, techniques of integration, improper integrals, infinite sequences and series, Taylor's theorem, topics in analytic geometry, polar coordinates, and parametric equations. This course includes computer labs. Students cannot receive credit for both MATH 114 and MATH 116. (F,W,S).

MATH 131 Conceptual Mathematics

4.000 Credits

The purpose of Math 131 is to develop an awareness of the use of mathematics in the world around us. Stuents are encouraged to understand organizational tools of mathematics, including set theory and the use of deductive logic. Areas of application may include: consumer Mathematics, Probability, Statistics, social decision making, apportionment, graph theory, mathematical modeling. Students intending to elect this course should have taken the equivalent of one year of high school algebra and one year of high school geometry. This course is not open to mathematics concentrators. (F,W,S).

MATH 200 Math Proof and Structures

2.000 Credits

Prerequisites: MATH 116 or MPLS 215

This course is required for students who wish to complete a Mathematics concentration, and is a prerequisite for many upper-level mathematics courses, e.g., MATH 331, 412, 413, 451, and 492, among others. The course covers basic mathematical concepts needed in upper-level mathematics courses, including set theory, logic, understanding the logical structure of mathematical statements, and strategies for and methods of mathematical proof. Additional topics may include equivalence relations, functions and mappings, and algebraic structures. (F,W).

MATH 205 Calc III for Engin Students

3.000 Credits

Prerequisites: MATH 116 or MPLS 215

Vectors in the plane and space, topics from multivariable calculus including partial differentiation and multiple integration, with an emphasis on applications, and line integrals and Green's theorem. This course includes computer labs. Students cannot receive credit for both MATH 205 and MATH 215. (F,W,S).

MATH 215 Calculus III

4.000 Credits

Prerequisites: MATH 116 or MPLS 215

Vectors in the plane and space, vector-valued functions and curves, functions of several variables including limits, continuity, partial differentiation and the chain rule, multiple integrals and coordinate transformations, integration in vector fields, and Green's and Stokes' theorems. This course includes computer labs. Students cannot receive credit for both MATH 205 and MATH 215. (F,W).

MATH 216 Intro to Diff Equations

3.000 Credits

Prerequisites: MATH 205 or MATH 215

Solutions and applications of differential equations of the first and second order, linear equations with constant coefficients, solutions by means of power series, Laplace transforms, and numerical methods for solution of differential equations. (F,W,S).

MATH 217 Intro to Matrix Algebra

2.000 Credits

Prerequisites: MATH 114 or MATH 116 or MPLS 215

Systems of equations, matrices, determinants, the n-dimensional real vector spaces, orthonormal basis, linear transformations, and eigenvalues and eigenvectors. Students cannot receive credit for both MATH 217 and MATH 227. (F,W,S).

MATH 227 Introduction to Linear Algebra

3.000 Credits

Prerequisites: MATH 116 or MPLS 215

An introduction to the theory and methods of linear algebra with matrices. Topics include: systems of linear equations, algebra of matrix factorizations, vector spaces, transformations, eigenvalues and eigenvectors, science and engineering applications, and computational methods. Students cannot receive credit for both MATH 227 and MATH 217. (F,W,S).

MATH 276 Discrete Math Meth Comptr Engr

4.000 Credits

Prerequisites: MATH 116 or MPLS 215

An introduction to fundamental concepts of discrete mathematics for computer engineering. Topics will be chosen from: set theory, partially ordered sets, lattices, Boolean algebra, semi-groups, rings, graphical representation of algebraic systems, graphs and directed graphs. Applications in various areas of computer engineering will be discussed. (F,W,S).

MATH 297 The Nature of Mathematics

3.000 Credits

Mathematics will be presented in a way so that Honors Program students (including nonscience majors) can learn what makes mathematics a fascinating field of study rather than a collection of dry formulas. A few "Great Theorems" will be studied in their historical context, inter-connections between mathematics and science will be studied, and some famous personalities will be presented. Open only to students in the CASL Honors Program.

MATH 301 Biostatistics I

3.000 Credits

Prerequisites: MATH 113 or MATH 115

Samples and populations, quantitative vs. categorical data; clinical vs. epidemiological studies; comparative displays and analysis; linear regression. Estimation of effect size is emphasized along with the P-value for a statistical test: difference of means in simple comparative data together with a confidence interval and t-test; relative risk for appropriate categorical data; slope of a regression line together with a confidence interval and t-test. Study design is emphasized: clinical trials in experimental settings; case-control and cohort studies in epidemiological settings. Students are expected to make presentations interpreting and reporting the results of research from the literature. Students can receive credit for only one of MATH 301, MATH 363, STAT 301, CRJ 383, SOC 383, STAT 325.

MATH 315 Applied Combinatorics

3.000 Credits

Prerequisites: MATH 200 and (MATH 227 or MATH 217)

An introduction to methods and applications of enumerative and configural combinatorics. Students study several elegant and useful techniques for counting and/or generating the elements in large and unwieldy finite sets. Students also study topics in graph theory that are applicable to real world problems. Topics include basic counting principles, the principle of inclusion-exclusion, generating functions and recurrence relations. Topics from graph theory include graph models, paths, circuits, cycles, connectedness; additional topics include the theory and applications of planarity, coloring, directed graphs, networks, and network flows.

MATH 325 Mathematical Statistics I

3.000 Credits

Prerequisites: MATH 114 or MATH 116

Brief overview of summary and display of data, probability concepts, discrete and continuous random variables and associated probability models, expectation, independent random variables, probability generating functions and moment generating functions, sampling distributions, the central limit theorem, the t-distribution, properties of estimators, and interval estimation. (F).

MATH 331 Survey of Geometry

3.000 Credits

Prerequisites: MATH 116 and MATH 200

A development of Euclidean geometry as a formal axiom system and an introduction to non-Euclidean geometries and to Transformational Geometry. Geometric models and the history of geometry are stressed. Development of students' geometric intuition as well as their ability to work in a formal axiom system is emphasized. (F).

MATH 363 Introduction to Statistics

3.000 Credits

Frequency distributions and descriptive measures. Populations, sampling, and statistical inference. Elementary probability and linear regression. Use of statistical computer packages to analyze data. Students can receive credit for only one of MATH 363, STAT 363, SOC 383, and STAT 325. Students intending to elect this course should have taken at least one year of high school algebra. (F,W,S).

MATH 372 Computing with Mathematica

3.000 Credits

Prerequisites: MATH 217 or MATH 227

The course explores a variety of topics from different areas of undergraduate mathematics including calculus, matrix algebra, number theory, geometry, and discrete mathematics. Students learn to design customized Mathematica functions to solve specific problems in these areas using the symbolic, computational, graphics and programming tools provided within Mathematica. (AY,W).

MATH 385 Math for Elemen Teachers I

3.000 Credits

Must be enrolled in one of the following Colleges: Coll of Ed, Health, &Human Ser

The purpose of this course and the Math 386 and Math 387 courses is to provide future teachers with foundational knowledge of mathematics they will teach. An inquiry approach is emphasized involving problem solving, problem posing, pattern seeking, reasoning, justification, representations, and communication. Topics in Math 385 include numeration, meaning of operations, the reasoning behind procedures, and the rational number system, including fractions and decimals. (F.W)

MATH 386 Math for Elem Teachers II

3.000 Credits

Must be enrolled in one of the following Colleges:

Coll of Ed, Health, &Human Ser

Prerequisites: MATH 385

The purpose of this course and the Math 385 and Math 387 courses is to provide future teachers with foundational knowledge of mathematics they will teach. An inquiry approach is emphasized involving problem solving, problem posing, pattern seeking, reasoning, justification, representations, and communication. Topics in Math 386 include number theory, proportional reasoning, the geometry of two-dimensional shape and measurement, integers, and the real number system. (F,W)

MATH 387 Math for Elem Teachers III

3.000 Credits

Must be enrolled in one of the following Colleges:

Coll of Ed, Health, & Human Ser

Prerequisites: MATH 386

The purpose of this course and the Math 385 and Math 386 courses is to provide future teachers with foundational knowledge of mathematics they will teach. An inquiry approach is emphasized involving problem solving, problem posing, pattern seeking, reasoning, justification, representations, and communication. Topics in Math 387 include data analysis; probability; the geometry of three-dimensions including shape, spatial visualization, and measurement; geometric concepts of similarity and congruence; coordinate geometry; and transformational geometry. Algebraic reasoning is integrated throughout. (F,W)

MATH 390 Topics in Mathematics

1.000 TO 3.000 Credits

A course designed to offer selected topics in different areas of mathematics. The specific topic or topics will be announced together with the prerequisites each term. Course may be repeated for credit when specific topics differ.

MATH 391 Topics in Mathmatics Education

1.000 TO 3.000 Credits

A course designed to offer selected topics in mathematics related to K-12 education. The specific topic or topics will be announced together with the prerequisites each term. Course may be repeated for credit when specific topics differ. (OC).

MATH 395 Elementary Number Theory

3.000 Credits

Prerequisites: MATH 205 or MATH 215

Properties of the integers, the division algorithm, Euclid's algorithm, Fermat's theorems, unique factorization of integers into primes, congruences, arithmetic functions, Diophantine equations, continued fractions, quadratic reciprocity. (W).

MATH 399 Independent Studies in Math

1.000 TO 3.000 Credits

Independent study in mathematics for topics at the junior level. Topics and objectives chosen by agreement between student and instructor.

MATH 404 Dynamical Systems

3.000 Credits

Prerequisites: MATH 216 and (MATH 217 or MATH 227)

The aim of this course is to survey the standard types of differential equations. This includes systems of differential equations, and partial differential equations, including for each type, a discussion of the basic theory, examples of applications, and classical techniques of solutions with remarks about their numerical aspects. Also included are autonomous and periodic solutions, phase space, stability, perturbation techniques and Method of Liapunov. Students cannot receive credit for both MATH 404 and MATH 504. (AY).

MATH 405 Integral Equations

3.000 Credits

Prerequisites: MATH 216 and (MATH 217 or MATH 227)

Origin and classification of integral equations, connections with differential equations, integral equations of convolution type, method of successive approximations, single kernels, elements of Hilbert space, linear operators, resolvents, Fredholm theory and Hilbert-Schmidt theory. Students cannot receive credit for both MATH 405 and MATH 505. (OC).

MATH 412 First Course in Modern Algebra

3.000 Credits

Prerequisites: MATH 200 and (MATH 217 or MATH 227)

Introduction to groups, subgroups, group homomorphisms, factor groups, simple groups, cyclic groups. Sylow theorems, rings, ideals, integral domains, fields, polynomial rings, Kronecker's theorem, also properties of the integer, rational, real, and complex numbers. Students cannot receive credit for both MATH 412 and MATH 512. (W).

MATH 413 Linear Algebra

3.000 Credits

Prerequisites: MATH 200 and MATH 216 and (MATH 217 or MATH 227)

Vector spaces, linear transformations and matrices, determinants, inner product spaces, bilinear and quadratic forms, Hamilton-Cayley theorem, eigenvalues and eigenvectors, and spectral theorem. Students cannot receive credit for both MATH 413 and MATH 513. (F)

MATH 420 Stochastic Processes

3.000 Credits

Prerequisites: MATH 217 or MATH 227

Review of distribution theory. Introduction to stochastic processes, Markov chains and Markov processes, counting, and Poisson and Gaussian processes. Applications to queuing theory. Students cannot receive credit for both MATH 420 and MATH 520. (AY,W).

MATH 425 Mathematical Statistics II

3.000 Credits

Prerequisites: MATH 325

Interval estimation and pivotal quantities, maximum likelihood estimation, hypothesis tests, linear models and analysis of variance, bivariate normal distribution, regression and correlation analysis, and nonparametric methods. Students cannot receive credit for both MATH 425 and MATH 525. (AY,S).

MATH 442 Geometry for Teachers

3.000 Credits

Must be enrolled in one of the following Colleges: Coll of Ed, Health, &Human Ser

Prerequisites: MATH 387

Properties of two and three-dimensional figures are covered, including congruence, symmetry, transformation, and measurement. Trigonometry from a geometric perspective and the use of trigonometry in problem solving are included. Topics also include coordinate geometry and visualization as well as the nature of axiomatic reasoning and the role it has played in the development of mathematics. An investigative approach involving problem solving, reasoning and proof, connections, and communication will be emphasized. Calculator and computer technology will support the investigation of these topics. Classroom resources and materials are considered. Different levels of geometric thinking will be explored. No credit for CASL concentration, minor, or area of focus. Open only to certified teachers or elementary education students. Student cannot receive credit for both MATH 442 and MATH 542.

MATH 443 Algebra for Teachers

3.000 Credits

Must be enrolled in one of the following Colleges: Coll of Ed, Health, &Human Ser

Prerequisites: MATH 386

Algebraic structure is emphasized, especially as it relates to arithmetic. Emphasis is on the development of algebraic reasoning and generalizations with the appropriate pedagogy. Curriculum issues relevant to teaching algebra for conceptual understanding are included. Major topics include algebraic representations of linear, exponential, power and quadratic patterns, systems of equations, and applications. An investigative approach involving problem solving, reasoning and proof, connections and communications will be emphasized. Classroom resources and materials are considered as well as calculators and computer technology as problem-solving tools to aid in algebraic thinking. No credit for CASL concentration, minor or area of focus. Students cannot receive credit for both MATH 443 and MATH 543. (F, W, S).

MATH 444 Data Anlsys, Prob&Stat forTchrs

3.000 Credits

Must be enrolled in one of the following Colleges: Coll of Ed, Health, &Human Ser

Prerequisites: MATH 387

Concepts of probability using both experimental and theoretical models are considered with an emphasis on the use of probability models to describe physical phenomena and to make and interpret predictions. Topics in data analysis and statistics include drawing inferences from visual displays of data, applying techniques of inferential statistics, sampling and simulations to generate solutions to problems, and making appropriate inferences using best fit techniques. Evaluating data and arguments to establish validity, interpreting, calculating and solving problems related to correlation, distributions, percentiles and standard scores are also included. An investigative approach involving problem solving, reasoning and proof, connections, and communication will be emphasized. Calculator and computer technology will support the investigation of these topics. No credit for CASL concentration, minor, or area of focus. Open only to certified teachers or elementary education students. Student cannot receive credit for both MATH 444 and MATH 544.

MATH 445 Number & Prop'l Rsng for Tchrs

3.000 Credits

Prerequisites: MATH 442 and MATH 443

This course deepens previous work on rational number ideas and applications, and explores the concepts of ratio and proportion. Content includes a variety of situations involving proportions, for example, real-world problems involving ratios, rates, and percents, geometry involving similarity, algerbra involving linearity, probability involving assigning a probability to an event, and trigonometry involving slope. Distinguishing proportional situations from those that are not and reasoning proportionally in appropriate situations are emphasized. The course includes problem solving, reasoning and proof, connections, communication, and multiple representations. No credit for CASL concentration, minor, or area of focus. Open only to certified teachers or elementary education students or by permission of instructor. Students cannot receive credit for both MATH 445 and MATH 545. (AY).

MATH 446 Discrete Math/Modeling for Tch

3.000 Credits

Must be enrolled in one of the following Colleges: Coll of Ed, Health, &Human Ser

Prerequisites: MATH 442 and MATH 443

This course interweaves the ideas of discrete mathematics with the approaches and strategies of mathematical modeling. It gives pre- and inservice teachers opportunities to deepen their understanding and use of mathematical models based on the concepts of discrete mathematics. Topics include recurrence, induction, permutations, combinations, binomial distributions, circuits, critical paths, minimal spanning trees, adjacency matrices, algorithm design and optimization. Systems thinking and multiple representations are emphasized. No credit for CASL concentration, minor, or area of focus. Open only to certified teachers or elementary education students. Students cannot receive credit for both MATH 446 and 546. (AY).

MATH 447 Micro in Math for Teachers

2.000 Credits

Must be enrolled in one of the following Colleges: Coll of Ed, Health, &Human Ser

Prerequisites: MATH 385

Use of the microcomputer in the mathematics classroom with an emphasis on the LOGO programming language. Problem solving, hands-on activities, and a cooperative learning environment are emphasized. Students cannot receive credit for both MATH 447 and MATH 547.

MATH 449 Concepts of Calc for Teachers

3.000 Credits

Prerequisites: MATH 442 and MATH 443

Concepts of Calculus for Teachers focuses on calculus concepts appropriate for middle school mathematics teachers and teacher-candidates. The course provides a deep understanding of the major concepts of calculus: rates of change, accumulation (net change), area, and limits. Students experience concrete approaches to the various topics using problem solving, manipulative and technology as appropriate, with the intent being to help the learners discover how the ideas of calculus are useful in a variety of settings. Visual, numeric and commonsense approaches will be used. No credit for CASL concentration, minor, or area of focus. Open only to certified teachers or elementary education students. Students cannot receive credit for both MATH 449 and 549. (AY)

MATH 451 Advanced Calculus I

3.000 Credits

Prerequisites: MATH 200 and MATH 216 and (MATH 217 or MATH 227)

Properties of the real number system; point set theory for the real line including the Bolzano-Weierstrass theorem; sequences, functions of one variable: limits and continuity, differentiability, Reimann integrability. Students cannot receive credit for both MATH 451 and MATH 551. (F).

MATH 452 Advanced Calculus II

3.000 Credits

Prerequisites: MATH 451

Includes the rigorous study of functions of two and more variables, partial differentiation and multiple integration. Special topics include: Taylor Series, Implicit Function Theorem, Weierstrass Approximation Theorem, Arzela-Ascoli Theorem. Students cannot receive credit for both MATH 452 and MATH 552. (AY,W).

MATH 454 Fourier and Boundary

3.000 Credits

Prerequisites: MATH 216 and (MATH 217 or MATH 227)

Fourier series and integrals. Their use in solving boundary value problems of mathematical physics by the method of separation of variables. Sturm-Liouville theory and generalized Fourier series, including those involving Bessel functions and Legendre polynomials, with applications. Students cannot receive credit for both MATH 454 and MATH 554. (F).

MATH 455 Func of a Complex Var with App

3.000 Credits

Must be enrolled in one of the following Levels:

Undergraduate

Prerequisites: MATH 216 and (MATH 217 or MATH 227)

Complex number system. Functions of a complex variable, their derivatives and integrals. Taylor and Laurent series expansions. Residue theory and applications, elementary functions, conformal mapping, and applications to physical problems. Students cannot receive credit for both MATH 455 and MATH 555. (W).

MATH 458 Introduction to Wavelets

3.000 Credits

May not be enrolled in one of the following Colleges:

No College Designated

Must be enrolled in one of the following classes:

Sophomore

Senior

Junior

Prerequisites: MATH 216 and (MATH 217 or MATH 227)

This course will introduce the students to theory and application of wavelets using linear algebra. Topics will include the discrete Fourier transform, the fast Fourier transform, linear transformations, orthogonal decomposition, discrete wavelet analysis, the filter bank, Haar Wavelet family, Daubechies's Wavelet family, and applications. Students cannot receive credit for both MATH 458 and MATH 558. (OC)

MATH 462 Mathematical Modeling

3.000 Credits

Prerequisites: MATH 216 and (MATH 217 or MATH 227)

The processes of constructing, implementing, and evaluating mathematical models of "real world" phenomena are investigated. Models involving continuous and discrete mathematical constructs are considered. Deterministic and stochastic models are compared. Examples are taken from genetics, epidemiology, queuing theory, and other fields. Students cannot receive credit for both MATH 462 and MATH 562. (F).

MATH 472 Intro to Numerical Analysis

3.000 Credits

Prerequisites: MATH 217 or MATH 227

Solution of linear systems by Gaussian elimination, solution of non-linear equations by iterative methods, numerical solution of ordinary differential equations, data fitting with spline functions, numerical integration, optimization. Students cannot receive credit for both MATH 472 and MATH 572. (F).

MATH 473 Matrix Computation

3.000 Credits

Prerequisites: MATH 217 or MATH 227

A study of the most effective methods for finding the numerical solution of problems which can be expressed in terms of matrices, including simultaneous linear equations, orthogonal projections and least squares, eigenvalues and eigenvectors, positive definite matrices, and difference and differential equations. Students cannot receive credit for both MATH 473 and MATH 573. (AY, W).

MATH 480 History of Mathematics

3.000 Credits

Prerequisites: MATH 216 and (MATH 217 or MATH 227)

A unified view of the rise of mathematics from ancient times to the present, as seen in its conceptual developments and developers, its major themes and its applications (including computers). Students cannot receive credit for both MATH 480 and MATH 580. (OC).

MATH 486 Sec School Math for Teachers

3.000 Credits

Prerequisites: MATH 217 or MATH 227

Basic concepts, relationships, generalizations, and applications from the secondary school mathematics curriculum are discussed both from an advanced viewpoint and from the standpoint of the learner. Included are the roles of technology, problem solving, and current thinking on the teaching of secondary mathematics topics. Students cannot receive credit for both MATH 486 and MATH 586. (F).

MATH 492 Introduction to Topology

3.000 Credits

Prerequisites: MATH 451

Metric spaces, topological spaces, continuous maps, connectedness, compactness, separation axioms. Students cannot receive credit for both MATH 492 and MATH 592. (AY,W).

MATH 499 Independent Studies in Math

1.000 TO 3.000 Credits

Independent study in mathematics for topics at the senior level. Topics and objectives chosen by agreement between student and instructor. (OC).

Medieval and Renaissance **Studies**

MINOR OR BGS/LIBS AREA OF FOCUS ONLY

The minor in Medieval and Renaissance Studies is cross-cultural in design and covers the time period from Late Antiquity (ca. 400) to the seventeenth century. Through the interdisciplinary study of history, art, religion, language and literature, students will develop an integrated understanding of medieval and early

modern civilization. Its legacy, along with its intellectual and social diversity, enhances our understanding not only of the past but of present society.

The minor in Medieval and Renaissance Studies consists of 15 credit hours from the courses listed below. Students must elect at least one course from Art History, History and English.

Art History

ARTH 331	Early Christian and Byzantine Art
ARTH 332	Early Medieval and Romanesque Art
ARTH 334	The 14th Century
ARTH 341	Art and Architecture in Early Renaissance
	Florence
ARTH 342	High Renaissance and Mannerism
ARTH 343	Northern Renaissance Art
ARTH 344	Italian Renaissance Sculpture
ARTH 351	Southern Baroque Art
ARTH 352	Northern Baroque Art
ARTH 454	Rembrandt

Comparative Literature

COML 433 Writing Women in Renaissance

History

nglish	
HIST 4312	European Encounters: 1400-1800
HIST 331	The Reformation Era:1500-1648
HIST 330	The Renaissance
HIST 329	Medieval Society
HIST 314	England: Tudors and Stuarts

En

ENGL 371	Survey of English Literature from
	Beginning -1500
ENGL 372	Survey of English Literature: 1500 to 1600
ENGL 373	Survey of English Literature: 1600-1660
ENGL 400	Major English Authors of the Middle Ages
ENGL 401	Literature of Anglo-Saxon England
ENGL 404	Medieval Mystical Writers
ENGL 405	Chaucer
ENGL 406	Studies in Medieval Literature and Culture
ENGL 408	Shakespeare I: Earlier Works
ENGL 409	Shakespeare II: Later Works
ENGL 410	Major English Authors of the Renaissance
ENGL 412	Milton
ENGL 413	English Renaissance Drama, Excluding
	Shakespeare

Seventeenth-Century Readings

Microbiology

ENGL 414

The field of microbiology encompasses the study of a wide diversity of organisms, including archaea bacteria, fungi and viruses. The program in microbiology is designed to prepare students for laboratory positions in industry, government, and university research. The program also provides a foundation for graduate work in microbiology, virology, molecular biology, medicine and other areas. Certification is possible by special examination upon graduation.

PREREQUISITES TO THE MAJOR

A solid background in mathematics is essential to success in any of the scientific disciplines. Incoming students who intend to choose a major in Microbiology should have completed at least three years of high school mathematics. First year students should plan to enroll in MATH 104 or 105; 113 or 115; or 114 or 116 based on the results of their math placement tests. CHEM 134 or 144 and 136 or 146 are prerequisites to many other courses in the Natural Sciences Department; students majoring in any of the sciences should complete this sequence as soon as possible.

BIOL 130 and 140 CHEM 124 and 136 or 146 CHEM 225, 226 and 227	8 hrs
MATH 113 and 114 (preferred sequence) OR MATH 115 and 116	8 hrs
PHYS 125 and 126 (preferred sequence) OR PHYS 150 and 151	8 hrs

MAJOR REQUIREMENTS

A minimum of 29 credit hours in Microbiology or Biological Sciences must be completed as outlined below:

Note: Students should begin the chemistry sequence before electing any MICR/BIOL course.

Required courses

AREA A: All of the	he following (minimum 12 hours required):
MICR 385	Microbiology4 hrs
MICR 406	Microbial Genetics
MICR 440	Micro Genetics & Physi Lab1 hr
MICR 485	Physiology of Microorganisms 3 hrs
At least one credit MICR 495	hour from the following* Off-campus Research in Microbiology
	1-3 hrs
MICR 497	Seminar in Microbiology1 hr
MICR 497 MICR 498	
	Seminar in Microbiology1 hr

*Note: No more than a total of six credit hours combined in MICR 495, 498, and 499 may be applied toward the 120 credit hours required for graduation. Both MICR 498 and 499 require independent study contracts agreed upon by a faculty member.

.....1-3 hrs

AREA B:

One of the following	ng organismal/environmental courses:
MICR 309	Introduction to Mycology4 hrs
MICR 405	Applied and Envir Microbiology4 hrs

AREA C:

Complete an additional 13 credit hours (to reach minimum 29 hours required for the major) from the following list, of which at least four credit hours must be from microbiology courses (MICR).

Microbiology Courses*

MICR 380	Epidemiology2	hrs
MICR 390	Topics in Microbiology1-6	hrs
when top	ic is appropriate – must petition	
MICR 430	Medical Virology3	hrs
MICR 450	Virology4	hrs
MICR 455	Immunology4	hrs
MICR 459	Pathogenic Microbiology4	hrs
MICR 495	Off-campus Research in Microbiology	
	1-3	hrs
MICR 497	Seminar in Microbiology Research	1 hr
MICR 498	Independent Study in Microbiology1-3	hrs
MICR 499	Lab in Micro Research1-3	hrs

* Note: All 400-level microbiology courses have MICRO 385 as a prerequisite.

Biological Sciences Courses

BIOL 301	Cell Biology	4 hrs
BIOL 306	General Genetics	3 hrs
BIOL 310	Histology	4 hrs
BIOL 370	Principles of Biochemistry	3 hrs
BIOL 390	Topics in Biological Sciences	1-4 hrs
when to	pic is appropriate – must petition	
BIOL 470	Biochemistry I	3 hrs
BIOL 471	Biochemistry II	3 hrs
BIOL 472	Biochemistry Laboratory I	1 hr
BIOL 473	Biochemistry Laboratory II	1 hr
BIOL 474	Molecular Biology	4 hrs
Cognates		6 hrs

A minimum of six credit hours upper level courses from the following:

BCHM, CHEM, ENST, ESCI, GEOL, PHYS, MATH 325, STAT 325 or 363, PHIL 442, 485, ANTH 430, 435, PSYC 370, SOC 440

Other appropriate courses with approval of program advisor by petition.

NOTES:

- 1. A maximum of 44 hrs of MICR or BIOL may count in the 120 hours required for graduation.
- 2. A maximum of 36 hrs from Areas A, B, and C may count toward the 120 hours required for graduation.
- 3. At least 12 of the 29 hrs of upper level hours used toward the major must be elected at UM-Dearborn.
- 4. A maximum of 6 hrs of Independent Study (courses numbered 495, 498, 499) in any science discipline may count in the 120 hours to graduate.
- 5. A maximum of 6 hrs combined in MICR/BIOL 495, 498, 499 may be applied toward the 29 hours required in the major.

MINOR OR BGS/LIBS AREA OF FOCUS

A minor or area of focus consists of 12 hours of upper-level credit in microbiology (MICR).

Microbiology (MICR) COURSE OFFERINGS

MICR 309 Introduction to Mycology

4.000 Credits

Prerequisites: BIOL 130 and BIOL 140

An introduction to the biology of the fungi. Classification, structure, industrial use, gastronomic qualities, and disease-producing ability of macroscopic and microscopic forms are studied. Laboratories include microscopic and macroscopic examinations of fungi, and their growth and field studies on the occurrence and classification of edible and poisonous varieties. Three hours lecture, four hours laboratory. (OC).

MICR 380 Epidemiology

2.000 Credits

Prerequisites: BIOL 140

A study of disease occurrence and spread in human populations. The primary concern is with groups of persons, rather than individuals. Emphasizes methods of study that would contribute to understanding disease etiology. Two hours lecture. (OC).

MICR 385 Microbiology

4.000 Credits

Prerequisites: BIOL 130 and BIOL 140

Co-requisites: MICR 385L

The biology of microorganisms is considered through study of the properties of bacteria, fungi, algae, protozoa, and viruses. Microbial structures are discussed and correlated with their function. Aspects of cellular metabolism pertinent to microorganisms are emphasized. The interaction of microorganisms and their environment, animate and inanimate, is discussed with respect to the beneficial or harmful effects of the different microbial groups. Laboratory exercises introduce the student to basic, practical microbiological techniques and illustrate various principles of microbial life. Three hours lecture, four hours laboratory. (F,S).

MICR 390 Topics in Microbiology

1.000 TO 6.000 Credits

Prerequisites: BIOL 385 or MICR 385

Current topics in microbiology will be presented through a lecture, discussion and/or laboratory format. Topics will vary, as appropriate, and may cover any area of microbiology including studies on bacteria, algae, fungi, protozoa, viruses, biotechnology, mechanisms of pathogenesis and immunology. (OC).

MICR 405 Applied & Environ Microbiology

4.000 Credits

Prerequisites: MICR 385 or BIOL 385

Co-requisites: MICR 405L

Advanced treatment of the interplay of microorganisms and the environment. Topics will include soil and water microbiology (bacteria, archaea, fungi, algae, protozoans and viruses) and plant-microbe interactions (pathogenic and symbiotic) as well as the role of microorganisms in decomposition, nutrient cycling (carbon, nitrogen, sulfur and metal cycling), wastewater and biosolids treatment, and bioremediation. 3 hr lec, 1-4 hr lab. For graduate credit elect MICR 505.

MICR 406 Microbial Genetics

3.000 Credits

Prerequisites: MICR 385 or BIOL 385

A course that emphasizes the genetics and molecular biology of bacteria and their viruses. Topics include DNA structure and replication, recombination, DNA repair, genetic mapping, mechanisms of gene transfer, regulation of gene expression, mutagenesis, and recombinant DNA techniques. Three hours lecture, four hours laboratory per week. (AY,F).

MICR 430 Medical Virology

3.000 Credits

Prerequisites: MICR 385 or BIOL 385

The course provides a general description of the history and nature of animal virus disease. Emphasis is placed on the pathogenesis and clinical description of specific diseases. Three hours lecture.

MICR 440 Micro Genetics & Physi Lab

1.000 Credits

Must be enrolled in one of the following Levels:

Undergraduate

May not be enrolled in one of the following Classes:

Freshman

Prerequisites: BIOL 385 * or MICR 385 * or BIOL 301 * or BIOL 406 * or MICR 406 * or BIOL 485 * or MICR 485 *

This course emphasizes the use of advanced microbiological techniques for understanding the genetics and physiology of microorganisms. Experiments focus on the understanding of general microbial phenomena, such as nutrition, metabolism and biochemistry; protein and nucleic acid synthesis; energy generation, enzyme regulation, membrane transport, motility, differentiation, cellular communication and the behavior of populations.

MICR 450 Virology

4.000 Credits

Prerequisites: (BIOL 385 or MICR 385) and CHEM 226

The first half of this course deals with bacterial viruses, with emphasis on classical events in this field. The second half surveys the field of animal viruses, with emphasis on recent discoveries, including replication, pathogenesis, and viral association with cancers. Three hours lecture, four hours laboratory. (AY,W).

MICR 455 Immunology

4.000 Credits

Prerequisites: BIOL 385 or BIOL 301 or MICR 385

A detailed study of the field of immunology. Among the topics covered are various aspects of the immunological response, such as humoral or cell-mediated immunity, cell-cell interactions, and immunology as related to the cause and prevention of disease. Three hours lecture, four hours laboratory. (AY,F).

MICR 459 Pathogenic Microbiology

4.000 Credits

Prerequisites: BIOL 385 or MICR 385

An introduction to pathogenic microorganisms and mechanisms of microbial pathogenicity. Disease-causing bacteria, fungi, viruses, and protozoa are studied. Laboratories emphasize clinical approaches to isolation, identification, and treatment. Three hours lecture, four hours laboratory. (AY,F).

MICR 485 Physiology of Microorganisms

3.000 Credits

Prerequisites: (BIOL 385 or MICR 385) and CHEM 225 *

An in-depth examination of the physiology of microorganisms. Areas of emphasis include the growth and nutrition of microorganisms, the development of viruses, the microbial degradation of organic compounds, the regulation of degradation reactions, and the biosynthesis of uniquely microbial compounds and secondary metabolites, such as antibiotics and toxins. Consideration is given to the natural environments of specific microorganisms. Three hours lecture, four hours laboratory. (AY,W).

MICR 495 Off-Campus Research

1.000 TO 3.000 Credits

Participation in ongoing experimental research at an off-campus laboratory (or in the field). Arrangements made between the research laboratory, (director of field study), the student, and the microbiology concentration advisor. No more than 6 hours combined from MICR 495, 498, and 499 may be credited toward the 120 hours required for a degree. Four to twelve hours laboratory. Permission of concentration advisor. (F,W,S).

MICR 497 Seminar in Microbiology

1.000 Credits

Topics of current interest in microbiology will be presented by guest lecturers, faculty members or students. Topics chosen will vary from term to term. Can be elected up to three times. One hour seminar. Permission of instructor. (W).

MICR 498 Ind Study in Microbiology

1.000 TO 3.000 Credits

Library research and independent study performed under the guidance of a faculty member. Four to twelve hours readings. (F,W,S).

MICR 499 Lab in Micro Research

1.000 TO 3.000 Credits

Directed laboratory research performed under the guidance of a faculty member. Four to twelve hours laboratory. Permission of instructor. (F,W,S).

Modern and Classical Languages

(Armenian, Greek, Swedish; not a field of concentration)

Armenian

(not a field of concentration)

Course offerings in Armenian are located below under the heading "Modern and Classical Languages (MCL)."

Greek

(not a field of concentration)

Course offerings in Greek are located below under the heading "Modern and Classical Languages (MCL)."

Swedish

(not a field of concentration)

Course offerings in Swedish are located below under the heading "Modern and Classical Languages (MCL)."

Students must be in the Swedish exchange program with Jonkoping University in the College of Engineering and Computer Science.

Modern & Classical Language (MCL)

COURSE OFFERINGS

MCL 103 First-Year Swedish I

3.000 Credits

A beginning course in the Swedish language. Open only to CECS undergraduate students taking part in the College of Engineering and Computer Science's study abroad program with the Jonkoping School of Engineering in Sweden. The Course meets in Jonkoping, Sweden.

MCL 104 First-Year Swedish II

3.000 Credits

A second course in the Swedish language. Open only to CECS undergraduate students taking part in the College of Engineering and Computer Science's study abroad program with the Jonkoping School of Engineering in Sweden. The Course meets in Jonkoping, Sweden.

MCL 105 Beginning Ancient Greek I

4.000 Credits

Ancient Greek I is designed for students wishing to begin the study of Ancient Greek and will include a study of grammar and vocabulary with readings of simple Attic prose. Attention will also be given to the Greek roots of English words, including scientific and medical terms. No previous foreign language study is required as a prerequisite. (OC).

MCL 106 Beginning Ancient Greek II

4.000 Credits

Prerequisites: MCL 105

Ancient Greek II completes the study of Ancient Greek syntax and morphology and puts greater emphasis on reading connected passages in ancient Greek. Passages from selected classical authors, such as Herodotus, Sophocles, Aristophanes, and Plato will be read. MCL 105 is required as a prerequisite. (OC).

MCL 111 Armenian I

4.000 Credits

Introduction to basic construction and vocabulary of the Armenian language. Lab to be arranged. Completion of this course prepares the student for Armenian II. (OC).

MCL 112 Armenian II

4.000 Credits

Prerequisites: MCL 111

Continuation of Armenian I. Introduction to basic construction and vocabulary of the Armenian language.

MCL 205 Intermediate Ancient Greek

4.000 Credits

Prerequisites: MCL 106

An intermediate language course in ancient Greek designed to increase the students' ability to read Greek with accuracy and speed and improve their skill in comprehension and translation. A wide range of reading selections of Greek prose and poetry will serve as the basis for translation, class discussion, and written assignments. Although the course includes a partial review of accidence and syntax as well as assigned translations from English to Greek, primary emphasis will be placed upon reading and translating Greek texts, whether prose (e.g., Xenophon, Herodotus, Lysias, Plato) or poetry (e.g., Euripides, Aristophanes). (OC)

MCL 206 Intermediate Ancient Greek II

4.000 Credits

Prerequisites: MCL 205

MCL 206 is the second course in intermediate ancient Greek and is designed to provide knowledge and familiarity with the language and style of the Homeric epics, as well as an introduction to related topics. We will learn Homeric Greek and how it differs from Attic, read extensive selections from the Iliad or the Odyssey in Greek, and discuss Homer's works as poetic, literary, and cultural texts. The selections read will serve as the basis for translation, class discussion, and written assignments. Related topics to be presented include: the archaeological excavations of Troy, the scope of ancient epics, the Homeric Question and oral composition, and the nature of the Greek hero. (OC)

MCL 233 Second-Year Swedish

3.000 Credits

MCL 234 Second-Year Swedish II

3.000 Credits

MCL 299 Independent Studies in MCL

1.000 TO 3.000 Credits

Reading or analytical assignments in Modern and Classical Languages in accordance with the needs and interests of those enrolled and agreed upon by the student, instructor and endorsed by the department chair. Also can be elected when a student is studying language as part of a study-abroad program.

MCL 325 **Political Islam**

3.000 Credits

Must be enrolled in one of the following classes:

Sophomore

Senior Junior

This course is designed as an introduction to the main issues and themes in the study of political Islam and Muslim Politics, providing a broad overview of the pertinent key concepts and issues. It provides a historical approach to the study of political Islam, and touches upon the nineteenth century Islamic revivalism. It also, explores diversity in contemporary Islamic thought and global Islamist movements.

MCL 353 **Italian Culture Civilization**

3.000 Credits

This course is an exploration of various facets of Italian culture and civilization. We will examine the major historical, political, social, economic, artistic and literary aspects of Italy, from its beginnings to the 21st century, through the close study of key persons, events and documents which shaped Italy's culture and civilization, and promoted the many accomplishments and contributions of this country.

MCL 365 Introduction to the Our'an

3.000 Credits

This course is an introduction to the Qur'an. This class will cover the historical and the cultural factors in which the Ouran appeared. The class will also examine some of the major themes covered in the Qur'an such as gender, science, pluralism, worldview and so forth. Also, it will cover major schools of interpretations and methodologies ranging from the literary to the scientific. The class will be conducted in English and knowledge of Arabic is desired but not required. No prerequisites. The class will consist of lectures, discussions, and movies.

MCL 381 Postwar European Cinema

3.000 Credits

Must be enrolled in one of the following classes:

Senior

Sophomore

Freshman

Junior

The course will concentrate on a series of films from various European countries with a focus on the socio-political issues, historical events and cultural preoccupations that have defined and also challenged European societies from WWII to the present. Zeroing in on the construction of European identities, the course will analyze and compare modes of narrating national, class, racial, sexual and social differences in different European nations. Themes such as memories of war and the Holocaust, new conflicts, class, immigration, women's rights, gender, and East-West relations will be addressed. The course will thus privilege a cinema that offers a "rcit," a story. Particular attention will be given to discourses on otherness and on the ways in which film culture has reflected, reinforced, reshaped and, in some instances, contested Europe's past and current dominant ideologies, and identities. Readings by cultural historians and analysts will provide the context for an understanding of the films. The course will conclude with a discussion of the possible existence of a specific postwar European Cinema.

MCL 390 **Topics in Arabic in Translatn**

3.000 Credits

Examination of problems and issues in selected areas of Modern & Classical Languages. Title as listed in the Schedule of Classes will change according to content. Course may be repeated for credit when specific topics differ.

MCL 399 Independ St in Mod & Class Lng

1.000 TO 3.000 Credits

Reading or analytical assignments in Modern and Classical Languages, including Arabic, in accordance with the needs and interests of those enrolled and agreed upon by the student, instructor, and endorsed by the department chair.

MCL 401 Images of Women in Germany

3.000 Credits

Must be enrolled in one of the following classes:

Sophomore

Senior

Junior

This course will focus on the position of women in Germany after WWII and up to and after the unification of East and West Germany. Particular attention will be given to the gendered history of working through the National Socialist past, the division and reconstruction of the two nation-states, and the terrorism in West Germany in the 1970's. Students will examine images of women in films and tie them to the ideologies of gender and status of women in these larger issues of German history. Course readings will be in English. Students wishing to receive German credit for the course must enroll concurrently in GER 380: Praktikum. Students cannot receive credit for both MCL 401 and MCL 501.

MCL 455 This American Life

3.000 Credits

May not be enrolled in one of the following Classes:

Graduate

Freshman

The course "This American Life: Immigrant Literature and the American Dream" is a literary and cultural analysis of the literature of immigration. The readings are from works of fiction in a variety of genres, and are written by American and non-American prize-winning authors. Their common denominator is the pursuit of the American Dream and its many multifaceted aspects. The themes explored include: assimilation, acculturation, diversity, language, subculture, intertextuality, nostalgia, belonging, and double identity. Student wishing to take this course for graduate credit should sign up for MCL 555. Students cannot receive credit for both MCL 455 and MCL 555.

MCL 490 Topics in Modern & Class Lang 3.000 TO 6.000 Credits

An examination of various theoretical or practical concerns of the field of foreign language. Title as listed in the Schedule of Classes will change according to content. Course may be repeated for credit when specific topics differ. (OC).

Music

MINOR OR BGS/LIBS AREA OF FOCUS ONLY

A minor or area of focus consists of 12 hours of upper-level credit in music history (MHIS), music theory (MTHY) or applied music (MAPP) courses.

Music, Applied

(not a field of concentration, see Applied Music)

Music History (MHIS)

(not a field of concentration)
COURSE OFFERINGS

MHIS 100 Intro to Music

3.000 Credits

A study of Western classical music and its historical development up to the present, through examination of representative musical works.

MHIS 120 History of Jazz

3.000 Credits

The course provides an introduction to jazz styles within their cultural context. Major figures (Louis Armstrong, Duke Ellington, Charlie Parker, and others) and styles (New Orleans, Big Band, Bebop, Cool Jazz, etc.) will be studied through recordings. Ideas about jazz as the expression of African American culture will be studied. (OC).

MHIS 130 Intro to World Music

3.000 Credits

This course is designed as an introductory survey of non-western music traditions within the field called ethnomusicology. The music is studied in terms of sounds, musical instruments, forms and their functions in the society and culture that supports them. Music studied includes that of the Middle East, India, Australia, China, Korea and Japan. (YR).

MHIS 311 Music Before Bach

3.000 Credits

Prerequisites: MHIS 100 or MHIS 120 or MHIS 130 or MHIS 312 or MHIS 331 or MHIS 340 or MHIS 341 or MHIS 342 or MHIS 390 or MTHY 100 or MTHY 101 or MTHY 102 or MTHY 301 or MTHY 302 or MTHY 390

A survey of the early history of music with emphasis on sacred and secular monophonic forms, the rise of part-singing and the opposition to it in the 17th century. (AY).

MHIS 312 Music from Bach to Brahms

3.000 Credits

Prerequisites: MHIS 100 or MHIS 120 or MHIS 130 or MHIS 311 or MHIS 313 or MHIS 331 or MHIS 340 or MHIS 341 or MHIS 342 or MHIS 390 or MTHY 100 or MTHY 101 or MTHY 102 or MTHY 301 or MTHY 302 or MTHY 390

A survey of music in the 18th and 19th centuries with emphasis on the styles and forms of the major composers. (AY).

MHIS 313 Music Since 1900

3.000 Credits

Prerequisites: MHIS 100 or MHIS 120 or MHIS 130 or MHIS 311 or MHIS 312 or MHIS 331 or MHIS 340 or MHIS 341 or MHIS 342 or MHIS 390 or MTHY 100 or MTHY 102 or MTHY 301 or MTHY 302 or MTHY 390 or MTHY 101

A survey of developments in musical styles (especially concert and popular music) and uses of music (film, theater, and recording technologies) in the 20th and 21st centuries.

MHIS 331 Music of America

3.000 Credits

Prerequisites: MHIS 100 or MHIS 120 or MHIS 130 or MTHY 100 or MTHY 101 or MTHY 102 or MTHY 301 or MTHY 302 or MTHY 390 or MAPP 125 or MAPP 126 or MAPP 135 or MAPP 136 or MAPP 145

An historical and cultural study of American music in both the written and unwritten traditions. Content of the course includes not only the various forms of classical music produced in the new world but also primitive, popular, and vernacular genres. (OC).

MHIS 332 Hist of Popular Mus in the USA

3.000 Credits

Prerequisites: MHIS 100 or MHIS 120 or MHIS 130 or MTHY 100 or MTHY 101 or MTHY 102

An introduction to popular music in the United States. This course will include music of the westward movement, ragtime and blues, the roots and growth of jazz, folk music, country music, music of Broadway and Tin Pan Alley, the roots of and development of rock music, as well as the historical, political and sociological background of the United States as pertinent to music history. (YR).

MHIS 333 Intro to Gospel Music

3.000 Credits

This course explores the history and aesthetics of Black sacred music within cultural context. Major figures (Thomas A. Dorsey, Mahalia Jackson, The Winans Family, Kirk Franklin), periods (slavery, Great Migration, Civil Rights movement), and styles (folk and arranged Negro spirituals, congregational songs, and gospel songs - traditional to contemporary) will be studied through recordings, videos, film, and at least one field experience. Underlying the course is the theory (Mellonee Burnim and Pearl Williams-Jones) that gospel music is an expression of African American culture that fuses both African and European elements into a unique whole. (OC).

MHIS 335 Multimedia and Music

3.000 Credits

Prerequisites: MTHY 100 or MTHY 101 or MTHY 102 or MHIS 100 or MHIS 120 or MHIS 130 or MHIS 150

In this course, students will explore case studies of music created, performed, and distributed in combination with other media from the 1960s to the present. Multimedia is understood as any context in which several media are integrated, but particular focus will be paid to technological and creative innovations (such as video games, computers, and phones). The use of music will be considered in such media as film and television, multimedia performance and installation art, and international developments in multimedia production and distribution.

MHIS 336 Film and Music

3.000 Credits

Prerequisites: MHIS 100 or MHIS 120 or MHIS 130

In this course, students will be introduced to the varieties of music used in film from c. 1900 to the present. Topics covered include a basic introduction to the musical features of Western European dramatic music; the role of music in the early decades of the 20th century; the growth of film and musical sound in the "classic era" of Hollywood film; the use of music in specific genres such as film noir, science-fiction, epic, and musicals; and the use of popular song in film. Prerequisite: previous completion of MHIS 100, 120, 130, or by permission of the instructor.

MHIS 337 Women Musicians/West Mus Hist

3.000 Credits

May not be enrolled in one of the following Classes: Freshman

Prerequisites: MHIS 100 or MHIS 120 or MHIS 130 or MTHY 100 or WGST 275 or PSYC 275 or HUM 275 or SOC 275 or ANTH 275 or WGST 303 or ANTH 303 or SOC 303 or PSYC 303 or HUM 303 or WST 275

Through a historical survey of female musicians from the Middle Ages to the present day, this course takes a critical look at theories of creativity and professionalism as they relate to female musical production. The course deals with women in European "art music" traditions and also in jazz and poplar music. Social and cultural norms dictating appropriate female involvement with music are examined. The historical approach will serve to reveal ways in which terms such as professionalism and virtuosity have continually shifted and changed in reference to female musical performance. The course challenges students to re-think many of the commonly accepted gender-based descriptions of particular genres and elements of music through listening and musical analysis.

MHIS 341 Symphony and Symphonic Poem

3.000 Credits

Prerequisites: MHIS 100 or MHIS 120 or MHIS 130 or MHIS 311 or MHIS 312 or MHIS 313 or MHIS 340 or MHIS 342 or MHIS 390 or MTHY 100 or MTHY 102 or MTHY 301 or MTHY 302 or MTHY 390

The symphony and symphonic poem developed from their origins to their more complex later forms. Comparative analysis of similar forms in different periods. (OC).

MHIS 343 Opera

3.000 Credits

Prerequisites: MHIS 100 or MHIS 120 or MHIS 130 or MHIS 311 or MHIS 312 or MHIS 313 or MHIS 331 or MHIS 340 or MHIS 341 or MHIS 342 or MHIS 390 or MTHY 100 or MTHY 101 or MTHY 102 or MTHY 301 or MTHY 302 or MTHY 390

A study of selected examples of music theater from the late 16th century to the present, including a comparison of the qualities of sung versus spoken drama, with emphasis on the achievements of such composers as Monteverdi, Mozart, Wagner, and Verdi. (AY).

MHIS 388 W. African Music: Trad.& Glob.

3.000 Credits

Prerequisites: MHIS 100 or MHIS 120 or MHIS 130 or MTHY 100 or AAAS 106 or AAAS 275 or HUM 100 or HUM 270

West African popular music contains a unique mixture of African, Cuban, European and American influences. With the advent of radio and recording, music that was once locally based is now part of a national and international popular music industry. This course offers an overview of modern West African music, both traditional and popular. The course begins with an introduction to traditional West African instruments and musical genres. Next, there is an exploration of the fusion of traditional African styles with European, Cuban and American styles during and after the colonial era. The course culminates with an examination of the contributions of West African musicians to the World Music scene, focusing on issues of representation and Fair Trade.

MHIS 390 Topics in Music History

3.000 Credits

Examination of problems and issues in selected areas of music history. Title as listed in Schedule of Classes will change according to content. Course may be repeated for credit when specified topics differ. (OC).

MHIS 399 Independent Study

1.000 TO 3.000 Credits

Advanced readings or analytical assignments in a particular area of music. Not more than three hours of independent study will be accepted toward the concentration. (F,W).

Music Theory(MTHY)

(not a field of concentration)
COURSE OFFERINGS

MTHY 100 Fundamentals of Music

3.000 Credits

This course presents the fundamentals of Western music theory through practical experience, including music notation, sightsinging, and ear training. Prerequisites: none.

MTHY 101 Music Theory I

3.000 Credits

Prerequisites: MTHY 100

Writing and analysis of melodic lines, alone and in counterpoint, leading to writing and analysis of harmony. Emphasis on being able to hear the sounds symbolized by notation. (F).

MTHY 102 Music Theory II

3.000 Credits

Prerequisites: MTHY 101

Continuation of MTHY 101 including harmonic analysis, layer analysis, and beginning formal analysis. (W).

MTHY 390 Topics in Music Theory

3.000 Credits

Examination of problems and issues in selected areas of music history. Title as listed in Schedule of Classes will change according to content. Course may be repeated for credit when specified topics differ. (OC).

Natural Sciences

(not a field of concentration)

Students without extensive background in science who wish to receive a general introduction to the natural sciences should elect NSCI 120 and/or 121. NSCI 120 and 121 count toward distribution requirements.

Natural Sciences (NSCI) COURSE OFFERINGS

NSCI 120 Matter, Energy, and Life I

4.000 Credits

Co-requisites: NSCI 120L

A general science course with emphasis on basic principles and their applications. Includes basic life processes, the fundamentals of chemistry and physics, and human systems and genetics. NSCI 120 is complementary to but not a prerequisite for NSCI 121. Students cannot use both NSCI 120 and BIOL 100 to satisfy the natural sciences distribution requirements. Three hours lecture, three hours laboratory. (OC).

NSCI 121 Matter, Energy, and Life II

4.000 Credits

Co-requisites: NSCI 121L

A general science course with emphasis on basic principles and their applications. Includes ecology and evolution, energy and energy technology, geology and astronomy. NSCI 121 is complementary to, but may be taken independently of, NSCI 120. Three hours lecture, three hours laboratory. (F,S).

NSCI 231 Inquiry: Physical Science

3.000 Credits

Prerequisites: EXPS 220

This course develops a strong conceptual understanding of physical science. Prospective K-8 teachers will participate in the same kind of inquiry-based experiences that they will use in their own teaching. Topics will include light and color, matter, and motion. (F,W,S)

NSCI 232 Inquiries: Earth/Planet Science

3.000 Credits

Prerequisites: EXPS 220

This course develops a strong conceptual understanding of earth and planetary science. Prospective K-8 teachers will participate in the same kind of inquiry-based experiences that they will use in their own teaching. Topics will include geology, weather, and astronomy. (F, W,S)

NSCI 233 Inquiry: Life Science

3.000 Credits

Prerequisites: EXPS 220

This course develops a strong conceptual understanding of Life Science. Prospective K-8 teachers will participate in the same kind of inquiry-based experiences that they will use in their own teaching. Topics will include characteristics of life, plants and animals, and ecology. (F,W,S)

NSCI 290 Projects in Natural Sciences

1.000 TO 2.000 Credits

An opportunity for non-science and lower-division science students to carry out independent projects in the natural sciences under the supervision of a faculty member. Projects range from laboratory and field observations to the development of materials and apparatus for use in laboratory exercises and classroom demonstration. In general, one credit hour corresponds to four hours of work per week. Permission of instructor. (F,W).

NSCI 295 Topics in Natural Sciences

1.000 TO 3.000 Credits

An introduction to the themes of the natural sciences reflecting their interactions with one another and society. Topics vary and are announced in the current time schedule. The course may be repeated no more than once under a different topic. One to three hours lecture, seminar, or field study.

NSCI 325 Gender, Science, & Engineering

3.000 Credits

Explores some of the history of women in science and engineering, the current status of women in science and engineering, and feminist theory in research. Topics include cultural influences on women in science and engineering, careers and life balance, and a feminist approach to scientific and engineering teaching and research. Lecture/discussion OR hybrid OR online.

NSCI 331 Inquiry: Physical Science II

3.000 Credits

Prerequisites: NSCI 231 or PHYS 125 or CHEM 134 or

CHEM 144

An inquiry-based physical science course suitable for prospective or practicing elementary teachers majoring or minoring in science studies. Students will construct meaningful understanding of physics and chemistry concepts through discussion, hands-on experiences and computer simulations. Specific topics will include the application of the atomic model to the behavior of gases, physical changes, and chemical changes. A learning-cycle pedagogy will be employed that consists of elicitation of initial student ideas, development of new or modified ideas, building student consensus on final ideas, and the application of ideas to new situations.

NSCI 332 Inquiry: Mich Earth Science

3.000 Credits

Must be enrolled in one of the following Degrees:

Bachelor of Science Bachelor of Arts

Must be enrolled in one of the following Colleges:

Coll of Ed, Health, &Human Ser Coll of Arts, Sciences&Letters

Must be enrolled in one of the following classes:

Undergrad Certification only

Sophomore

Senior

Junior

Post-baccalaureate Cert only

Prerequisites: NSCI 232 or GEOL 118

This course develops a strong conceptual understanding of earth science as it applies to the state of Michigan. Prospective K-8 teachers will participate in the same kind of inquiry-based experiences that they will use in their own teaching. Topics will include landforms, water, weather and seasons in Michigan.

NSCI 333 Inquiry: PBL in Life Science

3.000 Credits

Must be enrolled in one of the following Colleges:

Coll of Ed, Health, & Human Ser

Coll of Arts, Sciences&Letters

Must be enrolled in one of the following classes:

Undergrad Certification only

Sophomore

Senior

Junior

Post-baccalaureate Cert only

Prerequisites: NSCI 233 or BIOL 130

A problem-based learning course suitable for prospective or practicing elementary and middle-school teachers who major or minor in integrated science studies. This course builds on and reinforces content learned at the introductory level by applying life science concepts to complex real-world problems presented in class. Students will work in small groups to identify and research concepts and principles they need to know in order to progress through the real-world life science problems. The case studies used will require the understanding and application of concepts in cell structure and function, genetics, animal and plant physiology, and ecology.

NSCI 390 Topics in Natural Sciences

1.000 TO 3.000 Credits

A course in special topics current to natural sciences. Topic and format (seminar, lecture and laboratory) for the course may vary. See current Schedule of Classes. (OC).

NSCI 415 Nutrition and Health

3.000 Credits

Prerequisites: ANTH 101

The influence of nutrition on physical and mental development from conception to adulthood. Topics include: 1) definition and function of the essential nutrients for people, 2) basic principles of human growth and development, 3) the causes and consequences of under- and over-nutrition, 4) feeding practices for infants and children and the development of food habits, 5) nutrients and food problems in the local region and in global perspective. Students cannot receive credit for both NSCI 415 and NSCI 515. (YR).

NSCI 490 Topics in Natural Sciences

1.000 TO 3.000 Credits

A course in special topics current to natural sciences. Topic and format (seminar, lecture and laboratory) may vary. See current Schedule of Classes. (OC).

NSCI 497 Natural Sciences Colloquium

1.000 Credits

A series of colloquia on selected topics representing frontier areas of current research in the natural sciences. Lectures by guest speakers invited by the department constitute a major component of the course. One hour seminar. (F).

NSCI 498 Independent Study in NSCI

1.000 TO 3.000 Credits

Must be enrolled in one of the following Colleges:

Coll of Ed, Health, & Human Ser

Coll of Arts, Sciences&Letters

Must be enrolled in one of the following classes:

Undergraduate NCFD

Undergrad Certification only

Junior Senior

Provides an opportunity for students to pursue independent library-based research or readings under the direction of a faculty member. For students who wish to study an area that is interdisciplinary rather than an area focused on a single science. The student and the faculty member must complete a contract outlining the area to be studied and the product of the research.

NSCI 499 Laboratory Research in NSCI

1.000 TO 3.000 Credits

Must be enrolled in one of the following Colleges:

Coll of Ed, Health, &Human Ser

Coll of Arts, Sciences&Letters

Must be enrolled in one of the following classes:

Undergraduate NCFD

Undergrad Certification only

Junior

Senior

Provides an opportunity for students to pursue independent laboratory-based research under the direction of a faculty member. For students who wish to study an area that is interdisciplinary rather than an area focused on a specific science. The student and the faculty member must complete a contract outlining the area to be studied and the product of the research.

Organizational Change in a Global Environment

MINOR OR BGS/LIBS AREA OF FOCUS ONLY

Requires 15 credits of upper level course work from the following:

COMM 477; HIST 387, 3695; JASS 403; LIBS 364; PSYC 405, 431, 4305

Philosophy

Philosophy explores the fundamental values and assumptions of human activities such as science, the arts, religion, morality, and social and political institutions. It uses the power of human reasoning to address such questions as "What is it to know something?" "What is the best way to live? and "Is belief in God rationally justifiable?" Ultimately, philosophy has as its goal the development of a coherent view of the world and our place in it.

Philosophical inquiry helps students acquire and sharpen valuable intellectual and practical skills that can be important in their careers. These skills include effective writing, verbal argumentation, and critical thinking.

The primary value of philosophy lies in its contribution to intellectual insight and to a liberal arts education. The study of philosophy can also serve as a basis for a variety of careers, including medicine, business, and government. It is especially effective as the basis for a pre-law program. Recent developments in cognitive science and in medical and environmental ethics have broadened the range of careers and professions for which the study of philosophy can be recommended.

PREREQUISITES TO THE MAJOR

PHIL 100 Introduction to Philosophy
PHIL 233 Critical Thinking

OR

PHIL 234

Symbolic Logic

PHIL 240 Ethics

MAJOR REQUIREMENTS

PHIL 301 Ancient Philosophy **and** PHIL 302 Modern Philosophy

A student may choose either a traditional major in philosophy (Alternative I) or a program that stresses the relationship of philosophy to other areas of study (Alternative II). With regard to both alternatives, students are strongly encouraged to work closely with a faculty adviser to develop a coherent program. Alternative I requires a total of 24 hours in philosophy courses at the 300 or 400 level and six upper-level hours of cognate courses in one or more disciplines outside philosophy. Alternative II requires a total of 18 hours in philosophy courses at the 300 or 400 level and 12 upper-level hours of cognate courses. Satisfactory completion of PHIL 301 Ancient Philosophy and PHIL 302 Modern Philosophy will be counted as part of the 24 hours in philosophy in Alternative I or as part of the 18 hours in philosophy in Alternative II.

NOTES:

- A maximum of 44 hrs in PHIL may count in the 120 hours required to graduate.
- 2. Credit cannot be given for both PHIL 234 and 350.
- 3. At least 15 hrs of upper level Philosophy required for the major must be elected at UM-Dearborn.

MINOR OR BGS/LIBS AREA OF FOCUS

A minor or area focus consists of 12 hours of upper-level credit in philosophy.

Philosophy (PHIL) COURSE OFFERINGS

PHIL 100 Introduction to Philosophy

3.000 Credits

An introduction to philosophical thinking through an examination of some timeless human problems such as the existence of God, the problem of freedom, and the attempt to find an ethical foundation for life. (F,W).

PHIL 120 Philosophy and Religion

3.000 Credits

An examination of how basic concerns of philosophy impinge on questions of religious beliefs. Using philosophical texts, the course will explore such questions as the following: Does God exist? Does human life have a purpose? How can we know whether religious claims are true?

PHIL 200 The Human Condition

3.000 Credits

The human condition as seen in selected works of philosophy and literature. Typical issues: the meaning of life, the existence of God, moral responsibility for human actions, and the role of society in promoting or hindering human excellence. (OC).

PHIL 233 Critical Thinking

3.000 Credits

A study of the nature and justification of reasoned arguments, both deductive and inductive, as they occur in natural language. A consideration of topics in language that promote an understanding of ways of reasoning, including definitions and fallacies. (F,W).

PHIL 234 Symbolic Logic

3.000 Credits

This course will examine the central themes in modern symbolic logic including consistency, truth-functionality, sentential first-order predicate logic, and the logic of identity and possibility. These themes and their relation to the wider philosophical context will be discussed. (F,W).

PHIL 240 Ethics

3.000 Credits

A study of ethical concepts and theories. Typical questions: Is the morality of an action based on its results or on the intent of the person acting? Is ethics purely rational? What makes a good person? Ethical principles may be applied to such issues as abortion, capitalism, war, and capital punishment. (F,W).

PHIL 301 Ancient Philosophy

3.000 Credits

Prerequisites: PHIL 100 or PHIL 120 or PHIL 233 or PHIL 234 or PHIL 240 or PHIL 302 or PHIL 303 or PHIL 304 or PHIL 305 or PHIL 310 or PHIL 315 or PHIL 320 or PHIL 355 or PHIL 340 or PHIL 350 or PHIL 365 or PHIL 369 or PHIL 370 or PHIL 371 or PHIL 375 or PHIL 380 or PHIL 390 or PHIL 441 or PHIL 442 or PHIL 445 or PHIL 485 or PHIL 490

An examination of the metaphysical, epistemological, ethical, and political theories of the ancient Greek philosophers with particular attention paid to Plato and Aristotle and to the influence of their ideas on Western culture. Students electing this course must have successfully completed a previous course in philosophy or have permission of instructor.

PHIL 302 Modern Philosophy

3.000 Credits

Prerequisites: PHIL 100 or PHIL 120 or PHIL 233 or PHIL 234 or PHIL 240 or PHIL 301 or PHIL 303 or PHIL 304 or PHIL 305 or PHIL 310 or PHIL 315 or PHIL 320 or PHIL 355 or PHIL 340 or PHIL 350 or PHIL 365 or PHIL 369 or PHIL 370 or PHIL 371 or PHIL 375 or PHIL 380 or PHIL 390 or PHIL 441 or PHIL 442 or PHIL 445 or PHIL 485 or PHIL 490

A study of 17th and 18th century European philosophers including such philosophers as Descartes, Spinoza, Hume, and Kant with emphasis on their metaphysical and epistemological theories and how those theories provided a foundation for science and a bedrock for modern thought. Students electing this course must have successfully completed a previous course in philosophy or have permission of instructor.

PHIL 303 Kant and the 19th Century

3.000 Credits

Prerequisites: PHIL 100 or PHIL 120 or PHIL 233 or PHIL 234 or PHIL 240 or PHIL 301 or PHIL 302 or PHIL 304 or PHIL 305 or PHIL 310 or PHIL 315 or PHIL 320 or PHIL 355 or PHIL 340 or PHIL 350 or PHIL 365 or PHIL 369 or PHIL 370 or PHIL 371 or PHIL 375 or PHIL 380 or PHIL 390 or PHIL 441 or PHIL 442 or PHIL 445 or PHIL 485 or PHIL 490

The development of philosophical thought from Kant through the 19th century. In addition to Kant, figures discussed may include Hegel, Schopenhauer, Marx, Kierkegaard, and Nietzsche. Readings in selected texts. (OC).

PHIL 304 Twentieth-Century Philosophy

3.000 Credits

Prerequisites: PHIL 100 or PHIL 120 or PHIL 233 or PHIL 234 or PHIL 240 or PHIL 301 or PHIL 302 or PHIL 303 or PHIL 305 or PHIL 310 or PHIL 315 or PHIL 320 or PHIL 355 or PHIL 340 or PHIL 350 or PHIL 365 or PHIL 369 or PHIL 370 or PHIL 371 or PHIL 375 or PHIL 380 or PHIL 390 or PHIL 441 or PHIL 442 or PHIL 445 or PHIL 485 or PHIL 490

A study of selected topics, movements, and figures in the philosophy of the twentieth century, including such representative subjects as continental philosophy, contemporary philosophy of mind, and analytic philosophy. Designed to meet the needs of students in literature and the history of ideas as well as philosophy students. Students electing this course must have successfully completed a previous course in philosophy or have permission of the instructor.

PHIL 305 Marxism

3.000 Credits

Prerequisites: PHIL 100 or PHIL 120 or PHIL 233 or PHIL 234 or PHIL 240 or PHIL 301 or PHIL 302 or PHIL 303 or PHIL 304 or PHIL 310 or PHIL 315 or PHIL 335 or PHIL 340 or PHIL 350 or PHIL 365 or PHIL 369 or PHIL 370 or PHIL 371 or PHIL 375 or PHIL 380 or PHIL 390 or PHIL 441 or PHIL 442 or PHIL 445 or PHIL 485 or PHIL 490

This course is an introduction to the philosophy of Marxism which emphasizes Marx's theories of human nature, alienation, class struggle, and revolution through readings of classical and contemporary texts. Students electing this course must have successfully completed a previous course in philosophy or have permission of instructor. (OC).

PHIL 306 Islamic Philosophy

3.000 Credits

Prerequisites: PHIL 100

The course covers the development of Islam, basic Islamic doctrine, and a selection of issues that have been debated within the Islamic philosophical tradition. Students read original texts by Muslim philosophers and think critically about the issues in them and the arguments raised about them. All readings in English; no knowledge of Arabic required.

PHIL 310 Darwinism and Philosophy

3.000 Credits

Prerequisites: PHIL 100 or PHIL 120 or PHIL 233 or PHIL 234 or PHIL 240 or PHIL 301 or PHIL 302 or PHIL 303 or PHIL 304 or PHIL 305 or PHIL 315 or PHIL 320 or PHIL 355 or PHIL 340 or PHIL 350 or PHIL 365 or PHIL 369 or PHIL 370 or PHIL 371 or PHIL 375 or PHIL 380 or PHIL 390 or PHIL 441 or PHIL 442 or PHIL 445 or PHIL 485 or PHIL 490

Darwinism represents a challenge to the traditional view of human life as radically separate from the rest of the natural world. This course will examine the philosophical implications of this world view. It will address questions such as these: Is Darwinism compatible with traditional religion? Does Darwinism imply that human life and the cosmos are without purpose? Can human life be meaningful if it is the result of evolution and natural selection? Does Darwinism require us to change our view of nature? What are the ethical implications of a Darwinian view of life and the universe?

PHIL 312 Environmental Ethics

3.000 Credits

Prerequisites: PHIL 100 or PHIL 233 or PHIL 240 * or ENST 105 or ENST 301

The relationship of human beings to the non-human environment raises pressing moral and political issues. This course will use the theories and concepts of philosophical ethics to explore such questions as human obligations to non-human animals; the preservation of wilderness; balancing economic, aesthetic, and spiritual values; and the problems of pollution, urban sprawl, and ecological justice. Prerequisite or permission of instructor. (YR).

PHIL 315 Ethics of War & Peace

3.000 Credits

Prerequisites: PHIL 100 or PHIL 120 or PHIL 233 or PHIL 234 or PHIL 240 or PHIL 301 or PHIL 302 or PHIL 303 or PHIL 304 or PHIL 305 or PHIL 310 or PHIL 320 or PHIL 355 or PHIL 340 or PHIL 350 or PHIL 365 or PHIL 369 or PHIL 370 or PHIL 371 or PHIL 375 or PHIL 380 or PHIL 390 or PHIL 441 or PHIL 442 or PHIL 445 or PHIL 485 or PHIL 490

A philosophical exploration of ethical issues underlying war and peace. The course will treat such questions as the following: what wars, if any, are just? Are there moral restrictions on the methods that may be used? What individuals are morally responsible for wartime decisions, and to what degree? Discussion of these issues will be used to elucidate larger problems in ethical theory. Students electing this course must have successfully completed a previous course in philosophy or have permission of instructor.

PHIL 320 The Problem of Human Freedom

3.000 Credits

Prerequisites: PHIL 100 or PHIL 120 or PHIL 233 or PHIL 234 or PHIL 240 or PHIL 301 or PHIL 302 or PHIL 303 or PHIL 304 or PHIL 305 or PHIL 310 or PHIL 315 or PHIL 355 or PHIL 340 or PHIL 350 or PHIL 365 or PHIL 369 or PHIL 370 or PHIL 371 or PHIL 375 or PHIL 380 or PHIL 390 or PHIL 441 or PHIL 442 or PHIL 445 or PHIL 485 or PHIL 490

A critical examination of the idea of freedom: the free will/determinism debate, moral and legal responsibility, punishment, and the relationship between metaphysical and social freedom. Students electing this course must have successfully completed a previous course in philosophy or have permission of instructor.

PHIL 327 Kierkegaard & Nietzsche

3.000 Credits

This course will explore the philosophical views of Kierkegaard and Nietzsche, examining the interconnections and differences between these two thinkers as well as each one's contributions to philosophy and psychology. The course will focus on both

philosophers' emphasis on the individual and how that emphasis arose as a response to the social, political and economic changes in the 19th century and anticipated and influenced philosophical developments in the 20th century, in particular existentialism.

PHIL 335 Philosophy of Law

3.000 Credits

Prerequisites: PHIL 100 or PHIL 120 or PHIL 233 or PHIL 234 or PHIL 240 or PHIL 301 or PHIL 302 or PHIL 303 or PHIL 304 or PHIL 305 or PHIL 310 or PHIL 315 or PHIL 320 or PHIL 355 or PHIL 340 or PHIL 350 or PHIL 365 or PHIL 369 or PHIL 370 or PHIL 371 or PHIL 375 or PHIL 380 or PHIL 390 or PHIL 441 or PHIL 442 or PHIL 445 or PHIL 485 or PHIL 490

An examination of some of the important philosophical issues relevant to law and legal theory, including legal punishment, legal responsibility, and the relationship between law and morality. Both classical and contemporary writings will be studied. Students electing this course must have successfully completed a previous course in philosophy or have permission of instructor.

PHIL 340 Analytic Philosophy

3.000 Credits

Prerequisites: PHIL 100 or PHIL 120 or PHIL 233 or PHIL 234 or PHIL 240 or PHIL 301 or PHIL 302 or PHIL 303 or PHIL 304 or PHIL 305 or PHIL 310 or PHIL 315 or PHIL 320 or PHIL 355 or PHIL 350 or PHIL 365 or PHIL 369 or PHIL 370 or PHIL 371 or PHIL 375 or PHIL 380 or PHIL 390 or PHIL 441 or PHIL 442 or PHIL 445 or PHIL 485 or PHIL 490

An introduction to philosophy as the analysis and evaluation of fundamental concepts and principles occurring in ordinary life and in the sciences. While analytic philosophy in the twentieth century is emphasized, its antecedents in the history of western philosophy will be examined. Students electing this course must have successfully completed a previous course in philosophy or have permission of instructor. (OC).

PHIL 350 Symbolic Logic

3.000 Credits

This course will examine the central themes in modern symbolic logic including consistency, truth-functionality, sentential first-order predicate logic, and the logic of identity and possibility. These themes and their relation to the wider philosophical context will be discussed. (F,W).

PHIL 360 Philosophy of Technology

3.000 Credits

A study of both the history of, and current issues in, the philosophy of technology. This course will examine the deeper meaning and implications of our modern technological society. Questions examined include: What is the definition and nature of technology? How did the concept originate in Western thought? What is the relationship between modern industrial technology and the 'mechanistic' worldview? How do Western religious beliefs influence our attitudes about technology? Is technological progress socially determined, or is it culturally independent? In what ways has our technological society been supportive of, or detrimental to, overall human well-being? Students will cover both classic and contemporary readings.

PHIL 365 Philosophy of Religion

3.000 Credits

Prerequisites: PHIL 100 or PHIL 120 or PHIL 233 or PHIL 234 or PHIL 240 or PHIL 302 or PHIL 303 or PHIL 304 or PHIL 305 or PHIL 310 or PHIL 315 or PHIL 320 or PHIL 355 or PHIL 340 or PHIL 350 or PHIL 369 or PHIL 301 or PHIL 370 or PHIL 371 or PHIL 375 or PHIL 380 or PHIL 390 or PHIL 441 or PHIL 442 or PHIL 445 or PHIL 485 or PHIL 490 or RELS 120

A philosophical examination of basic religious problems, such as the nature and grounds of religious belief, the existence and nature of God, human immortality, the relations of religion and science, and the nature of religious language. Students electing this course must have successfully completed a previous course in philosophy or have permission of instructor.

PHIL 369 Philosophy of Art

3.000 Credits

Prerequisites: PHIL 100 or PHIL 120 or PHIL 233 or PHIL 234 or PHIL 240 or PHIL 301 or PHIL 302 or PHIL 303 or PHIL 304 or PHIL 305 or PHIL 310 or PHIL 315 or PHIL 320 or PHIL 355 or PHIL 340 or PHIL 350 or PHIL 365 or PHIL 370 or PHIL 375 or PHIL 380 or PHIL 390 or PHIL 441 or PHIL 442 or PHIL 445 or PHIL 485 or PHIL 490 or PHIL 371

An examination and critique of both traditional and contemporary theories of art as well as an examination of theories of the aesthetic including theories of beauty, taste, and the aesthetic attitude. Students electing this course must have successfully completed a previous course in philosophy or have permission of instructor. (OC).

PHIL 370 Philosophy of Mind

3.000 Credits

Prerequisites: PHIL 100 or PHIL 120 or PHIL 233 or PHIL 234 or PHIL 240 or PHIL 301 or PHIL 302 or PHIL 303 or PHIL 304 or PHIL 305 or PHIL 310 or PHIL 315 or PHIL 320 or PHIL 355 or PHIL 340 or PHIL 350 or PHIL 365 or PHIL 369 or PHIL 371 or PHIL 375 or PHIL 380 or PHIL 390 or PHIL 441 or PHIL 442 or PHIL 445 or PHIL 485 or PHIL 490

A study of current philosophical work in the area of consciousness studies examining the nature and function of human consciousness and the problem of reconciling an objective, scientific view of consciousness with our subjective experience of it. Students electing this course must have successfully completed a previous course in philosophy or have permission of instructor.

PHIL 371 Philosophy in Literature

3.000 Credits

Prerequisites: PHIL 100 or PHIL 120 or PHIL 233 or PHIL 234 or PHIL 240 or PHIL 301 or PHIL 302 or PHIL 303 or PHIL 304 or PHIL 305 or PHIL 310 or PHIL 315 or PHIL 320 or PHIL 355 or PHIL 340 or PHIL 350 or PHIL 365 or PHIL 369 or PHIL 370 or PHIL 375 or PHIL 380 or PHIL 390 or PHIL 441 or PHIL 442 or PHIL 445 or PHIL 485 or PHIL 490

An exploration of philosophical problems as they are encountered in works of literature. Students electing this course must have successfully completed a previous course in philosophy or have permission of instructor.

PHIL 375 Problems of Human Knowledge

3.000 Credits

Prerequisites: PHIL 100 or PHIL 120 or PHIL 233 or PHIL 234 or PHIL 240 or PHIL 301 or PHIL 302 or PHIL 303 or PHIL 304 or PHIL 305 or PHIL 310 or PHIL 315 or PHIL 320 or PHIL 355 or PHIL 340 or PHIL 350 or PHIL 365 or PHIL 369 or PHIL 370 or PHIL 371 or PHIL 380 or PHIL 390 or PHIL 441 or PHIL 442 or PHIL 445 or PHIL 485 or PHIL 590

A study of issues and problems that arise in considering the nature of knowledge: an examination of traditional theories of knowledge and recent critiques of those theories. Readings of classical and contemporary texts. Students electing this course must have successfully completed a previous course in philosophy or have permission of instructor.

PHIL 380 Theories of Reality

3.000 Credits

Prerequisites: PHIL 100 or PHIL 120 or PHIL 233 or PHIL 234 or PHIL 240 or PHIL 301 or PHIL 302 or PHIL 303 or PHIL 304 or PHIL 305 or PHIL 310 or PHIL 315 or PHIL 320 or PHIL 355 or PHIL 340 or PHIL 350 or PHIL 365 or PHIL 369 or PHIL 370 or PHIL 371 or PHIL 375 or PHIL 390 or PHIL 441 or PHIL 442 or PHIL 445 or PHIL 485 or PHIL 490

A critical examination of philosophical positions that claim to distinguish between what is real and what is apparent; an evaluation of the basic principles of philosophy and of extraphilosophical disciplines. Readings of classical and contemporary texts. Students electing this course must have successfully completed a previous course in philosophy or have permission of instructor.

PHIL 384 Feminist Philosophy

3.000 Credits

Prerequisites: PHIL 100 or WST 275 or WGST 275 or WGST 303 or HUM 275 or ANTH 275 or PSYC 275 or SOC 275 or HUM 303 or ANTH 303 or PSYC 303 or SOC 303

Feminists working in philosophy, most notably in the 19th and 20th centuries, have altered the traditional philosophical canon by first, recovering women philosophers who were essentially erased from the history and secondly, by extending and contributing to the standard questions of philosophy. For example, one central question of philosophy; "What can we know with certainty?" has been transformed through a feminist lens and reinterpreted as "What does one's gender, social location, and cultural framework contribute to what one knows?" In this course we will look at the variety of feminist philosophical theories with a focus on epistemology, metaphysics, and ethics.

PHIL 390 Topics in Philosophy

3.000 Credits

Prerequisites: PHIL 100 or PHIL 120 or PHIL 233 or PHIL 234 or PHIL 240 or PHIL 301 or PHIL 302 or PHIL 303 or PHIL 304 or PHIL 305 or PHIL 310 or PHIL 315 or PHIL 320 or PHIL 355 or PHIL 340 or PHIL 350 or PHIL 365 or PHIL 369 or PHIL 370 or PHIL 371 or PHIL 375 or PHIL 380 or PHIL 441 or PHIL 442 or PHIL 445 or PHIL 485 or PHIL 490

Examination of problems and issues in selected areas of philosophy. Title as listed in Schedule of Classes will change according to content. Course may be repeated for credit when specific topics differ. Typical topics: Philosophy of Language, Minds and Machines, Moral Responsibility. Students electing this course must have successfully completed a previous course in philosophy or have permission of instructor.

PHIL 399 Independent Studies

1.000 TO 3.000 Credits

Readings or analytical assignments in philosophy in accordance with the needs and interests of those enrolled and agreed upon by the student and instructor. (F,W).

PHIL 415 Existentialism and Its Sources

3.000 Credits

Prerequisites: PHIL 100 or PHIL 120 or PHIL 233 or PHIL 234 or PHIL 240 or PHIL 301 or PHIL 302 or PHIL 303 or PHIL 304 or PHIL 305 or PHIL 310 or PHIL 315 or PHIL 335 or PHIL 340 or PHIL 350 or PHIL 365 or PHIL 369 or PHIL 370 or PHIL 371 or PHIL 375 or PHIL 380 or PHIL 390 or PHIL 441 or PHIL 442 or PHIL 445 or PHIL 485 or PHIL 490

An exploration of the literary sources of existentialism and a critical study of selected philosophical texts. Particular themes death, subjectivity, alienation, commitment, and freedom - will be considered in an attempt to formulate an existential conception of the human condition. Students electing this course must have successfully completed a previous course in philosophy or have permission of instructor.

PHIL 441 Social and Political Phil

3.000 Credits

Prerequisites: PHIL 100 or PHIL 120 or PHIL 233 or PHIL 234 or PHIL 240 or PHIL 301 or PHIL 302 or PHIL 303 or PHIL 304 or PHIL 305 or PHIL 310 or PHIL 315 or PHIL 335 or PHIL 340 or PHIL 350 or PHIL 365 or PHIL 369 or PHIL 370 or PHIL 371 or PHIL 375 or PHIL 380 or PHIL 390 or PHIL 411 or PHIL 442 or PHIL 485 or PHIL 490

An analysis of some fundamental problems of political and social philosophy, with special attention to the way in which theory may function as a guide to specific policies. Students electing this course must have successfully completed a previous course in philosophy or have permission of instructor.

PHIL 442 Medical Ethics

3.000 Credits

Prerequisites: PHIL 100 or PHIL 120 or PHIL 233 or PHIL 234 or PHIL 240 or PHIL 301 or PHIL 302 or PHIL 303 or PHIL 304 or PHIL 305 or PHIL 310 or PHIL 315 or PHIL 320 or PHIL 335 or PHIL 340 or PHIL 350 or PHIL 365 or PHIL 369 or PHIL 370 or PHIL 371 or PHIL 375 or PHIL 380 or PHIL 390 or PHIL 441 or PHIL 445 or PHIL 490

An examination of moral issues in medicine. Among the problems to be considered are truth-telling and paternalism in the doctor-patient relationship, psychosurgery and behavior control, death and euthanasia, the allocation of scarce resources, and genetic counseling and control. Specific attention will be given to ethical theories and to philosophical concepts such as rights, autonomy, and justice. Students cannot receive credit for both PHIL 442 and PHIL 542. Students electing this course must have successfully completed a previous course in philosophy or have permission of instructor.

PHIL 445 Contemporary Ethical Issues

3.000 Credits

Prerequisites: PHIL 100 or PHIL 120 or PHIL 233 or PHIL 234 or PHIL 240 or PHIL 301 or PHIL 302 or PHIL 303 or PHIL 304 or PHIL 305 or PHIL 310 or PHIL 315 or PHIL 320 or PHIL 335 or PHIL 340 or PHIL 350 or PHIL 365 or PHIL 369 or PHIL 370 or PHIL 371 or PHIL 375 or PHIL 380 or PHIL 390 or PHIL 441 or PHIL 442 or PHIL 490

An intensive study of a topic in recent ethical theory. Topics will vary with each offering. Among the topics: ethics and law, utilitarianism, virtue theory, theories of justice, morality and emotion, ethics and partiality. Students electing this course must have successfully completed a previous course in philosophy or have permission of instructor.

PHIL 485 Philosophy of Science

3.000 Credits

Prerequisites: PHIL 100 or PHIL 120 or PHIL 233 or PHIL 234 or PHIL 240 or PHIL 301 or PHIL 302 or PHIL 303 or PHIL 304 or PHIL 305 or PHIL 310 or PHIL 315 or PHIL 320 or PHIL 355 or PHIL 340 or PHIL 350 or PHIL 365 or PHIL 369 or PHIL 370 or PHIL 371 or PHIL 375 or PHIL 380 or PHIL 390 or PHIL 441 or PHIL 442 or PHIL 445 or PHIL 490

A critical study of the foundations of the sciences, natural and social, with emphasis on the following topics: the nature of scientific method, theories and explanation, probability and determinism, the unity of the sciences. Students electing this course must have successfully completed a previous course in philosophy or have permission of instructor.

PHIL 490 Studies in Philosophy

1.000 TO 4.000 Credits

Intensive study of a figure, movement, or issue in philosophy. Title as listed in Schedule of Classes will change according to content. Course may be repeated for credit when specific topics differ. Typical topics: Plato's dialogues, philosophical foundations of mathematics, minds and machines. (OC).

PHIL 496 Independent Studies

1.000 TO 3.000 Credits

Topics in philosophy not ordinarily included in other courses in philosophy. Selected in accordance with needs and interests of those enrolled.

PHIL 497 Independent Studies

1.000 TO 3.000 Credits

Topics in philosophy not ordinarily included in other courses in philosophy, selected in accordance with the needs and interests of those enrolled.

PHIL 498 Independent Studies

1.000 TO 4.000 Credits

Topics in philosophy not ordinarily included in other courses in philosophy, selected in accordance with the needs and interests of those enrolled. Credit hours will vary. (F,W).

PHIL 499 Independent Studies

1.000 TO 4.000 Credits

Topics in philosophy not ordinarily included in other courses in philosophy, selected in accordance with the needs and interests of those enrolled. Credit hours will vary. (F,W).

Physics

Physics is the study of the most fundamental properties of matter and energy. The physics program has been designed with the recognition that a student might choose to major in physics for a variety of reasons. In addition to meeting the needs of those planning to continue their physics education in graduate school, the program serves those students wanting to pursue technical careers immediately after graduation, those seeking to enter medical, dental or other professional schools, and those interested in earning certification as high school teachers. After completing a core curriculum in physics and mathematics and an introduction to the life and other physical sciences, students have the opportunity to gain first-hand experience in basic and applied physics research by participating in faculty research projects both on and off campus. Similar experiences may be arranged in hospital, industrial, or government research facilities in the Detroit metropolitan area. The physics faculty have concentrated their efforts in quantum optics, statistical and condensed matter physics, biophysics, astrophysics, and the history and philosophy of physics. Physics majors have worked on problems in these specialty areas, and also on projects in the interdisciplinary application of physics in medicine and in the environment. Students wishing to emphasize the applied side of physics may do so by replacing elective courses in physics with courses offered by the College of Engineering and Computer Science.

PREREQUISITES TO THE MAJOR

A solid background in mathematics is essential to success in any scientific discipline. Incoming students who intend a concentration in physics should have completed at least three years of high school mathematics. First-year students should plan to enroll in MATH 105, 115 or 116 based on the results of their math placement tests. PHYS 150 and 151 are prerequisites to all other physics courses. Students intending on majoring in physics should complete these courses as soon as possible.

CHEM 134	General Chemistry I 4 hrs
OR	
CHEM 144	General Chemistry I 4 hrs
PHYS 150	General Physics I
PHYS 151	General Physics II 8 hrs
MATH 115, 1	16 and 215
	Calculus
MATH 216	Differential Equations
MATH 217	Matrix Algebra
OR	
MATH 227	Linear Algebra 2-3 hrs
Two other science	courses chosen from
	CHEM 136 OR CHEM 146,
	BIOL 130 OR BIOL 140,
	GEOL 118
MAJOR REQUI	REMENTS
Required courses	
PHYS 305	Contemporary Physics
PHYS 360	Instrumentation for Scientists 4 hrs
PHYS 401	Mechanics 3 hrs
PHYS 403	Electricity and Magnetism 3 hrs
PHYS 406	I nermal and Statistical Physics
PHYS 406 PHYS 453	Thermal and Statistical Physics

Six additional credit hours of lecture courses in physics, chosen from

PHYS 320	Environmental Physics
PHYS 370	Introduction to Mathematical Physics
PHYS 390	Current Topics in Physics
PHYS 405	Optics
PHYS 416	Biological Physics
PHYS 421	Astrophysics
PHYS 457	Atomic and Nuclear Physics
PHYS 463	Solid State Physics

Three additional credit hours of laboratory courses, selected from

PHYS 460	Advanced Physics Laboratory	3 hrs
PHYS 495	Off-Campus Research	1-3 hrs
PHYS 499	Laboratory Studies in Physics	1-3 hrs

NOTES:

- 1. A maximum of 44 hrs. of PHYS may count in the 120 hours required to graduate.
- 2. At least 12 of the 31 upper level hours in PHYS must be elected at UM-Dearborn.
- 3. A maximum of 6 hrs. of independent study/research in any Dept. of Natural Sciences discipline may count towards the 120 hours required to graduate.

MINOR OR AREA OF FOCUS

A minor or area of focus consists of 12 credit hours of upperlevel courses in physics.

Physics (PHYS) COURSE OFFERINGS

PHYS 100 Perspectives in Physics

3.000 Credits

An introductory look at the concepts and methods of physics as well as the role of physics in society today. Examines some of the problems facing physicists and the ways they go about tackling them. Problem solving includes the use of mathematics in physical situations. The course is designed for nonconcentrators interested in physics. Three hours lecture. (S).

PHYS 125 Introductory Physics I

4.000 Credits

Prerequisites: MATH 105 * or MPLS 113

Co-requisites: PHYS 125L

Part I of a non-calculus, introductory, survey of physics. The concepts of physics are presented with an emphasis on the methods of solving physical problems. Topics are drawn from mechanics, waves, and thermal physics. This course and PHYS 126 are normally taken by students in biological science,

preprofessional and computer science programs. Three hours lecture, one hour discussion, three hours laboratory. (F).

PHYS 126 Introductory Physics II

4.000 Credits

Prerequisites: PHYS 125 or PHYS 150

Co-requisites: PHYS 126L

A continuation of PHYS 125. Topics are drawn from electricity and magnetism, optics, and modern physics. Three hours lecture, one hour discussion, three hours laboratory. (W).

PHYS 150 General Physics I

4.000 Credits

Prerequisites: MATH 115 * or MPLS 116

Co-requisites: PHYS 150L

Part I of an integrated, two-semester, calculus-based treatment of physics, with emphasis on the solution of physical problems through the understanding of a few basic concepts. Topics are drawn from mechanics. This course and PHYS 151 are normally taken by concentrators in physics, chemistry, biochemistry, mathematics, and engineering. Three hours lecture, one hour discussion, three hours laboratory. (F,W).

PHYS 151 General Physics II

4.000 Credits

Prerequisites: PHYS 150 and (MATH 116 * or MPLS 215)

Co-requisites: PHYS 151L

A continuation of PHYS 150. Topics are drawn from electricity and magnetism, and optics. Three hours lecture, one hour discussion, three hours laboratory. (F,W).

PHYS 305 Contemporary Physics

3.000 Credits

Prerequisites: (PHYS 126 or PHYS 151) and (MATH 116

or MPLS 215)

An introduction to contemporary topics in physics of interest to science, mathematics and engineering students. Topics include relativity, and quantum mechanics and their applications to atoms, molecules, nuclei, solid state phenomena, and cosmology. Three hours lecture. (W).

PHYS 320 Environmental Physics

3.000 Credits

Prerequisites: PHYS 126 or PHYS 151

A survey of the applications of physical principles to the environment, and to the conversion, transfer, and use of energy. Problems of transportation, meteorology, and thermal pollution are included. Three hours lecture. (OC).

PHYS 360 Instrumentation for Scientists

4.000 Credits

Prerequisites: PHYS 126 or PHYS 151

An introduction to the principles of electronic instrumentation used in scientific research. Methods of converting physical measurements into electronic signals by means of electrical circuits, transistors, digital and analog integrated circuits will be discussed. Digital computers as general purpose laboratory instruments will be explored. Students will complete individual projects. Three hours lecture, four hours laboratory. (F).

PHYS 370 Intro to Mathematical Physics

3.000 Credits

Prerequisites: (MATH 205 or MATH 215 or MPLS 215) and PHYS 151

As introduction to those mathematical methods that are widely used in understanding the physical phenomena exhibited by Nature. Topics include vector analysis, linear algebra, complex variables, Fourier analysis, and differential equations. Emphasis is on the application of these techniques to physical problems of interest to students in mathematics, engineering, and the physical sciences. Three hours lecture. (AY).

PHYS 390 Current Topics in Physics

3.000 Credits

Prerequisites: PHYS 305 *

A lecture course in a topic of current interest in physics. Topics vary and are announced in the current Schedule of Classes. Three hours lecture. (OC).

PHYS 401 Mechanics

3.000 Credits

Prerequisites: (MATH 205 or MATH 215 or MPLS 215) and PHYS 151

A study of the classical physics of the motions of single particles, systems of particles, and rigid bodies. Topics include central force laws and planetary motion, collisions and scattering, rigid body motion, oscillations, Lagrange's equations, and Hamilton's principle. Three hours lecture. (F).

PHYS 403 Electricity and Magnetism

3.000 Credits

Prerequisites: (MATH 205 or MATH 215 or MPLS 215) and PHYS 151

The study of electrostatics, magnetostatics and electrodynamics using Maxwell's equations. Of interest to engineers and physical scientists, the course focuses on the logical development of Maxwell's equations from experimental laws and on their application to electromagnetic phenomena. Three hours lecture. (W).

PHYS 405 Optics

3.000 Credits

Prerequisites: (MATH 205 or MPLS 215 or MATH 215) and PHYS 151

An introduction to wave and ray optics for students in engineering, mathematics, and the physical sciences. Topics of discussion include reflection and refraction at dielectric surfaces, lenses and mirrors, fiber optics, polarization, interference, and Fraunhofer and Fresnel diffraction. Additional material on coherence, Fourier optics and spatial filtering, and holography is presented as dictated by students' needs and interests, and as time permits. Three hours lecture. (AY).

PHYS 406 Thermal and Statistical Physic

3.000 Credits

Prerequisites: (MATH 205 or MATH 215 or MPLS 215) and PHYS 151

A study of thermodynamic phenomena using the methods of statistical mechanics. Designed for engineering students and concentrators in mathematics and the physical sciences; extensive application is made to physical, chemical and biological systems and phenomena, including solids, liquids, gases, paramagnets, thermal radiation, DNA, hemoglobin, semiconductors, heat engines, chemical reactions, and phase transitions. Three hours lecture. (F).

PHYS 416 Biological Physics

3.000 Credits

Prerequisites: MATH 205 or (MATH 215 and PHYS 151)

A course based on the methodology of physics with particular emphasis on the applications of theoretical models and experimental methods to biological objects and systems. Topics may include bioelectricity, membranes, polymers, and physical chemistry of macromolecules. Three hours lecture. (OC).

PHYS 421 Astrophysics

3.000 Credits

Prerequisites: (MATH 205 or MATH 215 or MPLS 215) and PHYS 305

A calculus-based introduction to several major areas of modern astrophysics for students concentrating in the physical sciences, mathematics, and engineering. Topics to be covered include observable properties of stars and star systems, stellar structure and evolution, binary systems and galactic x-ray sources, galaxies and quasars, and cosmology. Three hours lecture. (AY).

PHYS 453 Quantum Mechanics

3.000 Credits

Prerequisites: PHYS 305 and MATH 216

Concepts of quantum mechanics with applications of the Schrodinger wave equation to the simpler atoms, molecules, and nuclei. Topics of current interest to physicists, chemists, and biologists are discussed. Three hours lecture. (F).

PHYS 457 Atomic and Nuclear Physics

3.000 Credits

Prerequisites: (MATH 205 or MATH 215 or MPLS 215) and PHYS 305

Topics in modern atomic physics such as optical and radiofrequency spectroscopy and scattering of atoms and electrons are considered. An introduction to nuclear physics, including nuclear interactions and structure, radioactive decay, fission, and fusion. Three hours lecture. (AY).

PHYS 460 Advanced Physics Laboratory

3.000 Credits

Prerequisites: PHYS 305 * and PHYS 360

Experiments in both classical and modern physics using contemporary techniques. Commercial apparatus is used in several experiments. Advanced students are encouraged to initiate and conduct their own experiments. Instruction in the planning of experiments and the presentation of oral and written reports is included. One hour recitation, six hours laboratory. Course may be repeated for credit. (W).

PHYS 463 Solid State Physics

3.000 Credits

Prerequisites: (MATH 205 or MATH 215 or MPLS 215) and PHYS 305

A study of the structure and properties of the solid state of matter with emphasis on crystalline solids, crystal structures, lattice dynamics, electrons in metals and semiconductors, and dielectric and magnetic properties of solids. Three hours lecture. (AY).

PHYS 490 Topics in Physics

1.000 TO 3.000 Credits

A lecture course in a topic of current interest in physics. Topics vary and are announced in the current Schedule of Classes. One to three hours lecture. (OC).

PHYS 495 Off-Campus Research

1.000 TO 3.000 Credits

Participation in ongoing experimental research at an off-campus laboratory. Assignments made by cooperative or internship agreement between the research laboratory, the student, and the physics concentration advisor. Course may be repeated for credit. Four to twelve hours laboratory. Permission of concentration advisor. (F,W,S).

PHYS 497 Seminar in Physics

1.000 TO 3.000 Credits

Current topics from various areas in pure and applied physics are reported upon by students, faculty, and guest lecturers. Topics presented will vary from year to year. Course may be repeated for credit. One to three hours seminar. (W).

PHYS 498 Directed Studies in Physics

1.000 TO 3.000 Credits

Special topics in physics chosen by agreement between student and instructor. Course may be repeated for credit. Permission of instructor. (F,W,S).

PHYS 499 Laboratory Studies in Physics

1.000 TO 3.000 Credits

Experimental studies in physics selected by agreement between student and instructor. Four to twelve hours laboratory. Course may be repeated for credit. Permission of instructor. (F,W,S).

Political Science

Political Science, broadly defined, is the study of political power and the ends to which that power is used. It is "political" in the sense that it concentrates on the institutions and processes of political systems that exercise power in an authoritative way. It is "scientific" in the sense that there is a systematic body of knowledge about political behavior which can be studied empirically, normatively, and experientially. The six officially-defined areas of specialty within political science are American Politics, Political Theory, Public Policy, Comparative Politics, International Relations, and Research Methodology.

PREREQUISITES TO THE MAJOR

Students majoring in political science must take two prerequisites:

POL 101 Introduction to American Government* POL 201 Introduction to Comparative Government

*POL 101 is highly recommended for all upper-level courses. Junior or senior standing is a prerequisite for most 400/4000-level courses. Students are advised to complete POL 101 and 201 within their first four terms and POL 300 during their fourth or fifth term.

MAJOR REQUIREMENTS

Students must complete 24 hours of upper-level political science courses. Students are advised to complete required classes as soon as possible to prevent schedule conflicts. Those who ignore this advice may have difficulties completing their major requirements as they planned.

Summary of requirements:

Field Requirements: one course from each field* 18 hrs
American Politics
POL 311, 312, 313, 315, 316, , 322, 323, 326, 327, 328, 329,
334, 340, 362, 413, 414, 415, 416, 417, 418, 489, 4165
Political Theory
POL 302, 303, 304, 305, 306, 307, 308 309, 310, 314
Public Policy
POL 325, 333, 360, 363, 364, 365, 466, 481, 490
Comparative Politics
POL 341, 350, 355, 370, 385, 386, , 450
International Relations
POL 361, 371, 375, 451, 471, 472, 473
Methodology
POL 300*
** POL 301 does NOT fulfill the POL 300 requirement

** POL 301 does NOT fulfill the POL 300 requirement.

Additional electives to reach a total of 24 hrs

Any political science course at the 300 level or above may be used to complete the required total of 24 hours of upper-level coursework beyond POL 300 and the required field courses. Students should select specific courses in consultation with the program advisor.

NOTES

- 1. At least 15 of the 24 upper level hours in the Political Science major must be elected at UM-Dearborn.
- 2. A maximum of 6 hours of POL 494, 495, 496, 497 internship credit may count in the 24 hours required for the major.

MINOR OR BGS/LIBS AREA OF FOCUS

A minor or area of focus consists of 12 hours of upper-level credit in political science.

EVENING PROGRAM OFFERINGS

The political science faculty have a commitment to a comprehensive evening program. In terms of required courses, the goal of the discipline is to offer POL 101 each semester and POL 201 and POL 300 at least once every year. If POL 201 or POL 300 is not offered during a given two-year period, a full-time evening student is allowed to petition the discipline for permission to substitute other classes. Evening students should watch for infrequently offered prerequisite classes and take them when they are available.

Political Science (POL) COURSE OFFERINGS

POL 101 Intro to American Government 3.000 Credits

An introduction to the national institutions and political processes of American government. Potential topics include: the Constitution, the founding, federalism, public opinion, interest groups, political parties, political institutions, civil rights, civil liberties, or public policy. (F, W).

POL 201 Intro Comparative Government 3.000 TO 4.000 Credits

An introduction to the world's major forms of government: democracies and non-democracies, their institutions, and the processes that affect their stability and the transitions between them. (F, W).

POL 205 Intro to Public Administration

3.000 Credits

Introductory study of the administrative phase of public policy development. Such aspects of administration as personnel and fiscal management are considered and related to issue of accountability, public responsibility, and notions of public interest. (F,W).

POL 250 Intro to Political Theory

3.000 Credits

This course examines the role of political theory as a tool for the critical analysis of political reality. It analyzes several dominant political conceptions such as justice, equality, democracy, civility, and authority. (YR).

POL 260 The Arms Race and War

3.000 Credits

An examination of the courses and consequences of the contemporary arms race. Special attention is given to nuclear weapons, the risk of war, and the prospect for arms control and disarmament. (YR).

POL 300 Political Analysis

3.000 Credits

Introduction to research design, data collection and analysis, sampling, and statistics for social scientists. (F,W).

POL 301 Political Analysis

3.000 Credits

This course is the online version of POL 300. It covers introduction to research design, data collection and analysis, sampling, and statistics for social sciences. Political Science concentrators may not register for this class unless a petition is approved in advance by the Political Science Discipline. (F, W, S).

POL 302 The Theory of the Law

3.000 Credits

A comprehensive introduction to the theoretical foundations and the political functions of law, with special emphasis on the different moral justifications of law; the relation between law and justice; the relation between law and freedom; due process and fairness in any legal system. This course is designed to have special relevance for those considering law as a career. (OC).

POL 303 Justice

3.000 Credits

An analysis of theories of justice. The relation between morality and political power is considered. (AY).

POL 304 American Political Thought

3.000 Credits

The principal American contributions to political theory. (OC).

POL 305 Race/Justice/Freedom in Amer

3.000 Credits

This course examines the social and political thought of selected African American political thinkers. Its focus will be to assess the origins, development and implications of their ideas in the context of the changing dynamics of racial politics in America and the world. (AY).

POL 306 Political Ideologies

3.000 Credits

An examination of significant modern ideologies, especially liberalism, conservatism, and Marxism. (YR).

POL 307 Marxist Thought

3.000 Credits

The theories of selected communist thinkers and the implications that these ideas have for the contemporary world. (OC).

POL 308 Moral and Political Dilemmas

2.000 TO 3.000 Credits

May not be enrolled in one of the following Classes: Sophomore

Freshman

The course focuses on the tensions and relations between personal morality and political action by examining the moral aspect of contemporary policy issues such as the right to life, environmental policy, and discrimination. (YR).

POL 309 Ancient Political Theory

3.000 Credits

An examination of seminal ancient and classical thinkers and texts such as Socrates, Plato, Aristotle, and the Bible on significant themes pertaining to justice, government, religion, and philosophy. (YR).

POL 310 Modern Political Theory

3.000 Credits

The course studies the origins of modern political theory and practice, and the development of "modern" democratic liberalism. (YR).

POL 311 Int Group and Pol Process

3.000 Credits

An examination of the structure, techniques, and internal politics of interest groups, their role in policy making and relationship with political parties, legislative and executive bodies, and administrative agencies. (AY).

POL 312 Legislative Process

3.000 Credits

An analysis of legislative systems with emphasis on the changing realities of congressional and state power and policy making. (YR).

POL 313 American State Government

3.000 Credits

A comparative analysis of politics, political processes, and governmental institutions in American state and local governments. (YR).

POL 314 Issues in Amer Pol Thought

3.000 Credits

Must be enrolled in one of the following Levels: Undergraduate

Fundamental and recurring issues in American political thought, as they appear in the most influential and representative works on public affairs since the end of the Civil War. Topics may include Social Darwinism and its progressive critics, "revisionist" critiques of the Constitution, political aspects of philosophic pragmatism, the "revolt against formalism" in law, political doctrines of Progressivism and the New Deal, mid-century changes in progressive liberalism, the revival of classical liberalism and its "fusion" with traditional conservatism, politicalphilosophical aspects of environmentalism, the political thought of the civil rights movement and its critics, feminism and its diversification, and the capacities of American political culture and institutions to conduct a sustained opposition to terrorism. The course concentrates on analyzing extended works of reasoning in books, essays, judicial opinions and other public documents. POL 304, American Political Thought, is recommended as a forerunner to this course.

POL 315 The American Presidency

3.000 Credits

The course examines the expansion of presidential powers, focusing on the constitutional and political development in the president's role as chief executive, legislative leader, and administrative head of state. Topics include: separation of powers, presidential selection, impeachment, relations with Congress and bureaucracy, emergency powers, presidential character, and leadership. (YR).

POL 316 The American Judicial Process

3.000 Credits

An analysis of American legal institutions, processes and doctrines, and their relationship to the formulation of public policy and the solution of social problems. (AY).

POL 318 Criminal Law

3.000 Credits

A survey of landmark Supreme Court decisions in the field of criminal law and related issues of criminal justice. State court decisions when applicable may also be included. (AY).

POL 320 Politics and Human Nature

3.000 Credits

An analysis of the political process in terms of the attitudes, values, and behavior of human beings. (OC).

POL 322 Mich Gov, Pol, & Publ Policy

3.000 Credits

This course explores government, politics, and public policy in Michigan. It examines the major governmental and nongovernmental institutions involved in state level policy making, the processes used by these institutions to influence public policy, and the policies that emerge through their interaction. (YR).

POL 323 Urban Politics

3.000 Credits

A survey of the political process in urban areas giving special attention to the changing role of cities in American politics. (YR).

POL 325 Environmental Politics

3.000 Credits

An examination of policy making about problems affecting the environment, at a global, national, and local scale. (AY).

POL 326 Presidential/Congress Election

3.000 Credits

Prerequisites: POL 101

This course will focus on the most recent and upcoming presidential and congressional elections from the perspective of how they fit into and help illustrate the broad theoretical frameworks and findings on elections and voting behavior in political science. Topics will include nominating and general election campaigns, campaign financing, participation, party coalitions, and news media. (OC).

POL 327 Pol Parties and Elections

3.000 Credits

A basic survey of American political party organization and the American election system. The course sometimes includes an examination of parties and elections in comparative perspective. (YR).

POL 328 Pub Opinion and Press Groups

3.000 Credits

A study of the nature and formation of public opinion, the techniques for its measurement, and its role in the political system. (AY).

POL 329 Politics and the Media

3.000 Credits

This course investigates the relationships between the news media and our major political institutions; the structure of the modern media; their influence on public opinion; their effects on our party and electoral system; their role in defining political reality and agenda setting; and their influence upon our political institutions and the policy-making process. (YR).

POL 333 Citizens and Bureaucrats

3.000 Credits

The focus of this course is citizen participation in administrative behavior. Attention is paid to the perspectives of both citizens and bureaucrats. The course uses broad concepts of political participation and organization behavior. (YR).

POL 334 Organizing and Leadership

3.000 Credits

Prerequisites: POL 323 or URS 300

The purpose of this course is to introduce students to the theory and practice of local democratic action. The course draws on the history, practices, and lessons of the American community organizing tradition and the civil rights movement and relates those past experiences to current issues. In collaboration with local community partners, students learn about effective methods of civic engagement and leadership, as currently practiced in metropolitan Detroit.

POL 340 Federalism

3.000 Credits

Federalism is considered from both legal and operational perspectives. Students examine traditional views of Federalism as well as empirical and technical studies about intergovernmental relations at national, state, and metropolitan levels. (YR).

POL 341 Canadian Politics

3.000 Credits

A survey of Canadian politics and government. It provides an understanding of the Canadian political tradition and some of the concerns of contemporary Canada; includes a focus on the cultural and socioeconomic bases of the political system, the development of constitutional structures, the scope of public policy and the dynamics of policy process. (OC).

POL 350 Pol of the Developing Areas

3.000 Credits

A comparative study of political development, political and governmental structures, and conflict patterns, especially of an ethnic nature. (AY)

POL 355 Religion and Politics

3.000 Credits

The primary focus of the course is on political movements or systems that take a religious form or have a religious base or use a religiously-rooted ideology. Possible themes or cases covered include the Catholic Church as a political system, Evangelical politics in America, religious uprisings, and Islamic political movements. (AY).

POL 360 American Policy Process

3.000 Credits

An analysis of political decision-making processes on a range of issues with an emphasis on how various political actors attempt to influence the process to their own advantage. (YR).

POL 361 American Foreign Policy

3.000 Credits

Survey of American foreign policy in various regions of the world. Instances of policy making, such as the Cuban missile crisis, are explored in detail. (YR).

POL 362 Women, Politics, and the Law

3.000 Credits

An examination of the political behavior of women in American politics. Included is an analysis of the legal and legislative demands of American women. (AY).

POL 363 Cr Just Policy and Admin

3.000 Credits

The structure and processes of criminal justice administration in America, including analysis of current issues in police behavior, courts, and corrections. (AY).

POL 364 Health Pol and Administration

3.000 Credits

Structure and processes of health administration in America, including analysis of current issues in health policy. (AY).

POL 365 Energy Policy

3.000 Credits

The course reviews the important elements in energy policy and a brief history of that development. It also considers what factors have been important in those developments. Finally, there is discussion of the potential for policy developments at all levels of government. (OC).

POL 370 Communist & Post-Communist Sys

3.000 Credits

China and Russia are the focal points of this course. Among questions explored are: How are Russia and China ruled? Are their forms of government and their economic systems "moderating" and becoming more like those of the United States? How successful have these governments been in meeting the needs of the people? (OC).

POL 371 Problems in Intl Politics

3.000 Credits

Present-day problems in world politics, with particular emphasis on the great powers and on areas and events of political conflict in the contemporary world. (YR).

POL 375 Great Pwrs Comp and Conflict

3.000 Credits

This course focuses on the foreign policies of major international powers, such as China, Russia, and the Western European democracies. Attention is also paid to the causes of the rise and decline of major powers. (YR).

POL 385 Middle East Politics

3.000 Credits

The course focuses on the Israeli-Palestine conflict in its domestic, regional, and world-wide dimensions. (AY).

POL 390 Topics in Political Science

3.000 Credits

Examination of problems and issues in selected areas of political science. Title as listed in Schedule of Classes will change according to content. Course may be repeated for credit when specific topics differ. (OC).

POL 398 Independent Studies

1.000 TO 3.000 Credits

Readings or analytical assignments in Political Science in accordance with the needs and interests of those enrolled and agreed upon by the student and instructor.

POL 399 Independent Study

1.000 Credits

Readings or analytical assignments in political sciences in accordance with the interests and needs of students enrolled and agreed upon by the instructor and student. Written permission of instructor required.

POL 413 American Constitutional Law

3.000 Credits

Must be enrolled in one of the following classes:

Senior

Junior

A major theme of this course is the development of the Constitution as shaped by the Supreme Court, Congress, and the president. The course examines the constitutional interpretation of government authority which includes such topics as judicial review, appointments, executive privilege, war power, federalism, commerce power, taxing and spending power, and substantive due process. (AY).

POL 414 Civil Rights and Liberties

3.000 Credits

Must be enrolled in one of the following Levels:

Undergraduate

Must be enrolled in one of the following classes:

Senior

Junior

An analysis of the Bill of Rights and the 14th Amendment, with particular emphasis upon recent landmark or controversial Supreme Court decisions dealing with freedom of speech and religion, rights of criminal defendants; cruel and unusual punishment, right to privacy; civil rights and equal protection clause; and apportionment. (YR).

POL 415 Problems in Constitutional Law

3.000 Credits

Must be enrolled in one of the following classes:

Senior

Junior

Selected areas of constitutional law of current interest. Topics to be announced. (AY).

POL 4165 Criminal Law

3.000 Credits

A survey of the major judicial, executive, and legislative decisions in the field of criminal law. (AY).

POL 417 Constitution&National Security

3.000 Credits

May not be enrolled in one of the following Classes:

Sophomore

Freshman

This course focuses on the issue of national security and how the federal government has used power to protect its citizens. It analyzes relevant national security issues in order to understand how government action is constrained by the Constitution and social norms. The course examines the historical development of national security in the United States including habeas corpus, wiretapping, military tribunals, state secrets, and extraordinary rendition. Particular close attention is paid to the modern development of national security. The emphasis in reading will be on cases, executive orders, congressional hearings, and statutes. For graduate credit elect POL 517.

POL 418 Supreme Court and Religion

3.000 Credits

May not be enrolled in one of the following Classes:

Sophomore

Freshman

Prerequisites: POL 101

A study of the major landmark decisions of the Supreme Court interpreting First Amendment guarantees of religious liberty. The course emphasizes case law defining the meaning of the Establishment Clause and the Free Exercise Clause and their significance for religious liberty in America.

POL 445 Environmental Law

3.000 Credits

A survey of common law theories and analysis of environmental statutes from a functional perspective. The course also includes environmental law aspects of constitutional law, administrative law and criminal law, as well as the public trust doctrine and public lands. Student cannot receive credit for both ENST 350 and ENST/POL 445.

POL 450 Revolution

3.000 Credits

Must be enrolled in one of the following classes:

Senior

Junior

A consideration of violent political change and the conditions which promote it. The course covers both revolutionary theories and empirical research. Specific revolutions are considered. (YR).

POL 451 Peace and War

3.000 Credits

Must be enrolled in one of the following classes:

Senior

Junior

An examination of the causes of war and the means of securing peace. (YR).

POL 4605 Science, Tech & Pub Policy

3.000 Credits

May not be enrolled in one of the following Classes:

Graduate

This course explores the intersection of science, technology, and public policy. Scientific knowledge and technological innovations are exceptionally powerful resources for policy-makers and for societies; they also pose great challenges and risks. This course will look at how science and technology affect the pursuit of policy goals in areas such as public health, environmental sustainability, economic growth, and national security. Students will not receive credit for more than one of POL 460, POL 560, and PPOL 560.

POL 466 Politics&Policies Soc Welfare

3.000 Credits

May not be enrolled in one of the following Classes:

Freshman

The course examines the relationship between politics and public policy as related to the provision of social welfare programs in the United States.

POL 471 American Foreign Policy I

3.000 Credits

Must be enrolled in one of the following classes:

Senior

Junior

American foreign policy in Western Europe, Russia, and Latin America. (OC).

POL 472 American Foreign Policy II

3.000 Credits

Must be enrolled in one of the following classes:

Senior

Junior

American foreign policy in the non-western world. (OC).

POL 473 International Security Affairs

3.000 Credits

Must be enrolled in one of the following classes:

Senior

Junior

International Security is the branch of world politics concerned with the threats, primarily military in nature, to the peace and security of the nation, states, and the international community. (AY).

POL 481 Terrorism & US Natl Security

3.000 Credits

Must be enrolled in one of the following Levels:

Undergraduate

Prerequisites: POL 101 or CRJ 468

The United States responded to the events of September 11, 2001 with a series of unprecedented action under the umbrella of homeland security and the "War on Terror." This course examines American National security policy by asking a few key questions: What is terrorism and how does it threaten the United States? How has the United States responded to the threat of terrorism over time? What have the consequences of US policy been to date? Finally, how would we balance a desire for security with our desire for civil liberties and ethical action?

POL 487 Comparative Enviro Policy

3 000 Cradite

Must be enrolled in one of the following classes:

Senior

Junior

This course explores environmental policy as a result of political processes involving diverse participants and entailing movement through several stages - from defining an issue as an environmental problem to placing it on political agenda and then receiving a response at domestic governmental or international levels. This course analyzes environmental issues from a crosscultural and comparative perspective, with a particular attention given to political institutions, political change, levels of development, political culture, public participation, and international commitments that shape the nature and dynamics of environmental politics and policy in different countries. Course POL 101 is recommended before taking this course.

POL 489 Seminar in Urban Politics

3.000 Credits

Selected topics in urban politics.

POL 490 Sem in Public Administration

2.000 TO 3.000 Credits

Selected topics in public administration.

POL 491 Seminar in Political Science

3.000 Credits

Selected topics in political science. Title as listed in Schedule of Classes changes according to content. Course may be repeated for credit when topics differ. (AY).

POL 492 Seminar in Political Analysis

3.000 Credits

An advanced in-depth look at the problems and techniques of empirical research. Gives special attention to research design, data collections, measurement, and validity. Statistics for social scientists will also be covered. (OC).

POL 494 Internship Seminar

3.000 Credits

This is the academic part of the internship. Students meet with other interns once a week to analyze political dynamics within their placements. Students are required to keep journals, prepare papers and reports, and do other written work. Anyone taking POL 495 or 497 is required to take POL 494. It may not be taken by itself. Repeatable if topic differs. Only six hours of internship credit is allowable toward concentration requirement.

POL 495 Public Affairs Internship

3.000 TO 6.000 Credits

Field study placements in national, state, county, local government or private agencies. Primarily for junior or senior political science concentrators or other qualified applicants. Maximum of 20 students selected each term. Students must also register for POL 494. Only six hours of internship credit is allowed toward concentration requirement.

POL 496 Canada Internship

3 .000 OR 6.000 Credits

Field study placements in Canada at national, provincial, or local levels, or in private agencies. Course is offered only in spring semester. Primarily for junior or senior political science concentrators, or other qualified applicants. Students must also register for POL 494. Only six hours of internship credit is allowed toward concentration requirement.

POL 497 Washington, D.C. Internship

3.000 TO 6.000 Credits

Field placements in Washington, D.C. Course is offered only in summer semester. Primarily for junior or senior political science concentrators or other qualified applicants. Only six hours of internship credit is allowed toward concentration requirement.

POL 498 Directed Studies

1.000 TO 6.000 Credits

Directed individual study of any subject agreed upon by the student and the instructor. May not duplicate a formal course offering. (OC).

POL 499 Directed Studies

1.000 TO 6.000 Credits

Directed individual study of any subjects agreed upon by the student and the advising instructor, which shall not duplicate a formal course offering.

Psychology

As the science of human experience and behavior, psychology has a vast range. At one end, it borders on natural sciences such as biology and physiology, and at the other, it shares interests with social science disciplines such as anthropology and sociology. A student might choose to focus on a particular subfield of psychology by taking elective courses from within one of these areas: social, personality, clinical, developmental, environmental, industrial/ organizational, cognitive, experimental physiological. The curriculum is designed to accommodate nonconcentrators who seek personal enrichment, concentrators who will go on to use psychology in a human services career or in a related field, and concentrators intending to pursue an advanced degree in psychology. Honors and internship programs provide opportunity for students to develop research skills and to gain practical experience in an applied setting.

PREREQUISITES TO THE MAJOR

Students desiring to concentrate in psychology are required to take the following or their equivalents.

PSYC 170 Introduction to Psychology as a Natural

Science

AND

Introduction to Psychology as a Social **PSYC 171**

Science

(Effective Fall 2014, PSYC 101 will replace PSYC 170 and 171.)

MAJOR REQUIREMENTS

Students must complete at least 27 hours in psychology at the 300 level or above. For those transferring from a community college this requirement will ordinarily mean that the 27 hours will be completed during the junior and senior years.

Students are required to take one course in each of the following areas.

Methods

PSYC 415, 425, 435, 4445, or 465

Biological Psychology

PSYC 370, 372, 455, or 4725

Clinical/personality

PSYC 440, 441, 442, or 450

Developmental Psychology

PSYC 300, 301, 302, 315, 407, 412, 418, or 432

Social/Organizational Psychology

PSYC 320, 322, 325, or 4305

Statistics and Experimental Design

PSYC 381

Cognitive

PSYC 363, 375, 461, 463, 464, or 474

Cognates 6 hrs Students must also complete at least six hours in cognate courses at the 300 level or above, (excluding co-op's, internships or independent studies), from: any CASL discipline (excluding psychology); College of Business disciplines; College of Engineering and Computer Science disciplines; College of Education, Health, and Human Services (EDA and EDC disciplines only).

NOTES:

- 1. A maximum of 54 hrs. in Psychology may count in the 120 hours required to graduate (excluding PSYC 498 and 499 for PSYC Honors students).
- 2. At least 15 of the 27 upper level hours in PSYC must be elected at UM-Dearborn.
- 3. No more than 6 hours of Independent Study and no more than 6 hours of Independent Research within the Behavioral Sciences (anthropology, psychology and sociology) may be counted in the 120 hours required to graduate

MINOR OR AREA OF FOCUS

A minor or area of focus consists of PSYC 170 or 171 (PSYC

101 effective Fall 2014) and 12 hours of upper-level credit in psychology.

HONORS PROGRAM IN PSYCHOLOGY

Psychology offers an honors program which provides special opportunities for outstanding students, including a research training seminar followed by research in collaboration with faculty members. Students are formally accepted for the honors program early in their junior year. Prospective students should plan on completing PSYC 381 and a methods course by the end of fall term in their junior year. Requirements for entrance are a) GPA of 3.2 or higher in psychology and overall UM-Dearborn courses and b) informal evidence of being a superior student, such as high motivation and ability to work independently. Requirements for graduation with honors in psychology are the successful completion of:

- all requirements for psychology major
- PSYC 481 Computers in Psychology, normally taken in the fall semester, senior year
- PSYC 498 Honors Seminar normally taken winter term, junior year
- PSYC 499 Honors Research normally completed during senior year
- Research proposal meeting completed early in senior year
- Final Oral Defense completed at least one month prior to graduation

PSYCHOLOGY INTERNSHIP

Juniors and seniors can obtain practical experience working under supervision in a setting relevant to psychology. Internship students will spend approximately 6 or 12 hours per week at their field placement and will attend a weekly seminar on campus. Students may register for PSYC 485 Field Work: Psychology Internship for 3 or 6 credits. Application should be made to the director of the psychology field work program.

Psychology (PSYC) COURSE OFFERINGS

PSYC 101 Introduction to Psychology

3.000 Credits

Psychology 101 introduces students to theories and research in the field of psychology. This course focuses on the scientific underpinnings of the field from both the social and natural science perspectives.

PSYC 170 Intro to Psych as a Nat Sci

3.000 Credits

A treatment of the principles of sensation, perception, maturation, learning, motivation, memory, thought, language, and physiological bases of behavior. (F,W,S).

PSYC 171 Intro to Psych as a Soc Sci

3.000 Credits

A treatment of the principles of human development, intelligence, motivation, personality theory, social and abnormal psychology, and psychotherapy. (F,W,S).

PSYC 300 Life-Span Developmental Psych

3.000 Credits

Prerequisites: PSYC 170 or 171

Theoretical issues of psychological development from birth through late adulthood are emphasized, along with issues regarding research methods. Topics include cognitive, intellectual, personality, and social development through the life-span. (YR).

PSYC 301 Psych of Infant Development

3.000 Credits

Prerequisites: PSYC 171 or PSYC 170

An examination of current theories and findings concerning physical, social, emotional, and intellectual development of the infant. Topics include genetic and experiential factors affecting prenatal and infant development. language, cognition, and environmental influences on development. Theory will be related to infant care practices in families.

PSYC 302 Psych of Child Development

3.000 Credits

Prerequisites: PSYC 170 or 171

An examination of current theories and findings concerning physical, social, emotional, and intellectual development from conception to late childhood. Topics include genetic and experiential factors affecting child development.

PSYC 303 Intro to Women's & Gender Stud

3.000 Credits

May not be enrolled in one of the following Classes: Freshman

This course provides an interdisciplinary overview of the key theories and topics in Women's and Gender Studies. Special attention is given to how gender intersects with class, race, nationality, religion and sexuality to structure women's and men's lives. Students are also introduced to methods of gender analysis and will begin to apply these methods to topics such as women and health, gender roles in the family, violence against women, and gendered images in the mass media.

PSYC 315 Personality Development

3.000 Credits

Prerequisites: PSYC 170 or 171

An investigation of the factors involved in the formation of personality and the changes in personality across the life-span. The influence of family, peers, and society will be emphasized. (YR).

PSYC 320 Social Psychology

3.000 Credits

Prerequisites: PSYC 171 or PSYC 170 or SOC 200 or SOC 201

An introductory study of the inter-relationships of the functioning of social systems and the behavior and attitudes of individuals. (YR).

PSYC 321 Attitude and Social Behavior

3.000 Credits

Prerequisites: PSYC 171 or PSYC 170

An analysis of social attitudes as they relate to personality and to membership in collective structures; the conditions of their formation and modification. (YR).

PSYC 322 Psychology of Prejudice

3.000 Credits

Prerequisites: PSYC 170 or 171

A consideration of ethnic (including racial), sexual, and religious prejudice from the psychological point of view, focusing on the mind of both the oppressor and the oppressed. (YR).

PSYC 325 Psyc of Interpersonal Relation

3.000 Credits

Prerequisites: PSYC 170 or 171

This course presents an overview of theory and research conducted by social psychologists that has been aimed at understanding interactions between individuals. Topics include an exploration of the research process that is used to investigate interpersonal relationships, the processes underlying social perception, friendship, liking, love, close relationships, aggression and violence in interpersonal relationships. (YR).

PSYC 363 Cognitive Psychology

3.000 Credits

Prerequisites: PSYC 170 or 171

Analysis of human perceptual and cognitive functioning from an information-processing point of view. Emphasis will be placed on attention, pattern-recognition, memory, problem solving and other cognitive processes. (YR).

PSYC 370 Physiological Psychology

3.000 Credits

Prerequisites: PSYC 170 or 171

Integration of physiological concepts with behavioral phenomena. (YR).

PSYC 372 Animal Behavior

3.000 Credits

Prerequisites: PSYC 170 or PSYC 171 or BIOL 100

Comparative psychology. Descriptive analysis of human and animal behavior. (YR).

PSYC 375 Psychology of Language

3.000 Credits

Prerequisites: PSYC 170 or PSYC 171 or LING 280

The nature of human language as seen from the perspective of experimental psychology. The course will also introduce the student to current developments in linguistic theory. (AY).

PSYC 381 Prin of Stat and Exper Design

3.000 Credits

Prerequisites: PSYC 170 or 171

An introduction to basic principles of experimental design and statistical analysis as employed in psychological research. Topics covered include data-gathering, descriptive statistics, hypothesis-testing and one- and two-sample experiments, correlational designs, and one- and two-way analysis of variance. (YR).

PSYC 390 Topics in Psychology

3.000 Credits

Prerequisites: PSYC 170 or PSYC 171

Examination of problems and issues in selected areas of psychology. Title listed in Schedule of Classes will change according to content. Course may be repeated for credit when specific topics differ. (OC).

PSYC 391 Topics in Psychology

3.000 Credits

Examination of problems and issues in selected areas of psychology. Title listed in Schedule of Classes will change according to content. Course may be repeated for credit when specific topics differ. (OC).

PSYC 394 Psychology and Theater

3.000 Credits

Prerequisites: PSYC 170 or 171

The linkages between psychology and theater are analyzed from the perspective of the actor, the audience, and the analyst (both psychotherapeutic and literary). This includes ties between plays and theories of human behavior, psychodrama, and self-insight through performance. Class involves a significant experiential component.

PSYC 3955 Diversity and the Workplace

3.000 Credits

Prerequisites: PSYC 170 or PSYC 171 or WST 275 or OB 354 or HRM 405 or WGST 275 or WGST 303 or PSYC 275 or ANTH 275 or SOC 275 or HUM 275 or PSYC 303 or SOC 303 or ANTH 303 or HUM 303

This course will: 1) discuss gender, race, ethnicity, disability, age, sexual orientation, and appearance as aspects of diversity; 2) examine social values and practices, and organizational policies and procedures that affect or have affected the employment opportunities of underrepresented groups; 3) examine individual (e.g., prejudice, stereotypes), group (e.g., ingroups and out-groups), and organizational (e.g., climate and culture) processes that affect work place diversity and; 4) discuss "best practices" for promoting an organizational culture that values diversity, along with a diverse work force.

PSYC 398 Independent Studies in Psych

1.000 TO 3.000 Credits

Readings or analytical research in psychology selected in accordance with the interests and needs of students enrolled and agreed upon by the instructor and student. Permission of instructor. (F,W,S).

PSYC 404 Parent-Child Relations

3.000 Credits

Prerequisites: PSYC 170 or 171

This course examines parental effects on children and children's effects on parents. Emphasis is placed on how the psychologist can collect additional information on the interactions of such people as parents and their children. (YR).

PSYC 405 Gender Roles

May not be enrolled in one of the following Classes: Graduate

Prerequisites: PSYC 171 or PSYC 170 or SOC 200 or SOC 201

This course will investigate the development of gender roles in childhood and adolescence due to either innate physiological differences or sociological patterning, the effect of gender roles upon male-female relationships within our society, and the possibility of transcending sociological gender roles in alternate modes of living. Students cannot receive credit for both PSYC 405 and PSYC 505. (YR).

PSYC 407 Psychology of Adolescence

3.000 Credits

Prerequisite: PSYC 170 or 171

Considers adolescence as an interaction of rapid biological and social change. Students lacking the prerequisite may elect course with permission of instructor. Examines the theoretical and empirical literature in some detail. Students cannot receive credit both PSYC 407 and PSYC 507. (YR).

PSYC 412 Psychology of Aging

3.000 Credits

Prerequisites: PSYC 170 or 171

This course examines development of the individual from middle adulthood through old age. Special emphasis is given to the understanding of developmental theories and issues in adulthood. Topics include biological basis, socialization, family relationships, personality, and intellectual development in the aging individual. (YR).

PSYC 415 Lab in Developmental Psych

3.000 Credits

Prerequisites: PSYC 300 or PSYC 302 or PSYC 315 or

PSYC 407 or PSYC 418

An examination of research design and methodology as related to developmental psychology. Special emphasis will be given to training students in data collection techniques used in developmental research and in providing practical experience in designing and conducting research. Students cannot receive credit for both PSYC 415 and PSYC 515. (YR).

PSYC 418 Cognitive Development

3.000 Credits

Must be enrolled in one of the following Levels:

Undergraduate

Prerequisites: PSYC 170 or PSYC 171

This course explores theories and methods in cognitive development focusing on Piaget's theory and more recent significant conceptualizations. Topics include stages of cognitive development, types of inferential processes, and the acquisition of world knowledge. Discussions leading to the formation of new research ideas are emphasized. Students cannot receive credit for both PSYC 418 and PSYC 518. (YR).

PSYC 421 Group Processes

3.000 Credits

Prerequisites: PSYC 170 or PSYC 171 or SOC 200

Topics treated include group cohesiveness, "group think," the social structure of groups, emotional factors in group life, leadership, and the development of groups. (YR).

PSYC 422 Psychology of Leadership

3.000 Credits

Prerequisites: PSYC 171 or PSYC 170

Analysis of theories and research findings in the field of leadership. Class will participate in and observe leadership-group interactions. Students cannot receive credit for both PSYC 422 and PSYC 522. (YR).

PSYC 425 Lab in Social Psychology

4.000 Credits

Prerequisites: PSYC 381

A broad introduction to research methods in basic and applied social psychology. Students will receive training in construction, implementation, and interpretation of scientific procedures used in the study of social psychology. Topics include: questionnaire construction, experimental design, and various multivariate analytic techniques. (YR).

PSYC 4305 Psychology in the Workplace

3.000 Credits

Prerequisites: PSYC 171 or PSYC 170 or OB 354 or HRM

405

This course introduces students to some of the core content areas of Industrial/Organizational (I/O) psychology. These content areas include: selection, training, performance appraisal, work teams, job design, motivation, leadership, union-management relations, and stress and health in the workplace. Students cannot receive credit for both PSYC 4305 and PSYC 530. (YR).

PSYC 431 Organizational Entry

3.000 Credits

Must be enrolled in one of the following Levels:

Undergraduate

May not be enrolled in one of the following Classes:

Graduate

Prerequisites: PSYC 170 or PSYC 171 or HRM 405 or OB

354

An in-depth consideration of the psychological aspects of the organizational entry process. Topics to be covered include recruitment, selection, orientation, socialization, and training. (OC).

PSYC 432 Socialization of the Child

3.000 Credits

Must be enrolled in one of the following classes:

Senior Junior

Prerequisites: PSYC 170 or 171

An in-depth consideration of some major social systems that affect the development of the child. Students lacking the prerequisite may elect course with permission of instructor. Students cannot receive credit for both PSYC 432 and PSYC 532. (YR).

PSYC 440 Abnormal Psychology

3.000 Credits

Prerequisites: PSYC 170 or 171

An introduction to the field of psychopathology, the study of mental disorders. Includes exposure to a number of historical and theoretical perspectives, each with their own theories, methodologies, and treatment approaches. Disorders covered will include: anxiety and mood disorders, personality disorders, schizophrenia, sexual disorders, and psychosomatic disorders. Students cannot receive credit for both PSYC 440 and PSYC 540. (YR).

PSYC 441 Intro to Clinical Psychology

3.000 Credits

Prerequisites: PSYC 170 or 171

Introduction to the logic, problems, and limitations of clinical observations and inference. Issues in diagnosis and treatment are examined, with an attempt to understand parallels between clinical interpretation and problems in other disciplines. (YR).

PSYC 442 Child Psychopathology

3.000 Credits

Prerequisites: PSYC 170 or 171

A review of the major psychological disorders of children from birth to adolescence. These disorders are considered from a clinical and theoretical point of view. In addition to an examination of causes, approaches to treatment and behavior modification are considered. Students cannot receive credit for both PSYC 442 and PSYC 542. (YR).

PSYC 4445Personality Assessment Lab

4.000 Credits

Must be enrolled in one of the following classes:

Senior Junior

Prerequisites: PSYC 170 or 171

This is a course in methods of assessing personality. The theory and methods of observation, interviewing, questionnaires, IQ tests, and projective tests are discussed and employed in brief individually-designed studies. In addition to the course prerequisite, students should have at least three upper-level psychology credits and junior or senior standing or permission of the instructor. Students cannot receive credit for both PSYC 4445 and PSYC 544. (YR).

PSYC 446 Human Sexual Behavior

3.000 Credits

Prerequisites: PSYC 170 or 171

A comprehensive review of facts about human sexuality. The emphasis is on psychological aspects of sex, but there is also a consideration of genetic, physiological, and anatomical aspects of sex, and contemporary issues. Students cannot receive credit for both PSYC 446 and PSYC 546. (YR).

PSYC 450 Personality Theory

3.000 Credits

Prerequisites: PSYC 170 or 171

A comparative review and examination of leading theories of personality; their basic concepts, similarities and differences, applications in clinical psychology, in education, in social planning, and in research. Students cannot receive credit for both PSYC 450 and PSYC 550. (YR).

PSYC 451 Prin of Counseling and Psych

3.000 Credits

Prerequisites: PSYC 170 or 171

An introduction to traditional and innovative methods of psychological counseling and psychotherapy with an emphasis upon the theoretical foundations of personality and behavior change. Differences and similarities among the various schools of counseling and psychotherapy will be examined among with the values and limitations common to them all. (YR).

PSYC 455 Health Psychology

3.000 Credits

Prerequisites: PSYC 170 or 171

A discussion of the research on health promotion, psychological factors in the development of illness, cognitive representations of health and illness, stress and coping, social support, nutrition and exercise. Focus will be on the factors related to the development and maintenance of optimal health. Students cannot receive credit for both PSYC 455 and PSYC 555. (YR).

PSYC 456 Sport Psychology

3.000 Credits

Prerequisites: PSYC 170 or 171

A consideration of research and theory aimed at two objectives: (a) understanding how psychological variables affect physical performance and (b) understanding how participation in sports influences psychological development. (YR).

PSYC 461 Learning and Memory

3.000 Credits

Must be enrolled in one of the following Levels:

Undergraduate

Prerequisites: PSYC 170 or PSYC 171

A consideration of major theories and research results related to learning and memory in humans and animals. Students cannot receive credit for both PSYC 461 and PSYC 561. (YR).

PSYC 463 Sensation and Perception

3.000 Credits

Must be enrolled in one of the following Levels:

Undergraduate

Prerequisites: PSYC 170 or 171

Analysis of basic sensory and perceptual phenomena with a review of relevant behavioral and physiological literature. Students cannot receive credit for both PSYC 463 and PSYC 563. (YR).

PSYC 464 Human Factors Psychology

3.000 Credits

Prerequisites: PSYC 170 or 171

This course will provide an overview of the field of human factors, including two major components: (1) a background in specific content areas of psychology that have direct relevance to the field, and (2) a survey of direct applications of these areas to real-world problems. The content areas include research methods, sensory and perceptual processes, learning and memory, human information processing, decision making, problem solving, and language and communications. Direct applications include accident avoidance, design of displays and instrument panels, automation, human-computer interaction, control devices, and transportation. (YR).

PSYC 465 Experimental Psychology

3.000 Credits

Prerequisites: (PSYC 170 or PSYC 171) and PSYC 381

Laboratory course in Experimental Psychology, including sensation, perception, learning, memory, language, and problem solving. Students will perform standard experiments, design one or two new modified experiments, collect data, analyze results, and present them in the form of laboratory reports. (YR).

PSYC 470 Advanced Physiological Psych

3.000 Credits

Must be enrolled in one of the following Levels:

Undergraduate Prerequisites: PSYC 370

Further study of the subject matter of PSYC 370. Advanced study of topics in the area of psychobiology. Students cannot receive credit for both PSYC 470 and PSYC 570. (YR).

PSYC 471 Reproductive Phys and Beh

3.000 Credits

Must be enrolled in one of the following Levels:

Undergraduate

Prerequisites: PSYC 170 or PSYC 171

An in-depth examination of reproduction from a physiological and psychological viewpoint. Physiological topics include anatomy, hormones, and neural mechanisms. Psychological topics include behavior development and descriptions. Students cannot receive credit for both PSYC 471 and PSYC 571. (YR).

PSYC 4725 Motivation and Behavior

3.000 Credits

Prerequisites: PSYC 170 or 171

Study of the psychobiological aspects of motivated behavior. Topics include hunger, addiction, aggression, sleep, and achievement. Students cannot receive credit for both PSYC 4725 and PSYC 572. Prerequisites or permission of instructor. (YR).

PSYC 473 Clinical Neuropsychology

3.000 Credits

Prerequisites: PSYC 370

This course is an in-depth examination of the field of clinical neuropsychology including a review of brain anatomy and physiology, theories of neural organization, and disorders of the nervous system. In addition, students will learn techniques utilized in neuropsychological assessment. (Prerequisite may be waived for students with Natural Science background.) (YR).

PSYC 474 Animal Intelligence

3.000 Credits

May not be enrolled in one of the following Classes:

Sophomore

Freshman

Prerequisites: PSYC 372 or PSYC 363 or PSYC 461 or

BIOL 419 or BIOL 456 or ANTH 336

Animal Intelligence involves the study of human and non-human animal behavior and cognition in an evolutionary and comparative framework. As an introduction to human and non-human animal cognition and though processes this course will examine topics such as problem-solving, spatial cognition, categorization, memory, number concepts, tool-use and tool-production, insight, imitation, social cognition, self-recognition and language (-like) behavior. In addition to discussing basic experimental findings about cognition in animals, an emphasis is placed on the logic and evidence used to justify theoretical conclusions. The course requires reading and critiquing original journal articles in addition to textbook chapters for foundational concepts.

PSYC 480 History of Psychology

3.000 Credits

Prerequisites: PSYC 170 or PSYC 171

An overview of the development of modern psychology from the 17th century to the present, with particular emphasis on the beginning of psychology in America. The philosophical assumptions of various schools of psychology will be examined. (YR).

PSYC 481 Computers in Psychological Res

3.000 Credits

Prerequisites: PSYC 381

An introduction to the use of computers in data analysis and psychological research. Students will receive training in computer programming using SPSSPC and other software packages. Topics will include: correlation, regression, analysis of variance, and several multivariate techniques. (YR).

PSYC 485 Psychology Internship

3 .000 OR 6.000 Credits

Must be enrolled in one of the following classes:

Senior Junior

Prerequisites: PSYC 170 or 171

The psychology internship offers experience in a wide variety of placements dealing with human services. These include programs related to child abuse, crisis intervention, geriatrics, human resources/staff development, cognitive impairment, criminal probation, teenage runaways, substance abuse, and women's issues. The program is designed for juniors and seniors with a concentration in psychology or behavioral sciences and involves training in listening and helping skills.

PSYC 490 Advanced Topics in Psychology

3.000 Credits

Examination of problems and issues in selected areas of psychology. Title in Schedule of Classes will change according to content. Course may be repeated for credit when specific topics differ. (OC).

PSYC 492 Individual Research

1.000 TO 3.000 Credits

Must be enrolled in one of the following Levels:

Undergraduate

No more than 6 hours may be counted for concentration. Arrangements will be made for adequately prepared students to undertake individual research under the direction of a staff member. The students, in electing, should indicate the staff member with whom the work has been arranged. Students cannot receive credit for both PSYC 492 and PSYC 592. (YR).

PSYC 497 Seminar in Psychology

3.000 Credits

Small seminar examination of problems and issues in selected areas of psychology. Title in Schedule of Classes will change according to content. Course may be repeated for credit when specified topics differ. Written permission of instructor required.

PSYC 498 Psychology Honors Seminar

3.000 Credits

Preparation for Honors research project. Involves discussion of and writing on: choosing a topic, reviewing the literature, selecting a research method and design, and developing a research proposal. (YR).

PSYC 499 Psychology Honors Research

3.000 Credits

Prerequisites: PSYC 498

Participation with two faculty members in work leading to the honors thesis. This work involves active participation in research and will culminate in an independent research report, the honors thesis. Open only to psychology honors candidates. (F.W).

Public Relations (PR) Certificate:

The public relations certificate requires the following courses:

COMM 260: Public Relations Principles

JASS 2015: Fundamentals of Journalism

COMM 300: Communication Research Methods COMM 360: Social Media for Public Relations

COMM 460: Public Relations Campaigns

COMM 477: Professional Communication Ethics

Notes Regarding PR Certificate Program:

- A minimum 2.0 cumulative GPA and a minimum of twelve earned hours completed at UM-Dearborn are required for admission to the program.
- A maximum of nine credit hours may simultaneously count toward the PR certificate and toward the Communication major.
- A maximum of two transfer courses (six credit hours) may count toward the PR program.
- A minimum 2.0 GPA in the courses counting toward the PR certificate and minimum 2.0 cumulative GPA are required at the time of graduation and/or posting of the certificate.

Religious Studies

MINOR OR BGS/LIBS AREA OF FOCUS ONLY

It is impossible to understand any cultural context, including Western, without knowledge of the traditions, influence and rationale of its religious underpinnings. In light of this fact, a Religious Studies minor has been established to provide a focus for discussions of the ethical standards and the cultural orientations that have been fostered by various religions. It is also the objective of this program to provide a background in the religious beliefs, practices, and aesthetics of other cultures in order to give students insight into the basis of social and political actions that otherwise are subject to misunderstanding.

Religious Studies is an interdisciplinary course of study which requires one prerequisite course (RELS 120 Philosophy and Religion; **or** RELS 201 Religions of the World) and 15 upper level credit hours of any RELS courses.

Religious Studies (RELS) COURSE OFFERINGS

RELS 120 Philosophy and Religion

3.000 Credits

An examination of how basic concerns of philosophy impinge on questions of religious beliefs. Using philosophical texts, the course will explore such questions as the following: Does God exist? Does human life have a purpose? How can we know whether religious claims are true?

RELS 201 Religions of the World

3.000 Credits

A study of religion in essence, in manifestation, and in relationship with the other dimensions of culture. Surveys major world religions.

RELS 327 Myth & Ritual in Classical Art

3.000 Credits

Prerequisites: ARTH 101 or ARTH 102 or ARTH 103 or ARTH 104 or ARTH 105

Polytheistic, multicultural religious practices shaped Greek and Roman culture and society. This course examines the main deities, myths, rituals and sanctuaries of the ancient Mediterranean through the study of art, architecture, texts and archaeology. Freestanding sculptures, relief sculptures, vase paintings, wall paintings, mosaics, coinage, altars and temples will be analyzed.

RELS 331 Erly Christian Byzan Art

3.000 Credits

Prerequisites: ARTH 101 or ARTH 102 or ARTH 103 or ARTH 104 or ARTH 106

Borrowing its formal language from late antiquity and its symbolism from other mystery cults, the art of early Christianity emerged from the Roman catacombs to monumental expression under emperors Constantine and Justinian. Special attention will be devoted to the invention of a new symbolic language in art and to the development of church architecture.

RELS 332 The Reformation Era: 1500-1648

3.000 Credits

A study of the nature, course, and impact of the Protestant Reformation in Europe, Humanism, the Counter-Reformation, and the cultural and social implications of Protestantism also receive attention. (YR).

RELS 333 Intro to Gospel Music

3.000 Credits

This course explores the history and aesthetics of Black sacred music within cultural context. Major figures (Thomas A. Dorsey, Mahalia Jackson, The Winans Family, Kirk Franklin), periods (slavery, Great Migration, Civil Rights movement), and styles (folk and arranged Negro spirituals, congregational songs, and gospel songs - traditional to contemporary) will be studied through recording, videos, film, and at least one field experience. Underlying the course is the theory (Mellonee Burnim and Pearl Williams-Jones) that gospel music is an expression of African American culture that fuses both African and European elements into a unique whole. (OC).

RELS 335 Women in Medieval Art

3.000 Credits

Prerequisites: ARTH 101 or ARTH 102 or ARTH 103 or ARTH 104 or ARTH 106 or WGST 275 or WGST 303 or HUM 275 or HUM 303 or ANTH 275 or ANTH 303 or PSYC 275 or PSYC 303 or SOC 275 or SOC 303 or WST 275

Women have often been regarded as the second sex of the middle ages due to the misogynistic attitudes of that era. Recent scholarship, however, as unearthed a significantly more complex picture. Through a study of visual representations of women in medieval art, this course will examine women's roles in the creation and patronage of art and literature, economic and family issues, and women's participation in new and innovative forms of religious piety.

RELS 337 Islamic Movemnts Mid East Hist

3.000 Credits

Will compare several Islamic movements in Middle Eastern history, starting with the rise of Islam in Mecca and Medina. Later impulses toward Islamic revival all looked back to the first movement, and hoped to capture both its spirit and its success. With this as background, the course will move to address two questions; How did later Islamic movements understand the history of the rise of Islam? How have later Islamic movements had to adapt their methods and their ideology to different historical circumstances? (AY).

RELS 338 Women&Islam in MidEast to 1900 3.000 Credits

This course covers the historical development of Islam's normative stance towards women and gender roles in the Middle

East from the rise of Islam to the earliest stirrings of feminist activism.

RELS 341 Religion and Literature

3.000 Credits

Prerequisites: (COMP 106 or COMP 220 or COMP 270 or COMP 280 or CPAS 40) and (ENGL 230 or ENGL 231 or ENGL 232 or ENGL 233 or ENGL 235 or ENGL 236 or ENGL 237 or ENGL 239 or ENGL 200)

An investigation of the ways in which religious ideas and practices have informed works of literature, and vice versa. Surveying a variety of genres and themes, the course will focus mainly on British and/or American literature and its engagement with Judaeo-Christian religion, though some attention may be devoted to other literary and religious traditions (e.g., ancient and medieval texts, European and world literature, Islam and Eastern religions).

RELS 342 Myth and Motif

3.000 Credits

Prerequisites: ENGL 230 or ENGL 231 or ENGL 232 or ENGL 233 or ENGL 235 or ENGL 236 or ENGL 237 or ENGL 239 or ENGL 200

A study of archetypal figures and thematic motifs. Their recurrent appearance in different literary periods and genres and their lineage will be examined in order to increase understanding of the works themselves and of the ages which produced them. A selection will be made from classical myth, Biblical narrative, and historical sources. Thus the figures may vary from Oedipus and Cain to Faust and Don Juan. Motifs or story patterns may include such devices as the spiritual quest, the journey into Hell, or the patricide prophecy.

RELS 346 Bible and Western Tradition

3.000 Credits

A detailed study of major episodes from the Bible, first as a literary work, and second as it is reflected in both poetry and the visual arts during the Renaissance and Baroque periods. Included are selected works by such masters as John Donne, George Herbert, and John Milton in poetry and Michelangelo, Raphael, and Leonardo da Vinci in painting and sculpture.

RELS 349 Bible In/As Literature

3.000 Credits

Prerequisites: (COMP 106 or COMP 220 or COMP 270 or COMP 280 or CPAS 40) and (ENGL 230 or ENGL 231 or ENGL 232 or ENGL 233 or ENGL 235 or ENGL 236 or ENGL 237 or ENGL 239 or ENGL 200)

This course will study selected readings from the Bible, first in regard to their own literary, historical, and cultural contents, and then in regard to their reception, interpretation, and reapplication by later literary tradition. Biblical selections will cover both the Old and New Testaments as well as Apocryphal traditions, while reading from later non-biblical texts will be drawn from various literary periods.

RELS 355 Religion and Politics

3.000 Credits

The primary focus of the course is on political movements or systems, which take a religious form or have a religious base or use a religiously rooted ideology. Possible themes or cases covered include millennialism, the Iranian Islamic revolution, the Catholic Church as a political system, liberation theology in Latin America, Zionism and the Evangelical movement in America. (AY).

RELS 360 Myth, Magic, and Mind

3.000 Credits

A broadly based introduction to the range of human mythical and magical traditions. Sophomore standing, ANTH 101 highly recommended. (YR).

RELS 363 Rel in Amer Hist:1607-1865

3.000 Credits

A survey of the religious movements and trends in America from the 17th century to the Civil War, with emphasis on Puritanism, 18th-century revivalism, and 19th-century denominationalism and social reform. (AY).

RELS 3634 History of Islam in the US

3.000 Credits

Must be enrolled in one of the following classes:

Senior

Sophomore

Freshman

Junior

This course traces the long history of Islam and of Muslims in the United States (1730s-present), paying careful attention to the interaction among Muslims across the dividing lines of race, gender, immigrant generations, sect, political orientation, and class, and between Muslims and other Americans.

RELS 364 Rel in Am Hist II:1865-Present

3.000 Credits

A survey of American religion from the Civil War to the present, with emphasis on ethnicity and religion and post-World War II revivals of religion. (AY).

RELS 365 Introduction to the Qur'an

3.000 Credits

This course is an introduction to the Qur'an. This class will cover the historical and the cultural factors in which the Qur'an appeared. The class will also examine some of the major themes covered in the Qur'an such as gender, science, pluralism, worldview and so forth. Also, will cover major schools of interpretations and methodologies ranging from the literary to the scientific. The class will be conducted in English and knowledge of Arabic is desired but not required. No prerequisites. The class will consist of lectures, discussions, and movies.

RELS 373 Bible in History

3.000 Credits

In this course we will try to examine the historical circumstances and contexts surrounding the writing of The Hebrew Bible. Roughly speaking, we will begin by exploring three aspects of the subject: Historical context of the writing of the Bible-i.e. during the organizing and communicating of each segment. History of the canonization: the ideas and rationale behind including some books but not others. History in the Bible. In more specific terms, this will entail examining who wrote the Bible, when and why. The narrative incorporates the movement from an oral tradition to a written one and will demand some focus on certain pivotal moments, e.g., Ezra's reading (cf. Ezra-Nehemiah), or the historical events in Kings and Chronicles, or the defeat of the northern kingdom of Israel in 722 B.C.E. (BC) and of the southern kingdom of Judah in 589 B.C.E.

RELS 384 Islamic Decorative Arts

3.000 Credits

Prerequisites: ARTH 101 or ARTH 102 or ARTH 103 or ARTH 104 or ARTH 106 or HUM 201 or RELS 201

This course in an in-depth investigation of the decorative arts of the Islamic Middle East from the seventh through the eighteenth century including the lands of Islamic Spain and North Africa and extending east to Afghanistan. The course traces the development of decorative styles in objects of daily and courtly life, particularly ceramics, metal work, glass, wood and ivory carving, textiles and rugs. The central role played by calligraphy in all of the arts in emphasized as well as in manuscript production and the Arts of the Book. As a religion, but also a way of life, Islam fostered a distinctive artistic production reflected in these decorative arts.

RELS 385 Philosophy of Religion

3.000 Credits

Prerequisites: PHIL 100 or PHIL 120 or PHIL 233 or PHIL 234 or PHIL 240 or PHIL 301 or PHIL 302 or PHIL 303 or PHIL 304 or PHIL 305 or PHIL 310 or PHIL 315 or PHIL 320 or PHIL 365 or PHIL 340 or PHIL 355 or PHIL 350 or PHIL 369 or PHIL 371 or PHIL 375 or PHIL 380 or PHIL 390 or PHIL 441 or PHIL 442 or PHIL 445 or PHIL 485 or PHIL 490 or RELS 120

A philosophical examination of basic religious problems, such as the nature and grounds of religious belief, the existence and nature of God, human immortality, the relations of religion and science, and the nature or religious language. Students electing this course must have successfully completed a previous course in philosophy or have permission of the instructor.

RELS 390 Topics in Religious Studies

3.000 Credits

Must be enrolled in one of the following Levels:

Undergraduate

May not be enrolled in one of the following Classes:

Sophomore

Freshman

Examination of problems and issues in selected areas of religious studies. Title in Schedule of Classes will change according to content. Course may be repeated for credit when specific topics differ. Junior standing required.

RELS 401 Religion in Contemp US Culture

3.000 Credits

The purpose of this course is to provide people in contemporary multi-religious America foundational information about beliefs and practices of several of the world's religions sufficient to engage in inter-religious dialogue. Special emphasis will be given to changes the American religious landscape after 1965 with the passage of new immigration laws. The course will combine lectures and visits to a variety of Metropolitan Detroit religious centers including Hindu, Buddhist, Jain, Sikh, Jewish, Christian, Muslim, and Native American. (S).

RELS 404 Medieval Mystical Writers

3.000 Credits

Prerequisites: (COMP 106 or COMP 220 or COMP 270 or COMP 280 or CPAS 40) and (ENGL 200 or ENGL 230 or ENGL 231 or ENGL 232 or ENGL 233 or ENGL 235 or ENGL 236 or ENGL 237 or ENGL 239)

A study of the genre of mystical writing as it was developed and practiced throughout the Middle Ages and in 14th century England particularly. Attention will be given to the historical, religious, and cultural contexts that enabled and were created by mystical texts. In addition, the course will explore how traditional and contemporary trends in the fields of religious and literary studies can be brought to bear on the genre of mystical writing. (OC)

RELS 440 Religion and Culture

3.000 Credits

An introduction to the comparative study of religious systems. Explores religious beliefs and practices in non-Western cultures; surveys theoretical approaches to the study of religion; and discusses how religions grow, develop, and change. ANTH 101 recommended. (YR).

RELS 455 Sociology of Religion

3.000 Credits

Prerequisites: SOC 200 or 201

Religion as a social institution; its purposes, methods, structure, and beliefs, and its relation to other institutions.

RELS 498 Independent Study

3.000 Credits

Must be enrolled in one of the following classes:

Senior Junior

Prerequisites: HUM 201 or PHIL 120

This course provides an opportunity for qualified students interested in Religious Studies to pursue independent research under the direction of a qualified faculty member. The project must be defined in advance, in writing, and must be a topic not currently offered in the regular curriculum.

Science and Technology Studies

(minor or BGS/LIBS Area of Focus only)

In a democratic society increasingly reliant on science and technology, it is crucial for citizens to understand the social, political, ethical, economic, and environmental issues at stake in the development, distribution, consumption, and control of the products of science and technology. Science and Technology Studies (STS) is an interdisciplinary program in which the methods and perspectives of various disciplines in the humanities, social sciences, and behavioral sciences are used to examine the social contexts from which science and technology emerge, the intertwined organizations of people and things used to implement scientific and technological systems, the social consequences of these systems, and the cultural reactions to them.

In keeping with UM-Dearborn's location and its historic and continuing connections to the automobile industry, the STS Program gives special attention to the impact of the automobile and the automobile industry on American society. The program's introductory course, for example, analyzes the social as well as the technical reasons for the emergence of the internal combustion engine, the reorganization of factories and reconceptualization of labor fueled by mass production and lean production, the impact of the automobile on the design of cities and the development of suburbs, and the iconic status of the car in American culture. A website on "The Automobile in American Life and Society" (autolife.umd.umich.edu) has been developed by the STS Program and is used in the introductory

Most of the courses in STS are cross listed with other

disciplines, and the STS faculty hold appointments in such fields Anthropology, Art History, Biological Sciences, Communications, Economics, English, Environmental Studies, History, Mathematics, Mechanical Engineering, Philosophy, Psychology and Sociology.

A minor in STS is particularly relevant for students who live and work in southeast Michigan and makes an appropriate complement to any field of study in the arts and sciences, engineering, education, or management.

Students who wish to minor in STS must complete STS 300 Introduction to Science and Technology Studies and four courses from the list below, with at least one course from each of the three areas. Contact the STS Director for updated information about course offerings.

Required courses

STS 300	Introduction to Science and Technology
	Studies

Science, Technology and Cultures		
One course from the list below		
STS 310	Computers and Society	
STS 326	Gender and Science	
STS 340	Race and Evolution	
STS 345	Cultural Ecology and Evolution	
STS 349	Thomas Edison and His Era	
STS 360	Philosophy of Technology	
STS 374	History of Industrial Technology*	
STS 386	Comparative History of Technology*	
STS 403	Issues in Cyberspace	
STS 409	Human Body, Growth and Health	
STS 410	Darwinism and Philosophy	
STS 430	Medical Anthropology	
STS 485	Philosophy of Science	
STS 488	Environmental Literature and	
	Representations of Nature	

Science, Techno	logy and Labor	3 hrs
One course from the list below		
STS 305	Social Issues in Auto Design and	
	Engineering*	

	66
STS 310	Computers and Society
STS 321	Labor in the American Economy*
STS 383	Labor in America*
STS 421	Economics of the Labor Sector*
STS 441	Sociology of the Auto Industry*
STS 442	Sociology of Work*
STS 464	Human Factors in Psychology

One course from the list below		
STS 301	Concepts of Environmentalism*	
STS 305	Social Issues in Auto Design and	
	Engineering*	
STS 308	Urban Geography	
STS 309	Economic Geography*	
STS 312	Environmental Ethics	
STS 325	Environmental Politics*	
STS 365	Environmental Psychology*	
STS3666	Henry Ford and His Place	
STS 3695	The American City*	
STS 384	Environment, Architecture, and Design*	

One additional course from any of the above.

^{*}An asterisk indicates a course that contains some attention to the automobile.

Science and Technology Studies (STS)

COURSE OFFERINGS

STS 300 Intro to Sci & Technol Studies

3.000 Credits

An examination of the social contexts and consequences of science and technology, with special attention to the impacts of the automobile and automobile industry on American society. Topics include the automobile's role in the history of manufacturing; the impact of various production techniques on work and workers; the effects of the automobile on the natural environment, the design of cities and development of suburbs, and ways of life; the iconic status of the car in American culture and the relationship between automobile design and aesthetics. (YR).

STS 301 Concepts of Environmentalism 3.000 Credits

Designed to identify the underlying concepts of any environmental issue. The course will demonstrate the interdisciplinary nature of environmental problem-solving through current readings, classical monographs, and films. Students will conduct a systems analysis of a household and a local community. A major research paper on an environmental topic will be required. The course will not be open to students who take ENST 105. (YR)

STS 305 Social Issues in Auto Design

3.000 Credits

Prerequisites: COMP 105 or COMP 110 or CPAS 30

An examination of the impact of four contemporary social issues - vehicle safety, energy consumption, environmental impact, and a changing workforce - on the design and engineering of automobiles in the context of globalization and rapid technological change. Using a series of case studies, the course will focus on the ways social concerns, government regulation, and professional ethics, as well as industry standards and technical considerations, affect the decision-making processes of automobile designers and engineers. (OC).

STS 308 Urban Geography

3.000 Credits

The geography of human settlement and urbanization. Particular emphasis placed on human transformation of the physical environment, and resource use throughout history from ancient civilizations to modern megalopolises. Universal urban challenges, such as sprawl, pollution, congestion, crime, poverty, etc., are addressed. (F,W).

STS 309 Economic Geography

3.000 Credits

Spatial aspects of the ways people make their living. Discussion of the spatial distribution of resources and wealth at various scales. Introduction of site selection and location analysis. (F).

STS 310 Computers and Society

3.000 Credits

Prerequisites: SOC 200 or SOC 201

A sociological discussion of computers and other information technology starting with the larger concept of technology and social change, an exploration of various forms of information technology, their history and development, their relationship to the changing social structure of a post-industrial society like 20th/21st-century USA. Case studies could include "Computers and the Workplace," "Computers in Medicine," "Computers and Education," and "Computers in Popular Culture." Course concludes with a discussion of new social problems and possible futures. (OC).

STS 312 Environmental Ethics

3.000 Credits

Prerequisites: PHIL 100 or PHIL 120 or PHIL 200 or PHIL 233 or PHIL 240

The relationship of human beings to the non-human environment raises pressing moral and political issues. This course will use the theories and concepts of philosophical ethics to explore such questions as human obligations to non-human animals; the preservation of wilderness; balancing economic, aesthetic, and spiritual values; and the problems of pollution, urban sprawl, and ecological justice. (OC).

STS 321 Labor in the American Economy

3.000 Credits

Prerequisites: ECON 201 and ECON 202

An analysis of the nature and underlying causes of the problems facing the worker in modern economic society. Includes an examination of wages, unemployment, economic insecurity, the trade union movement, collective bargaining, and labor legislation. (F).

STS 325 Environmental Politics

3.000 Credits

An examination of policy making on environmental and energy problems globally, nationally, and locally.

STS 326 Gender, Science, & Engineering

3.000 Credits

Explores some of the history of women in science and engineering, the current status of women in science and engineering, and feminist theory in research. Topics include cultural influences on women in science and engineering, careers and life balance, and a feminist approach to scientific and engineering teaching and research. Discussion, Lecture OR hybrid OR online. (OC).

STS 340 Race and Evolution

3.000 Credits

An evolutionary survey of the biological differences among human populations in response to such factors as climate, culture, disease, nutrition, and urbanization. The meaning of racial variation is discussed in terms of adaptation to environmental stress. "Race" is rejected; racism is discussed. (AY).

STS 345 Cultural Ecology & Evolution

3.000 Credits

An introduction to the study of human ecology. This course employs the case-study method to develop an evolutionary and biocultural perspective on the relationship between human beings and their environments. (OC).

STS 349 Thomas Edison and His Era

3.000 Credits

This course will introduce students to the life and work of Thomas Edison. Breaking with the stereotype of the lone inventor/genius, we will examine how Edison helped shape and was in turn shaped by the context of the Gilded Age America when the United States emerged as an urban, industrial nation.

Lectures and discussions will be supplemented by slides, films, and visits to the Edison-related sites at the Henry Ford. . Throughout the course the following themes will be explored: invention and the labor process, the significance of manufacturing and marketing, the origins of modern consumer culture. (OC).

STS 360 Philosophy of Technology

3.000 Credits

A study of both the history of, and current issues in, the philosophy of technology. This course will examine the deeper meaning and implications of our modern technological society. Questions examined include: What is the definition and nature of technology? How did the concept originate in Western thought? What is the relationship between modern industrial technology and the 'mechanistic' worldview? How do Western religious beliefs influence our attitudes about technology? Is technological progress socially determined, or is it culturally independent? In what ways has our technological society been supportive of, or detrimental to, overall human well-being? Students will cover both classic and contemporary readings.

STS 365 Environmental Psychology

3.000 Credits

Prerequisites: PSYC 170 or PSYC 171

A survey of the contributions of the behavioral sciences to the understanding and solution of environmental problems that threaten our survival. Insights derived from psychology, anthropology, and computer science are discussed. Major topics include overpopulation, overconsumption of resources and energy, future shock, cognitive limitations in our understanding of ecological-political systems, and the use of behavioral control. (OC).

STS 3666 Henry Ford and His Place

3.000 Credits

Using the biography of Henry Ford as a touchstone, the course will examine the trajectories of historical change and regional development between 1870 and 1950. Of fundamental concern will be southeastern Michigan's transformation from a 19th century outpost on the Great Lakes to the nation's "engine of change" in the 20th century. Henry Ford was the major player in that revolutionary transformation. This course examines his role in history and mythology as well as the causes and implications of that transformation. (OC).

STS 3695 The American City

3.000 Credits

This course examines the development of urban America from the European-style port cities of the colonial period through the edge cities of today. The bulk of the course will focus on the late 19th and 20th century urban environment with an eye towards understanding the diverse residents, cultures, economies, and geographies that have shaped the American cities. We will cover everything from developments in transportation, architecture, business, and technology to immigration, politics, and urban culture. Broad concerns and constituencies have shaped the urban public sphere, the physical development of cities and the experiences of living as an urbanite and, consequently, they will receive much of our attention. American patterns of development will then be placed in context with those of other nations and cultures.

STS 374 Hist of Industrial Technology

3.000 Credits

Focusing on western Europe and the United States since the Industrial Revolution, this course will examine the history of manufacturing technologies and will include the following topics: mechanization and the rise of the factory; mass production; the process of innovation; design and diffusion of new technologies; technologies; technology and the changing nature of work; discussions, and examination of artifacts (actual tools and machines), students will consider the central role played by technology in the making of modern society. (YR).

STS 383 Labor in America

3.000 Credits

A survey of urban workers from colonial times to the present. Among the topics covered are changing standards of living, the experiences of industrial work, labor organizations, and working-class politics. (OC).

STS 386 Comparative Hist of Technology

3.000 Credits

This course will examine the history of technology from a comparative perspective; studying the development and impact of technology in different societies during various historical eras. Topics include: irrigation control and the rise of ancient empires; technology's role in the industrial revolution; technological innovation and the pace of social change. Current issues and various analytical perspectives in the history of technology will also be examined. (OC).

STS 390 Topics in STS

3.000 Credits

Examination of problems and issues in selected areas of Science and Technology Studies. Title as listed in the Schedule of Classes will change according to content. Course may be repeated for credit when specific topics differ. (OC).

STS 4021 **Economics of the Labor Sector**

3.000 Credits

Prerequisites: ECON 302

Theoretical analysis and empirical studies of the nature and operation of labor markets. Includes theories of wage determination and income distribution, the nature of unemployment, the impact of collective bargaining on the economy, the extent and economic effects of discrimination, and the nature and effects of government wage and employment policies. ECON 321/STS 321, Labor in the American Economy, is valuable background to this course although it is not a prerequisite. This course counts as a required capstone (4000level) course in Economics and also counts toward the Economics Honors designation.

STS 403 Issues in Cyberspace

3.000 Credits

This course will explore some of the social, political, legal, and technological issues associated with the use of new media technology to move ideas and information in a democratic society. Examples of areas to be explored include the Internet and World Wide Web, privacy, the future of the mass audience, and the meaning of the First Amendment in the 21st Century. (AY).

STS 409 Human Body, Growth & Health

3.000 Credits

This course provides and advanced undergraduate introduction to the topic of human growth and shows how human growth can be a reliable measure of the psychological, social, economic and moral conditions of a society. A major theme will be the interplay of biology and culture in shaping the patterns of human growth and, consequently, the health of populations and individuals. (OC).

STS 410 Darwinism and Philosophy

3.000 Credits

Prerequisites: PHIL 100 or PHIL 210 or PHIL 200 or PHIL

233 or PHIL 240

Darwinism represents a challenge to the traditional view of human life as radically separate from the rest of the natural world. This course will examine the philosophical implications of this world view. It will address questions such as these: Is Darwinism compatible with traditional religion? Does Darwinism imply that human life and the cosmos are without purpose? Can human life be meaningful if it is the result of evolution and natural selection? Does Darwinism require us to change our view of nature? What are the ethical implications of a Darwinian view of life and the universe? (OC).

STS 430 Medical Anthropology

3.000 Credits

A comprehensive examination of how culture mediates processes of illnesses and healing. Comparative materials examined, which provide a context for an anthropological analysis of modern biomedicine. (YR).

STS 441 Sociology of the Auto Industry

3.000 Credits

Prerequisites: SOC 200 or 201

The American auto industry is examined in its relationship to the economic and political structures of 20th-century U.S. This includes a focus on the social history of the industry as well as a discussion of the nature of auto work. Proposals for changing social relations at work are also examined. The course concludes with an examination of the impact of the industry on a local community (Detroit). (F,W).

STS 442 Sociology of Work

3.000 Credits

Prerequisites: SOC 200 or 201

The study of work roles in modern society. The impact of industrialization, professionalization, and unionization on the conditions of work, worker motivation, and job satisfaction. Career choice processes and career patterns, occupational status and prestige, and occupations associations are among the topics to be considered. (YR).

STS 464 Human Factors Psychology

3.000 Credits

Prerequisites: PSYC 170 or 171

This course will provide an overview of the field of human factors, including two major components: (1) a background in specific content areas of psychology that have direct relevance to the field and (2) a survey of direct applications of these areas to real-world problems. The content areas include research methods, sensory and perceptual processes, learning and memory, human information processing, decision making. (YR).

STS 485 Philosophy of Science

3.000 Credits

Prerequisites: PHIL 100 or PHIL 120 or PHIL 200 or PHIL 233 or PHIL 240

A critical study of the foundations of the sciences, natural and social, with emphasis on the following topics: the nature of scientific method, theories and explanation, probability and determinism, the unity of the sciences. (OC).

STS 488 Env Lit & Reps of Nature

3.000 Credits

Prerequisites: (COMP 106 or COMP 220 or COMP 280 or CPAS 40 or COMP 270) and (ENGL 230 or ENGL 231)

An interdisciplinary study of the ways in which the relationship between "nature" and humankind has been represented in literature and other forms of cultural expression. Emphasis on American and British texts of the 19th and 20th centuries, but assigned materials may include readings from other cultures and historical periods. (OC).

Social Sciences (SSCI)

(not a field of concentration)
COURSE OFFERINGS

SSCI 390 Topics in Social Sciences

1.000 TO 3.000 Credits

Must be enrolled in one of the following Levels:

Undergraduate

Examination of problems and issues in selected areas of social science. Title as listed in the Schedule of Classes will change according to content. Course may be repeated for credit when the specific topic differs. (OC)

Social Science Research Methodology

MINOR OR BGS/LIBS AREA OF FOCUS ONLY

Requires 15 credits of upper level course work from the following (must include courses from three disciplines): ANTH 370; ECON 305, 4015; MATH 363; POL 300; PSYC 381, 464; SOC 410.

Social Studies

The Social Studies major provides students with a broad range of courses through which to examine and appreciate the processes and institutions that shape civilizations and social orders. It seeks to recreate the context of changing human activities, be they cultural, economic, geographic, political, or social, and to explain and understand the contemporary human condition. Because of its interdisciplinary structure, the Social Studies major is valuable for those who want a multidimensional understanding of the human past and future, and of the contemporary world and their own place in it.

The degree was especially designed for students seeking to become secondary school teachers, but it could also provide background for those who seek a career in government work, law or business.

MAJOR REQUIREMENTS

Students must complete 33 hours of coursework in Economics, Geography, History, and Political Science from the following:

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Geography
3 hours Any 100-400 level AND
3 hours 300/400; 3000/4000 level
Economics 6 hrs
3 hours ECON 201, 202, 2001 AND
3 hours any 300/400; 3000/4000 level
U.S. History
Any 300/400; 3000/4000 level
Non-U.S History 9 hrs
Any 300/400; 3000/4000 level – MUST be in 3 different
global areas (Asia, Europe, Africa, Middle East)
Political Science 6 hrs
Any 300/400; 3000/4000 level
Additional Economics, Geography, or Political Science 3 hrs
Any 300/400; 3000/4000 level
Cognates
Students must also complete six hours in upper level cognate
courses from any CASL discipline (excluding ECON, GEOG,
HIST, POL, MATH 385, 386, 387); or Education courses (EDA
and EDC only).
For Secondary Education Certification Students
Please note that the College of Education, Health, and Human
Carriage Capial Studies Tapahing Major requires the following

Please note that the College of Education, Health, and Human Services Social Studies Teaching Major requires the following specific courses (as of Fall 2012):

HIST 101, 103, 111, 112, 3601; POL 101, 371 or 471 or 472; GEOG 206, 302; ECON 201, 202.

NOTES

- 1. At least 15 of the 27 upper level hours required for the major must be elected at UM-Dearborn.
- 2. Secondary Certification requires additional credits to graduate. Contact College of Education, Health, and Human Services for current requirements.

Society and Technological Change

MINOR OR BGS/LIBS AREA OF FOCUS ONLY

Requires 15 credits of upper level course work from the following:

ENGL 453; JASS 403; LIBS 364; PSYC 464; STS 300; SOC 441.

Sociology

The field of sociology has grown in scope and importance as society has grown more complex and pluralistic. The modern individual is involved in a tightly integrated, sometimes conflicting, network of social groups, families, institutions, governmental, economic, educational and religious bodies, and specialized community organizations. Sociology studies the internal structure by which society is organized, the development and dynamics of the various groupings within it and the influences of these upon the individual. The undergraduate program in sociology provides a focus for general liberal education, as well as for preparation for careers in sociology. These include careers in social work and related human services, law, criminal justice, labor relations, public administration, business management, human relations, marketing and public opinion research.

PREREQUISITES TO THE MAJOR

A student desiring to major in sociology is required to have completed an introductory course in sociology, or to complete SOC 200 or SOC 201 at UM-Dearborn. The introductory course (or its equivalent) is the prerequisite for all other sociology courses.

MAJOR REQUIREMENTS

Students must complete 28 hours in sociology in course numbered 300 or above. All students are required to complete 18 of these 28 hours in sociology at the UM-Dearborn campus. All majors must complete the following courses:

Required courses		
SOC 308	Development of Sociological Theory 3 hrs	
SOC 410	Quantitative Research	
SOC 413	Qualitative Research	
Mana Casialasa	2 1	
One of the following	•	
SOC 422	Structure of American Society	
SOC 423	American Social Classes	
SOC 450	Political Sociology	
SOC 453	Sociology of Law	
SOC 455	Sociology of Religion	
SOC 457	Family, Aging and the Law	
SOC 458	Sociology of Education	
SOC 460	America in a Global Society	
Public Issues		
One of the following		
SOC 350	Poverty and Inequality	
SOC 402	Genocide	
SOC 403	Minority Groups	
SOC 446	Marriage and Family Problems	
SOC 447	Family Violence	
SOC 465	Deviant Behavior/Social Disorganization	
SOC 469	Juvenile Delinquency	
Organizations		
One of the following		
SOC 439	Sociology of Professions	
SOC 440	Medical Sociology	
SOC 442	Sociology of Work	
SOC 456	Health Care and the Law	
SOC 477	Social Welfare	
SOC 477	Complex Organizations	
	1 6	
	Society	
One of the following	ng	
SOC 382	Social Psychology	
SOC 426	Society and Aging	
SOC 443	Gender Roles	
SOC 445	The Family	
SOV 449	Black Family in Contemp Amer	
SOC 497	Senior Research Seminar	
One any upper level Sociology course		
*Note: Double majors in sociology and psychology may use		
PSYC 425 in combination with PSYC 381 or SOC 383 as a		

*Note: Double majors in sociology and psychology may use PSYC 425 in combination with PSYC 381 or SOC 383 as a substitute.

Students are required to develop a portfolio before graduation. Please see a sociology advisor for specific portfolio requirements.

Students must also complete six hours in upper level cognate courses from two of the following six disciplines: ANTH, CIS, ECON, HIST, POL, STAT. Internships in these disciplines cannot be used to satisfy the cognate requirement.

NOTES:

- 1. A maximum of 44 hrs. in Sociology may count in the 120 hours required to graduate.
- 2. At least 18 of the 28 upper level hours in SOC must be elected at UM-Dearborn.
- 3. No more than 6 hours of Independent Study and no more than 6 hours of Independent Research within the Behavioral Sciences (anthropology, psychology and sociology) may be counted in the 120 hours required to graduate.

MINOR OR BGS/LIBS AREA OF FOCUS

A minor or area of focus consists of 12 hours of upper-level credit in sociology.

SOCIAL WORK/CRIMINAL JUSTICE INTERNSHIP

Provides field experience in social welfare or criminal justice agencies, e.g., for children/adolescents, in residential programs, in abuse remediation, in probation, for chemical dependencies, in victim advocacy, for elderly, in prisons, for special needs populations, in court services, and for families and communities. Instructor and student will, work together to determine appropriate intern placement.

Sociology (SOC) COURSE OFFERINGS

SOC 200 Understanding Society

3.000 Credits

An introduction to the study of human groups with special attention devoted to an analysis of contemporary American society. (F,W).

SOC 201 Contemporary Social Problems

3.000 Credits

The study of major social problems with particular reference to American society. Problems such as crime, mental disorders, addiction, drug abuse, suicide, racial conflict, urban decay, pollution, population, and family disorganization are studied both from a descriptive and theoretical point of view and analyzed collectively as a manifestation of a complex, industrial society. (YR).

SOC 263 Western Culture III

3.000 Credits

Prerequisites: (HUM 262 or HIST 262) and (HUM 261 or HIST 261) $\,$

The third of four courses on Western Culture required of all honors students. Covers the period from 17th to 19th centuries. Focus in on the emergence of scientific thought, Enlightenment political theory, Romantic individualism, and the great 19th century intellectual revolutions of Darwinism, Marxism, and feminism. Materials will be drawn from literature, philosophy, political, and scientific writings of the period. (YR).

SOC 264 West Cult IV: The Modern Era

3.000 Credits Prerequisites: HIST 365

Fourth of four courses in Western Culture required of all Honors students. Course covers period from 19th century to present.

Focus will be on selected major issues of Western Civilization in the modern era: science and human values, bureaucratic and totalitarian societies, psychoanalytical thought, feminism, nihilism, existentialism, (YR).

SOC 303 Intro to Women's & Gender Stud

3.000 Credits

May not be enrolled in one of the following Classes: Freshman

This course provides an interdisciplinary overview of the key theories and topics in Women's and Gender Studies. Special attention is given to how gender intersects with class, race, nationality, religion and sexuality to structure women's and men's lives. Students are also introduced to methods of gender analysis and will begin to apply these methods to topics such as women and health, gender roles in the family, violence against women, and gendered images in the mass media.

SOC 304 Studies in Detroit Culture

3.000 Credits

This course is an attempt to define a modern cultural history of Detroit. Taught by two faculty members, the emphasis of the course will vary but the following aspects of the city's cultural history will be covered in some detail: its literature, arts, music and architecture; its social conditions and broadened American cultural context. Not open to students who have completed SOC 305 or ENGL 305 or HUM 305 or ARTH 305 or HIST 305.

SOC 306 Comparat. American Identities

3.000 Credits

Must be enrolled in one of the following Levels:

Undergraduate

Prerequisites: COMP 106 or CPAS 40 or COMP 220 or COMP 270 or COMP 280

This course will confront and complicate the following key questions: what does it mean to be an American? What is American culture? Participants in this course will respond to the questions central to the American Studies field by reading and discussing historical, sociological, literary, artistic, material culture, political, economic, and other sources. Students will use this interdisciplinary study to examine the multiple identities of Americans - as determined by factors such as gender, race, class, ethnicity, and religion. While emphasizing the diversity of American culture, participants will consider some core values and ideas uniting America both in historical and contemporary society. Students will be invited to seek out and share fresh narratives of the American experience.

SOC 308 Sociological Theory

3.000 Credits

Prerequisites: SOC 200 or 201

A historical survey of the major theorists and their works from the beginnings of sociological positivism to contemporary theories. (YR).

SOC 310 Computers and Society

3.000 Credits

Prerequisites: SOC 200 or SOC 201

A sociological discussion of computers and other information technology. Starting with the larger context of technology and social change, an exploration of various forms of information technology, their history and development, their relationship to the changing social structure of a post-industrial society like 20th/21st century USA. Case studies could include "Computers and the Workplace," "Computers in Medicine," "Computers and

Education," and "Computers in Popular Culture." Course concludes with a discussion of new social problems and possible futures. (YR).

SOC 350 Poverty and Inequality

3.000 Credits

Prerequisites: SOC 200 or 201

In a middle class-oriented culture, the poor experience many problems and are also considered deviant which tend to make poverty self-perpetuating. This stratum will be explored with respect to life styles, life changes, contributing factors, characteristics, individual and social consequences, and evaluation of attempted solutions. (YR).

SOC 382 Social Psychology

3.000 Credits

Prerequisites: SOC 200 or PSYC 170 or PSYC 171 or SOC 201

An introductory study of the interrelationships of the functioning of social systems and the behavior and attitudes of individuals. (YR).

SOC 383 Introduction to Statistics

3.000 Credits

Frequency distributions and descriptive measures. Populations, sampling, and statistical inference. Elementary probability and linear regression. Use of statistical computer packages to analyze data. Students electing this course should have completed a minimum of one year of high school algebra. Students can receive credit for only one of MATH 363, STAT 363, SOC 383, and STAT 325. (F,W,S).

SOC 390 Topics in Sociology

3.000 Credits

Examination of problems and issues in selected areas of sociology. Title in Schedule of Classes will change according to course content. Course may be repeated for credit when specific topics differ. (F,W).

SOC 398 Directed Readings

1.000 TO 3.000 Credits

Prerequisites: SOC 200 or SOC 201

Reading assignments in sociology. No more than a total of six credit hours of SOC 398 and SOC 498 may be applied toward concentration. Permission of instructor required. (F,W,S).

SOC 402 Genocide

3.000 Credits

Prerequisites: SOC 200 or SOC 201

Applies concepts and theories dealing with rumor, prejudice, group contagion, and mass movements to the Jewish, Armenian, and American-Indian genocides. In addition, psychological, philosophical, and political issues related to genocide are addressed. (YR).

SOC 403 Minority Groups

3.000 Credits

Prerequisites: SOC 200 or 201

The status of racial and ethnic minorities in the United States with particular reference to the social dynamics involved with regard to majority-minority relations. Topics of study include inequality, segregation, pluralism, the nature and causes of prejudice and discrimination and the impact that such patterns have upon American life. Students cannot receive credit for both SOC 403 and SOC 503. (F,W).

SOC 4045 Dissed: Differ, Power, Discrim

3.000 Credits

Must be enrolled in one of the following Levels:

Undergraduate

Must be enrolled in one of the following classes:

Senior Sophomore Freshman Junior

Have you ever been dissed? Why are some people targets of disrespect? This class examines the unequal distribution of power - social, economic, and political - in the United States and other countries that results in favor for privileged groups. We will examine a variety of institutional practices and individual beliefs that contribute to disrespect. We'll look at ways that beliefs and practices, like viewing inequality as consequence of a 'natural order', obscure the processes that create and sustain social discrimination. We will engage in the intellectual examination of systems, behaviors, and ideologies that maintain discrimination and the unequal distribution of power and resources. Students will not receive credit for both SOC 404 and SOC 504.

SOC 4075 Sexual Praxis and Theory

3.000 Credits

Prerequisites: WST 275 or WGST 275 or PSYC 275 or SOC 275 or ANTH 275 or HUM 275 or SOC 443 or PSYC 405 or ANTH 406 or ANTH 101 or WGST 303 or PSYC 303 or SOC 303 or ANTH 303 or HUM 303

This course will offer an overview of sexual differences including: the socio-cultural construction of gender, sexual behavior, and orientation; sex and sexualities in language and literature; and diversity by race, class, and cultural heritage. These topics will enable students to understand human sexuality within and across a continuum removing notions of duality, or polarity, in sexual behaviors and orientations. Examples both from within Western society and from non-Western societies may be used to further this position. Theoretical perspectives may encompass sociological and anthropological work, literary theory and criticism, queer theory, and multi-disciplinary discussions/discourse. Texts may include: Sex and the Machine: Readings in Culture, Gender and Technology, The Anatomy of Love, The Lesbian and Gay Studies Reader, Second Skins: The Body Narratives of Transexuality, and Lesbian and Gay Marriage.

SOC 409 Feminist Theories

3.000 Credits

Prerequisites: WGST 275 or WST 275 or SOC 200 or SOC 201 or PSYC 275 or SOC 275 or ANTH 275 or HUM 275 or WGST 303 or PSYC 303 or SOC 303 or ANTH 303 or HUM 303

This course examines the different perspectives that feminist theorists have offered to analyze the unequal conditions of women's and men's lives. Students taking this course will develop an understanding of how theory functions as a way to know, understand and change the world. They will also be provided with a lens for comparing the assumptions and implications of alternative theoretical perspectives. A particular emphasis of this course is on theorizing the interrelationships among gender, race, class, sexuality and nationality. Course material includes applications of feminist theory to issues such as gender identity formation; sexuality; gender, law and citizenship; women and work; and the history and politics of social movements. Student will not receive credit of both SOC 409 and SOC 509. (AY)

SOC 410 Quantitative Research

4.000 Credits

Prerequisites: SOC 200 or 201

An introduction to methods of data collection and analysis. Elementary statistics data are analyzed using computerized statistics programs. A discussion of research design and the philosophy of social science is also included. Students cannot receive credit for both SOC 410 and SOC 510. (YR).

SOC 411 Program Evaluation

3.000 Credits

Must be enrolled in one of the following Levels:

Undergraduate

Prerequisites: SOC 200 or PSYC 170 or PSYC 171 or POL

101 or SOC 201

The application of social research procedures in assessing whether a human service program is needed, likely to be used, conducted as planned, and actually helps people in need. The course will cover research design and measurement as well as issues of how to get research findings utilized. Students cannot receive credit for both SOC 411 and SOC 511. (YR).

SOC 412 Men and Masculinities

3.000 Credits

Must be enrolled in one of the following Levels:

Undergraduate

May not be enrolled in one of the following Classes:

Sophomore

Freshman

Prerequisites: SOC 200 or SOC 201 or ANTH 101 or WST 275 or WGST 275 or PSYC 275 or SOC 275 or ANTH 275 or HUM 275 or WGST 303 or PSYC 303 or SOC 303 or ANTH 303 or HUM 303

This course addresses the question, "What is a man?", in various historical, cross-cultural, and contemporary contexts. A major focus on the social and cultural factors that underlie and shape conceptions of manhood and masculinity in America as well as in a variety of societies around the globe. (AY).

SOC 413 Qualitative Research

3.000 Credits

Prerequisites: SOC 308

Qualitative research methods involve the observation and study of people in their everyday lives, in their taken-for-granted worlds. Qualitative research seeks to combine close empirical observation with analytic techniques that demand (and teach) personal and social self-consciousness as necessary to an understanding of the social worlds of "others". This course in qualitative methods is designed to acquaint students with field research theories and techniques. Students will gain hands on experience in participant observation, interviewing and the use of sociological scholarship. Qualitative Research Methods will prepare students to gather data, focus the data in a social scientific manner, analyze the data, and then organize it in reportable form.

SOC 422 Structure of American Society

3.000 Credits

Must be enrolled in one of the following Levels:

Undergraduate

Prerequisites: SOC 200 or SOC 201

An analysis of the institutional structure of American society, with a view of determining the degree of its integration. Students cannot receive credit for both SOC 442 and SOC 522. (YR).

SOC 423 American Social Classes

3.000 Credits

Must be enrolled in one of the following Levels:

Undergraduate

Prerequisites: SOC 200 or 201

Stratification of American communities and society; a review of the findings of major studies and an introduction to methodology. Students cannot receive credit for both SOC 423 and SOC 523. (YR).

SOC 426 Society and Aging

3.000 Credits

Must be enrolled in one of the following Levels:

Undergraduate

Prerequisites: SOC 200 or SOC 201

Personal, interpersonal, and institutional significance of aging and age categories. Sociological dimension of aging based on social, psychological, and demographic factors. Attention to social networks and institutionalization. Students cannot receive credit for both SOC 426 and SOC 526. (YR).

SOC 430 Population Problems

3.000 Credits

Prerequisites: SOC 200 or SOC 201

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 underdeveloped countries. (YR).

SOC 435 Urban Sociology

3.000 Credits

Must be enrolled in one of the following Levels:

Undergraduate

Prerequisites: SOC 200 or 201

A descriptive study of the form and development of the urban community with respect to demographic structure, spatial and temporal patterns, and functional organization. The relationship of city and hinterland. Social planning and its problems in the urban community. Students cannot receive credit for both SOC 435 and SOC 535. (YR).

SOC 436 Personality and Society

3.000 Credits

Prerequisites: SOC 200 or SOC 201

Deals with the forms and modes of change of personality, social structure, and culture; examines their interactions with body/population, niche/environment, and technology. (YR).

SOC 439 Sociology of Professions

3.000 Credits

Prerequisites: SOC 200 or SOC 201

Course begins with a review of the sociological literature on the professions. It will then focus on the medical, legal, and business/managerial professions as case studies of the development of professions in post-industrial society. Intrinsic to the definition of profession is "autonomy." The course will explore what is happening to professions and professional autonomy in highly bureaucratized and corporatized societies, where we speak of deprofessionalization and proletarianization of professions. (YR).

SOC 440 Medical Sociology

3.000 Credits

Prerequisites: SOC 200 or 201

An analysis of health and illness behavior from the point of view of the consumer, as well as of medical professionals, the structure, strengths, and weaknesses of the medical care delivery system in the U.S.; the impact of culture and personality on illness behavior; and a study of the institution of medicine and activities of health care professionals. Students cannot receive credit for both SOC 440 and SOC 540. (F,W,S)

SOC 441 Sociology of the Auto Industry

3.000 Credits

Prerequisites: SOC 200 or 201

The American auto industry is examined in its relationship to the economic and political structures of 20th-century United States. This includes a focus on the social history of the industry as well as a discussion of the nature of auto work. Proposals for changing social relations at work are also examined. Concludes with an examination of the impact of the industry on a local community (Detroit). Students cannot receive credit for both SOC 441 and SOC 541. (F,W)

SOC 442 Sociology of Work

3.000 Credits

Must be enrolled in one of the following Levels:

Undergraduate

Prerequisites: SOC 200 or 201

Study of work roles in modern society. The impact of industrialization, professionalization, and unionization on the conditions of work, worker motivation, and job satisfaction. Career choice processes and career patterns, occupational status and prestige, and occupational associations are among the topics considered. Students cannot receive credit for both SOC 442 and SOC 542. (YR)

SOC 443 Gender Roles

3.000 Credits

Prerequisites: SOC 200 or PSYC 170 or PSYC 171 or SOC

This course will investigate the development of gender roles in childhood and adolescence due to either innate physiological differences or sociological patterning, the effect of gender roles upon male-female relationships within our society, and the possibility of transcending sociological gender roles in alternate modes of living. Students cannot receive credit for both SOC 443 and SOC 543. (F,W,S).

SOC 444 The Medical Profession

3.000 Credits

May not be enrolled in one of the following Classes:

Freshman

Prerequisites: SOC 200 or POL 201

Professions are the hallmark of modern society, and the medical profession is a prototype of what is meant by a profession. This course will examine the nature and history of the American medical profession, how it developed and changed since the early 1800's. What is the nature of the profession today? What social forces have shaped it? What does the future hold? These are some of the questions the course will address. (W).

SOC 445 The Family

3.000 Credits

Prerequisites: SOC 200 or 201

The family as an institution shaped by other aspects of society, as a social system with its own dynamics, and as a primary

group affecting the lives of its members. Historical and contemporary materials from the United States and other cultures. Students cannot receive credit for both SOC 445 and SOC 545. (F,W,S).

SOC 446 Marriage and Family Problems

Must be enrolled in one of the following Levels:

Undergraduate

Prerequisites: SOC 200 or 201

Sociological analysis of problems encountered within the institution of marriage with particular reference to such issues as choosing a marriage partner, sexual adjustment, occupational involvement, conflict resolution, child rearing, divorce and readjustment. Students cannot receive credit for both SOC 446 and SOC 546. (YR)

SOC 447 Family Violence

3.000 Credits

Must be enrolled in one of the following Levels:

Undergraduate

Prerequisites: SOC 200 or SOC 301 or SOC 443 or PSYC

405 or WST 405 or SOC 201

Sociological analyses of various forms of family violence which occur disproportionately in the lives of girls and women. Topics such as incest, sexual abuse, date rape, wife battering, and elder abuse will be situated within the social and cultural context of contemporary gender relationships. Social and political responses to the phenomena will be examined. Students cannot receive credit for both SOC 447 and SOC 547. (YR)

SOC 448 Comparative Health Care Sys

3.000 Credits

Must be enrolled in one of the following Levels:

Undergraduate

Prerequisites: SOC 200 or SOC 201

An introduction and overview of the English, Swedish and People's Republic of China health care systems. Focus on cultural context and other organizational characteristics, unique features, approaches and ability to solve problems. Emphasis on how the three systems help us understand the American health care system. Students cannot receive credit for both SOC 448 and SOC 548. (YR).

SOC 449 Black Family in Contemp Amer

3.000 Credits

Prerequisites: SOC 200 or 201

The African-American family is examined in relationship to the historical and contemporary forces that have shaped its characteristic patterns of family life. These forces include the influence of slavery, urbanization, racial discrimination and urban poverty. The patterns of family life include parental roles, family structure, kinship relations, and gender roles. (YR).

SOC 450 Political Sociology

3.000 Credits

Must be enrolled in one of the following Levels:

Undergraduate

Prerequisites: SOC 200 or SOC 201

Examines how society effects the distribution and exercise of power through analyzing linkages between power, participation, and perspectives. Studies of political participation and social organization, ideology and social conflict, as well as political socialization, represent some of the major parameters. Students cannot receive credit for both SOC 450 and SOC 550. (YR)

SOC 452 Marxism

3.000 Credits

Prerequisites: SOC 200 or POL 101 or ECON 201 or ECON 202 or SOC 201

This survey of Marxist and neo-Marxist thought discusses philosophy, economic history, and socialism. Topics include Marx's view of the nature of man, class conflict, the dialectic in history, the labor theory of value, monopoly capital and imperialism. Problems of socialist societies such as economic development and rule of elites will also be discussed. (AY).

SOC 453 Sociology of Law

3.000 Credits

Must be enrolled in one of the following Levels:

Undergraduate

Prerequisites: SOC 200 or 201

Various aspects of the relationship between law and society are explored. After a look at processes of law making, attention is turned to the administration of law. This involves a study of the activities of legislatures, courts, police, and correctional agents. Students cannot receive credit for both SOC 453 and SOC 553. (YR)

SOC 454 Mental Health and the Law

3.000 Credits

Must be enrolled in one of the following Levels:

Undergraduate

Prerequisites: SOC 200 or SOC 201

Courts and legislatures now control much of the work of mental health professionals such as social workers, counselors, therapists, and psychologists. This course looks at problems encountered in putting the laws and policies into effect. These implementation problems are much the same in other areas of government action, such as poverty programs and pollution control. Students cannot receive credit for both SOC 454 and SOC 554. (YR)

SOC 455 Sociology of Religion

3.000 Credits

Must be enrolled in one of the following Levels:

Undergraduate

Prerequisites: SOC 200 or 201

Religion as a social institution; its purposes, methods, structure, and beliefs, and its relation to other institutions. Students cannot receive credit for both SOC 455 and SOC 555. (YR)

SOC 4555 Immigrant Cultures and Gender

3.000 Credits

Must be enrolled in one of the following classes:

Senior

Junior

Prerequisites: ANTH 101 or WGST 303 or SOC 200 or

SOC 201

The history and culture of immigration since 1850, including (1) formation and perseverance of immigrant communities and interethnic boundaries; (2) relations between the homeland and the immigrant; and (3) impact of migration on family life and gender roles.

SOC 456 Health Care and the Law

3.000 Credits

Must be enrolled in one of the following classes:

Junior Senior Graduate

Prerequisites: SOC 200 or SOC 201 or POL 364

A sociological study of legal issues in health care, including regulation of hospitals, consent for treatment, confidentiality, experimentation, family planning, children's rights, access to health care. The emphasis will be on the organizational and personal consequences of legal requirements. Junior/Senior standing is a requirement. Students cannot receive credit for both SOC 456 and SOC 556. (AY).

SOC 457 Family, Aging and the Law

3.000 Credits

Prerequisites: SOC 200 or SOC 201

The law exerts a powerful impact on the family and the elderly. This course interprets the effects of laws concerning guardianship, competence, nursing home regulation, marriage, divorce, custody, adoption, abortion, and child sexual abuse.

SOC 458 Sociology of Education

3.000 Credits

Must be enrolled in one of the following Levels:

Undergraduate

Prerequisites: SOC 200 or SOC 201

Education as a social institution; its purposes, methods, structure, and philosophy, and its relation to other institutions, particularly in the urban setting. Students cannot receive credit for both SOC 458 and SOC 558. (YR)

SOC 460 America in a Global Society

3.000 Credits

Prerequisites: SOC 200 or 201

Social changes in America are studied from an internal and an external perspective. The internal dynamics of social change emphasize the role of social movement, e.g., the impact of the civil rights movement on American culture and politics. The external perspective sees America as part of a changing global society. The development of the capitalist world system from its origin in Western Europe to its present global reach is examined. Contemporary American social problems are examined in relation to America's position in a rapidly changing world. Students cannot receive credit for both SOC 460 and SOC 560. (AY)

SOC 461 Cops & Cons: Women in Prison

3.000 Credits

Must be enrolled in one of the following classes:

Senior

Junio

Prerequisites: SOC 200 or SOC 201 or WST 275 or WGST 275 or CRJ 240 or CRJ 300 or PSYC 275 or SOC 275 or ANTH 275 or HUM 275 or WGST 303 or PSYC 303 or SOC 303 or ANTH 303 or HUM 303

Course uses contemporary theories of gendered organizations to frame analyses of prison policies and practices in employment and incarceration as they reflect and reproduce gender inequalities. Analyses will be framed within a restorative justice model, that is, a critique of the current criminal justice system of retributive justice and a paradigm of what an alternative system could be.

SOC 465 Deviant Behavior/Soc Disorganz

3.000 Credits

Must be enrolled in one of the following Levels:

Undergraduate

Prerequisites: SOC 200 or 201

A general analysis of the concept of social deviance and social disorganization: factors producing each condition, the effects of social control measures on the course of deviance and disorganization consequences for the social system, and the relationship between the two. Students cannot receive credit for both SOC 465 and SOC 565. (YR)

SOC 466 Drugs, Alcohol, and Society

3.000 Credits

Must be enrolled in one of the following classes:

Senior Junior

Prerequisites: SOC 200 or 201

Analyses of the sociology of substance use and abuse. Provides a sociological framework for understanding issues and evaluating our nation's responses to the phenomenon of drug use. Drawing on sociocultural and social psychological perspectives, this course systematically examines the social structure, social problems, and social policy aspects of drugs in American society. Prerequisite or permission of instructor. (YR).

SOC 467 Drugs, Crime, and Justice

3.000 Credits

Must be enrolled in one of the following classes:

Senior Junior

Prerequisites: SOC 200 or 201

Provides a comprehensive analysis of the current state of research on interactions between crime and drug use. Examines drug distribution, organization of drug systems, and mechanisms of social control of drug systems. Analyzes the social problems associated with drugs and crime. The course also focuses on drug-law enforcement and public policy strategies for dealing with drugs and crime. Prerequisite or permission of instructor. (YR).

SOC 469 Juvenile Delinquency

3.000 Credits

Prerequisites: SOC 200 or 201

The analysis of juvenile delinquent behavior in relationship to the institutional framework of society. Emphasis on the extent, causes, and methods of treatment of juvenile delinquency in the United States. (YR).

SOC 473 Race, Crime and Justice

3.000 Credits

May not be enrolled in one of the following Classes:

Freshman

Prerequisites: SOC 200 or 201

This course is an analysis of race and its relation to crime in the criminal justice system. Students will analyze and interpret the perceived connection between race and crime, while exploring the dynamics of race, crime, and justice in the United States. This course is designed to familiarize students with current research and theories of racial discrimination within America's criminal justice system.

SOC 475 Diversity ISS in Mental Health

3.000 Credits

May not be enrolled in one of the following Classes:

Sophomore

Freshman

Prerequisites: WGST 303 or ANTH 303 or HUM 303 or SOC 303 or PSYC 303 or WGST 336 or HPS 336

Diversity Issues in Mental Health explores varied cultural descriptions and models of mental illness. By focusing on the ways that culture shapes how people experience, and respond to, mental illness this class explores cultural representations of

mental illness, ranging from discrete illness resulting from a chemical imbalance to a profound threat to order. We seek to understand the cultural, personal, and political underpinnings of mental illness and medical practices in societies throughout the world. The course utilizes an interdisciplinary perspective, drawing from multiple sources of information regarding mental health issues, including feminism, psychiatry, history, sociology, and literature. Issues raised throughout the course include the ways gender, race, culture, religion, and stigma influence the diagnosis of mental illness, patterns of help-seeking behavior, formation of comprehensive mental health policy, and treatment options.

SOC 476 Inside Out Prison Exchange

4.000 Credits

Must be enrolled in one of the following classes:

Senior

Junior

This community-based course, taught in a local correctional facility, brings university students and incarcerated students together to study as peers. Together students explore issues of crime and justice, drawing on one another to create a deeper understanding of how these issues affect our lives as individuals and as a society. The course creates a dynamic partnership between UMD and a correctional facility to allow students to question approaches to issues of crime and justice in order to build a safer and more just society for all. The course encourages outside (UMD) students to contextualize and to think deeply about what they have learned about crime and criminals and to help them pursue the work of creating a restorative criminal justice system; it challenges inside students to place their life experiences into larger social contexts and to rekindle their intellectual self-confidence and interest in further education.

SOC 477 Social Welfare

3.000 Credits

Prerequisites: SOC 200 or 201

The practice of social work is examined within the context of the development of the social service professions and welfare institutions in American society. Social welfare is a concept that encompasses the provision of material resources, as well as regulation and protection of clients. Changes in welfare policy are analyzed in relationship to other institutional changes in American society. (YR).

SOC 478 Social Work Internship

3.000 TO 6.000 Credits

Prerequisites: SOC 200 or 201

Provides field experience in social welfare or criminal justice agencies, e.g., for children/adolescents, in residential programs, in abuse remediation, in probation, for chemical dependencies, in victim advocacy, for elderly, in prisons, for special needs populations, in court services, and for families and communities. Supervision by approved field instructors. An internship of 80 hours is required for three (3) credits. Instructor and student will work together to determine appropriate intern placement. Approval of instructor is required. (OC).

SOC 479 Comparative Hlth Systems: Trip

3.000 Credits

Must be enrolled in one of the following classes:

Senior Junior

Prerequisites: SOC 200 or SOC 201

A unique combination of lectures, field trips, visits with general practitioners, specialists, hospital observations, talks with health policy planners, researchers, and many others. Personal experience in two health care systems. Permission of instructor. Junior/Senior standing required. Students cannot receive credit for both SOC 479 and SOC 579. (AY).

SOC 481 Gender and Globalization

3 000 Credits

Must be enrolled in one of the following Levels:

Undergraduate

Must be enrolled in one of the following Colleges:

Coll of Arts, Sciences & Letters

May not be enrolled in one of the following Classes:

Sophomore

Freshman

Prerequisites: ANTH 303 or HUM 303 or SOC 303 or PSYC 303 or WGST 303

Mass media, politics, and academia are full of references to globalization, and a future "world without borders." This interdisciplinary course considers the implication of globalization for women's lives, gender relations, and feminism. Topics covered include the global factory, cross-cultural consumption, human rights, global communications, economic restructuring, nationalism, and environmental challenges. Rather than survey international women's movements, this course explores how globalization reformulates identities and locations and the political possibilities they create. (AY).

SOC 482 Methods of Social Work Pract

3.000 Credits

Prerequisites: SOC 200 or 201

Examination of social work practice methods and approaches to social problems, contexts of practice and targets of change. Focus is on knowledge and skills each practice method requires to effect personal and social change. (YR).

SOC 483 Images of Organizations

3.000 Credits

Must be enrolled in one of the following Levels:

Undergraduate

Prerequisites: SOC 200 or SOC 201

Formal bureaucratic organizations such as government agencies, hospitals, and colleges are a distinctive feature of modern industrialized societies. Analysis of types of formal organizations, their goals, structure, and consequences for intra- and inter-organizational behavior helps to understand how to deal with a complex world. Students cannot receive credit for both SOC 483 and SOC 583. (YR).

SOC 484 Violence Against Women

3.000 Credits

Must be enrolled in one of the following Levels:

Undergraduate

May not be enrolled in one of the following Classes:

Freshman

Prerequisites: SOC 200 or SOC 201 or WGST 303 or HUM 303 or PSYC 303 or ANTH 303 or SOC 303 or WGST 375 or HUM 275 or PSYC 275 or SOC 275 or ANTH 275 or WST 275

Course examines local and global social violence against women outside family and other intimate relationships. Students consider violations against women's human rights through the life cycle, which are often sanctioned under the guise of cultural practices and misinterpretations of religious tenets. Topics include sex-selective abortion and female infanticide (the "missing millions"); female genital mutilation and cosmetic surgeries; prostitution and pornography; trafficking in women; sexual harassment; and women's experiences of war as soldiers, non-combatants and refugees. Topics are "paired", that is, students compare understandings of Western and non-Western social practices related to gender. Students examine both institutionalized sexism and racism, as part of political, economic, and social systems, and sexism and racism as realities affecting individual women's lives.

SOC 490 Advanced Topics in Sociology

3.000 Credits

Examination of problems and issues in selected areas of sociology. Title as listed in the Schedule of Classes will change according to content. Course may be repeated for credit when specific topic differs.

SOC 497 Senior Research Seminar

3.000 Credits

Prerequisites: SOC 410

This course is intended as the culmination of a student's prior work in sociology. Each student will conduct an applied research project that draws upon sociological concepts and issues. The product of this research will be an essential component of the student's concentration portfolio.

SOC 498 Independent Study

1.000 TO 3.000 Credits

Must be enrolled in one of the following Levels:

Undergraduate

Must be enrolled in one of the following classes:

Senior Junior

Prerequisites: SOC 200 or 201

Analytical assignments in sociology. No more than a total of six credit hours of SOC 398 and SOC 498 may be applied toward concentration. Permission of instructor required. (F,W,S).

Spanish

(see Hispanic Studies)

Speech (SPEE)

(not a field of concentration; see Communications)
COURSE OFFERINGS

SPEE 101 Principles of Speech Comm

3.000 Credits

Consideration of the basic elements of effective interpersonal, small group, and public communication. Designed to give the student increased self-confidence through practical experience in presenting speeches, with emphasis on delivery skills and training in the skills of analysis, organization, development, and adaptation of ideas. (F,W).

SPEE 310 Interpersonal Communication

3.000 Credits

Prerequisites: SPEE 101

Course adopts a discussion and activities-centered approach to understanding and applying principles and methods associated with successful interpersonal communication. Students will study and refine the communication of relationship in dyadic settings as it is influenced by cultural and gender differences. Non-verbal variables, listening, and assertive communication are just a few of the areas of discourse that will be studied in relationship to expanding cultural and gender awareness.

SPEE 320 Public Argument and Advocacy

3.000 Credits

Prerequisites: SPEE 101

Students gain perspectives and experience as both critical consumers and informed producers of public discourse. Students will become familiar with basic theories of rhetorical action, engage in critical analysis of varied public arguments and rhetorical events, and prepare speeches of advocacy intended for both real and imagined audiences. (YR).

SPEE 330 Argumentation and Debate

3.000 Credits

Prerequisites: SPEE 101

This course covers the logical and legal foundations of the argumentation process. Offers practical and theoretical experience in analysis, reasoning, case-building, evaluation of evidence, refutation, and cross-examination. (AY).

SPEE 340 Theories of Persuasion

3.000 Credits

Prerequisites: SPEE 101

A study of the theories of persuasion. Consideration will be given to the psychological appeals and logical reasoning skills that secure the acceptance of ideas, attitudes, values, and beliefs. This course provides practical experience in persuasive speaking as well as theoretical analysis of representative persuasive speaking. (AY).

SPEE 399 Independent Studies in Speech

1.000 TO 3.000 Credits

Readings or analytical assignments in speech in accordance with the needs and interests of those enrolled and agreed upon by the student and advising instructor. (F,W).

SPEE 400 Speech Skills for Professional

3.000 Credits

May not be enrolled in one of the following Classes:

Graduate

Prerequisites: SPEE 101

Course concentrates on aspects of organizational communication theory and specific speech skills useful for professionals in education, government, business and industry. Representative topics include formal and informal presentations, interviewing, dealing with media and public, audience analysis, use of graphics, negotiation and conflict resolution, non-verbal skills, listening, instructional techniques. Students cannot receive credit for both SPEE 400 and SPEE 500. (OC).

SPEE 430 Small Group Communication

3.000 Credits

May not be enrolled in one of the following Classes:

Graduate

Prerequisites: SPEE 101

A survey of small group behavior from the perspectives of theory, research, and practice. Activities and discussion will emphasize skills in leadership, problem solving, policy making, and the development of consensus. Students cannot receive credit for both SPEE 430 and SPEE 530. (AY).

SPEE 442 20th Century Public Argument

3.000 Credits

Prerequisites: SPEE 101

This class is a survey of American public address in the 20th century. Students will examine and critically analyze several of the most significant speeches and rhetorical movements of the last one hundred years. Through lectures, discussions, and analysis of speeches and other artifacts, we will focus on the relationship between rhetoric and history, and how theories of rhetorical action help us appreciate the role of discourse in the effective functioning of a democratic system. Students will learn to utilize several critical perspectives as a means of understanding both historical and contemporary political discourse. (W).

Statistics (STAT)

(minor only, see Applied Statistics)

Swedish

(not a field of concentration, see Modern and Classical Languages)

Urban and Regional Studies

Urban and Regional Studies (URST) encompasses the environmental, aesthetic, social, economic, geographic, historical, political, and cultural aspects of cities, suburbs and regions. It advances in-depth study of some of the major challenges facing individuals and groups living and working in major metropolitan regions, such as the Detroit area. These challenges include:

- Economic development
- Urban poverty and income inequality
- Preservation and promotion of culture, architecture and art
- Land use conflicts
- Provision of adequate and sustainable transportation and housing services.

Career Opportunities

Urban and Regional Studies provides students with the knowledge, techniques and critical analytical skills that will enable them to effectively participate in changing cities and regions.

Pursuing a degree in Urban and Regional Studies at UM-Dearborn offers you the opportunity to combine real-world practice and theory. Students can specialize in areas such as urban and regional policy, community development, urban design and the environment.

Graduates of this program may consider careers in urban/regional planning, community organizing, non-profit management, public policy/administration, social services, and arts and culture management. They may also consider pursuing graduation education and research in areas such as geography, urban planning, sociology, anthropology, environmental studies, public policy and public administration.

The Major

The program is interdisciplinary by design, meaning that courses draw upon a variety of traditional academic disciplines – e.g. history, English, geography, economics, sociology and anthropology. Students are encouraged to rigorously and creatively integrate the theory and methods learned in these courses. In addition, a unique feature of the program is that students gain handson experience by working in the community through an internship, academic service learning and/or community-based research.

Requirements

- URS 300 Urban and Regional Studies: Theory and Practice (3 credit hours)
- 12 credit hours in one of the three tracks
- 12 credit hours from the other two tracks
- 6 credit hours of academic-based community research satisfied through any combination of the following:
 - Internship (students may elect to participate in any CASL Internship program with approval from their faculty advisor and the Internship Program Director)
 - Independent Study (3 credits of which can also be used to satisfy the credit requirements in a single track, with the approval of the program faculty director)
 - •
 - Designated approved 300/400, 3000/4000 level academic service learning (ASL) courses – see Civic Engagement website www.umd.umich.edu/678201/ and www.umd.umich.edu/694936.
- URS 450 Senior Capstone in Community Research (3 credit hours)

THREE SPECIALIZATION TRACKS

TRACK I: URBAN PROBLEMS AND POLICY

ECC	ON 305	Economic Statistics
ECC	ON 325	Economics of Poverty and Discrimination
ECC	ON 482	Regional Economics
ECC	ON 483	Urban Economics
POI	L 313	American State Government
POI	322	Government of Michigan
POI	323	Urban Politics
POI	334	Community Organizing and Leadership
POI	L 360	American Policy Process
POI	4605	Science, Tech & Pub Policy
POI	L 466	Politics & Policies Soc Welfare
POI	L 489	Seminar in Urban Politics
SOC	C 350	Poverty and Inequality
SOC	C 403	Minority Groups
SOC	C 435	Urban Sociology
SOC	C 441	Sociology of the Auto Industry
SOC	C 473	Race, Crime and Justice
STA	AT 363	Introduction to Statistics

TRACK II: COMMUNITY DEVELOPMENT, CULTURE, HISTORY

AAAS 368	Black Exp in U.S1865-Present
AAAS 389	Odyssey of Black Men in America
AMST 300	Comparative American Identities
ANTH 340	Race and Evolution
ANTH 376	Power & Privilege in Southeast Michigan
ANTH 455	Immigrant Cultures and Gender
ARTH 426	City of Ancient Rome
COML 355	Urban Voices: France and Italy
ENGL 356	Reading Urban Monstrosity
ECON 361	U S Economic History
HIST 3601	Michigan History
HIST3665	Automobile in American Life
HIST 3695	American City
HIST383	Labor in America
SOC 304	Studies in Detroit Culture
SOC 4045	Dissed: Difference, Power, Discrimination
SOC 423	American Social Classes
SOC 449	Black Family in Contemporary America
SOC 458	Sociology of Education

TRACK III: ENVIRONMENT, DESIGN AND SPACE

Cultural Ecology and Evolution
Modern Architecture
Urban Design Perspectives
Intro to GIS and Cartography
Concepts of Environmentalism
Environmental Politics
Land Use Planning and Mgmt
Remote Sensing
Ecological Economics
Urban Geography
Economic Geography
History of Industrial Technology

COGNATES

Six credit hours of upper-level (300/400; 3000/4000 level, excluding MATH 385, 386, 387) coursework in a <u>single discipline</u>, in addition to any courses already elected in that discipline used to satisfy urban and regional studies requirements. Cognate courses will provide supporting skills or contexts for the study of urban issues. Internships in these disciplines will not be used to satisfy the cognate requirement.

NOTES

- 1. At least 18 of the 36 upper level hours required in the major must be elected at UM-Dearborn.
- 2. In satisfying the academic based community research requirement, students must obtain approval of the URST faculty program advisor for internships, independent study, and "other" approved forms of academic service learning, prior to enrolling in the courses. Courses already designated as academic service learning (ASL, 300/400; 3000/4000 level only) do not require approval. ASL courses vary by semester.

MINOR OR BGS/LIBS AREA OF FOCUS

URST is also available as a minor, or as an area of focus in General Studies or Liberal Studies. The minor/area of focus requires 15 credit hours of upper level coursework including URS 300 and at least one course from each of the three tracks.

Urban and Regional Studies (URS)

COURSE OFFERINGS

URS 300 Urban and Regional Studies 3.000 Credits

In this course we will explore the field of urban and regional studies. The scope of readings is inter-disciplinary, spanning the environmental, aesthetic, social, economic, geographic, historical, political and cultural aspects of cities, suburbs and regions. The interrelationship between the spatial organization of a city, patterns of social and economic inequality, delivery of services, the relationship between culture and public space, as well as the processes of urban and regional change will all be considered. Problems such as race and class inequality will also be examined. Special attention will be given to issues of relevance in the Detroit metropolitan region (e.g. spatial, economic, cultural, political and social impacts of the loss of manufacturing jobs). Students will be introduced to methods of social scientific analysis and will begin to apply those methods to researching urban and regional community groups, enterprises and social movements.

URS 390 Topics Urban&Regional Studies 3.000 Credits

Problems and issues in selected areas of urban and regional studies. Title as listed in Schedule of Classes changes according to content. Course may be repeated for credit when specific topic differs.

URS 450 Sr Capstone in Community Rsrch 3.000 Credits

The capstone course is designed to assist students in integrating the concepts, theories, and methods of inquiry or urban studies into research for or in the surrounding metropolitan area. Open to students in urban and regional studies who have completed their community-based learning requirement for the concentration.

URS 499 Independent Study

3.000 Credits

Readings, community-based research and analytical assignments in accordance with the needs and interests of the student and approval of the instructor. Students must submit a written proposal of study for approval. In addition, students electing to take this course in partial fulfillment of their community-based research must get approval from the Director of the Urban and Regional Studies program. (F,W,S)

Women's and Gender Studies

Global women's poverty, gender-based violence and other forms of discrimination have made gender equity one of the central moral challenges of our century. Women's and Gender Studies offers an interdisciplinary major and minor designed to provide students with an understanding of gender as a category of analysis that intersects with race, class, sexual identity, religion and (dis)ability, and the tools to lead for gender equity and social justice. Faculty who teach in the program are committed to critical thinking, student mentoring, active learning, and the application of theory to practice through social change opportunities on campus, in metropolitan Detroit, and beyond.

Women's and Gender Studies prepares students for a variety of careers. Our graduates have gone on to work in fields of health, social work, law, politics and government, education, business, science, and the arts. Working closely with an advisor from the program, students devise a course of study tailored to meet their specific needs and interests. Many of our students graduate with a double major with fields such as Psychology, Behavioral Sciences, Health Policy Studies, Economics, History and Anthropology. For more information see our website at http://www.casl.umd.umich.edu/wgst/

REQUIREMENTS

A major requires 30 credit hours in Women's and Gender Studies:

- WGST 303 Introduction to Women's and Gender Studies (3 credit hours)
- Either WGST 384 Feminist Philosophies or WGST 409 Feminist Theories
- 6 credit hours in Gender, Culture and Representation courses
- 6 credit hours in Gender and Social Institutions courses
- 9 credit hours of coursework in 300/ 3000; 400/4000 level WGST courses

- 3 credit hours of a capstone experience satisfied through any combination of the following:
 - Internship (students may elect to participate in any CASL Internship program with approval from the director of WGST and the Internship Program Director)
 - WGST 498 Women's and Gender Studies thesis
 - Or other approved form of capstone learning experience by petition.

Gender, C	ulture, an	d Represen	tation (Courses:
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WGST 315	Body Image and Culture
WGST 335	Women in Medieval Art
WGST 337	Women as Musicians in Western Music
	History
WGST 385	Gender Differences in Language
WGST 386	Gender Issues in Literature
WGST 387	Film and Feminisms
WGST 401	Images of Women in Germany
WGST 406	Culture and Sexuality
WGST 407	Sexual Praxis and Theory
WGST425	Women in Classical Antiquity
WGST 433	Writing Women in Renaissance
WGST 445	20c/21c Women Authors
WGST 455	Gender and Media Studies
WGST 470	Voices of Black Women in Film, Music,
	Literature
WGST 471	Sexual Subcultures in Literature
WGST 473	Arab American Women Writers
WGST 486	Queer Theory and Literature
WGST 487	Monsters, Women and Gothic
WGST 4555	Immigrant Cultures and Gender

Gender and Social Institutions Courses:

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WGST 325	Gender and Science
WGST 326	Economics of Poverty and Discrimination
WGST 336	Perspective's in Women's Health
WGST 338	Women and Islam in Middle East History
WGST 362	Women, Politics, and the Law
WGST 370	Women in America: Historical Perspective
WGST 404	Dissed: Difference, Power and
	Discrimination
WGST 405	Gender Roles
WGST 408	Gender, Power and International
	Development
WGST 412	Men and Masculinities
WGST 420	Kinship and Marriage
WGST 446	Marriage and Family Problems
WGST 447	Family Violence
WGST 461	Cops and Cons: Women in Prison
WGST 475	Diversity Issues in Mental Health
WGST 476	Inside/Out Prison Exchange
WGST 481	Gender and Globalization
WGST 484	Violence Against Women
WGST 3651	Women, Leadership and Social Change
WGST 3955	Diversity in the Workplace
WGST 4505	Feminism and the Modern Middle East

COGNATES

Six credit hours of upper-level (300/400; 3000/4000 level) coursework in a single CASL discipline. Excluding courses in Women's and Gender Studies or cross-listed courses with Women's and Gender Studies, and MATH 385, 386, 387. Cognate courses will provide supporting skills for the study of women and gender. Internships will not be used to satisfy the cognate requirement.

NOTES:

- A maximum of 44 hrs. in WGST may count in the 120 hours required to graduate.
- At least 15 of the 30 upper level hours required in WGST must be elected at UM-Dearborn.

MINOR OR BGS/LIBS AREA OF FOCUS/CERTIFICATE IN WOMEN'S AND GENDER STUDIES

WGST is also available as a minor or as an area of focus in General Studies or Liberal Studies. The minor/area of focus requires 15 credit hours of upper level coursework including WGST 303, Introduction to Women's and Gender Studies.

Students who have completed this requirement, along with post-baccalaureate students who complete the 15 credits for the minor, will obtain a certificate in WGST. The certificate provides students with a credential that is widely recognized in the field. For more information about the post-baccalaureate certificate, contact the Director, Office of Women's and Gender Studies, 2040 CB. (313) 593- 4591 or on the web at http://www.casl.umd.umich.edu/wgst/

Women's and Gender Studies (WGST) COURSE OFFERINGS

WGST 303 Intro to Women's & Gender Stud

3.000 Credits

May not be enrolled in one of the following Classes: Freshman

This course provides an interdisciplinary overview of the key theories and topics in Women's and Gender Studies. Special attention is given to how gender intersects with class, race, nationality, religion and sexuality to structure women's and men's lives. Students are also introduced to methods of gender analysis and will begin to apply these methods to topics such as women and health, gender roles in the family, violence against women, and gendered images in the mass media.

WGST 315 Body Image and Culture

3.000 Credits

Prerequisites: ANTH 101 or WST 275 or WGST 275 or WGST 303 or PSYC 275 or ANTH 275 or HUM 275 or PSYC 303 or ANTH 303 or SOC 303 or HUM 303 or SOC 275

This course examines the biological and sociocultural construction of body image in both men and women. We explore such cultural and social practices as nudity, tattooing, piercing, scarification, dietary habits, physical activity and sports performance and their associated myths and realities. We explore how the human body is a terrain of contested meaning within society. The course provides an examination of the causes and consequences of women's poor body image, contemporary and historically. Course materials include case studies from North America, Europe, Africa, Asia and the Pacific.

WGST 325 Gender, Science, & Engineering 3.000 Credits

Explores some of thehistory of women in science and engineering, the current status of women in science and engineering, and feminist theory in research. Topics include cultural influences on women in science and engineering, careers and life balance, and a feminist approach to scientific and engineering teaching and research. Discussion, lecture OR hybrid OR online.

WGST 326 Poverty and Discrimination

3.000 Credits

Prerequisites: ECON 201 and ECON 202

An analysis of the economic aspects of poverty and discrimination. Emphasis on the theoretical economic causes of poverty and the economic bases for discriminatory behavior, the impact of poverty and discrimination on individuals and society and the effect of reform policies on the two problems.

WGST 335 Women in Medieval Art

3.000 Credits

Prerequisites: ARTH 101 or ARTH 102 or ARTH 103 or ARTH 104 or ARTH 106 or WGST 275 or WGST 303 or HUM 275 or HUM 303 or ANTH 275 or ANTH 303 or PSYC 275 or PSYC 303 or SOC 275 or SOC 303 or WST 275

Women have often been regarded as the second sex of the middle ages due to the misogynistic attitudes of that era. Recent scholarship, however, has unearthed a significantly more complex picture. Through a study of visual representations of women in medieval art, this course will examine women's roles in the creation and patronage of art and literature, economic and family issues, and women's participation in new and innovative forms of religious piety.

WGST 336 Perspectives in Women's Health

3.000 Credits

May not be enrolled in one of the following Classes: Freshman

Topic: Perspectives in Women's Health. This course examines women's health issues across the human lifespan, using feminist and sociocultural perspectives. Topics to be explored include the social construction of women's sexuality, reproductive options, health care alternatives and risk for physical and mental illness. Attention to the historical, economic, and cultural factors that influence the physical and psychological well-being of women is an underlying theme. (F,W,Y)

WGST 337 Women Musicians/West Mus Hist

3.000 Credits

May not be enrolled in one of the following Classes:

Prerequisites: MHIS 100 or MHIS 120 or MHIS 130 or MTHY 100 or WGST 275 or PSYC 275 or HUM 275 or SOC 275 or ANTH 275 or WGST 303 or ANTH 303 or SOC 303 or PSYC 303 or HUM 303 or WST 275

Through a historical survey of female musicians from the Middle Ages to the present day, this course takes a critical look at theories of creativity and professionalism as they relate to female musical production. The course deals with women in European "art music" traditions and also in jazz and poplar music. Social and cultural norms dictating appropriate female involvement with music are examined. The historical approach will serve to reveal ways in which terms such as professionalism and virtuosity have continually shifted and changed in reference to female musical performance. The course challenges students to re-think many of the commonly accepted gender-based descriptions of particular genres and elements of music through listening and musical analysis.

WGST 338 Women&Islam Mid East to 1900

3.000 Credits

This course covers the historical development of Islam's normative stance towards women and gender roles in the Middle East from the rise of Islam to the earliest stirrings of feminist activism.

WGST 362 Women, Politics, and the Law

3.000 Credits

Must be enrolled in one of the following Levels:

Undergraduate

Must be enrolled in one of the following Colleges:

Coll of Arts, Sciences&Letters

An examination of the political behavior of women in American politics. Included is an analysis of the legal and legislative demands of American women.

WGST 3651 Women/Leadership/Social Change

3.000 Credits

Must be enrolled in one of the following Levels:

Undergraduate

May not be enrolled in one of the following Classes:

Freshman

Prerequisites: ANTH 303 or SOC 303 or HUM 303 or ANTH 275 or PSYC 275 or SOC 275 or HUM 275 or HIST 112 or WGST 275 or WST 275 or PSYC 303

The purpose of this seminar is to examine women's leadership in movements for social change. We will approach this topic through the study of historical examples, drawn primarily from the twentieth-century United States, and including movements for economic justice, race relations, sexual identity, peace, gender equality, public health and social welfare.

WGST 370 Women in America-Hist Perspect

3.000 Credits

A survey of American women's history from the colonial period to the present. Among the topics included are family roles, women's economic status, women's education and women in American political life.

WGST 384 Feminist Philosophy

3.000 Credits

Prerequisites: PHIL 100 or WGST 275 or WGST 303 or HUM 275 or ANTH 275 or PSYC 275 or SOC 275 or WST 275 or HUM 303 or ANTH 303 or PSYC 303 or SOC 303

Feminists working in philosophy, most notably in the 19th and 20th centuries, have altered the traditional philosophical canon by first, recovering women philosophers who were essentially erased from the history and secondly, by extending and contributing to the standard questions of philosophy. For example, one central question of philosophy; "What can we know with certainty?" has been transformed through a feminist lens and reinterpreted as "What does one's gender, social location and cultural framework contribute to what one knows?" In this course we will look at the variety of feminist philosophical theories with a focus on epistemology, metaphysics and ethics.

WGST 385 Gender Differences in Language

Prerequisites: LING 280 or LING 281

Examines theories of differences between male and female speakers of English, focusing on phonological, syntactic, semantic, stylistic and conversational features, with analyses of differences in speaking strategies and agendas of male and female speakers, as well as split-language situations in the workplace, home and social settings.

WGST 386 Gender Issues in Literature

3.000 Credits

Prerequisites: ENGL 230 or ENGL 231 or ENGL 232 or ENGL 233 or ENGL 235 or ENGL 236 or ENGL 237 or ENGL 239 or ENGL 200

A study of gender issues in English and American Literature. The exact topic will vary from semester to semester, but the course may feature such topics as gay and lesbian literature, feminist criticism, images of masculinity, the representation of sexual ideologies, etc. Course may be repeated for credit when specific topics differs.

WGST 387 Film and Feminisms

3.000 Credits

Prerequisites: JASS 248 or WGST 275 or ANTH 275 or PSYC 275 or SOC 275 or WGST 303 or ANTH 303 or PSYC 303 or SOC 303 or WST 275 or HUM 240 or ENGL 240 or FILM 240 or ENGL 248 or HUM 248 or FILM 248 or JASS 240 or HUM 275 or HUM 303

This course will establish the role of mainstream cinema in the construction of female gender roles in contemporary Western society. The course will engage with debates in feminist film theory and the role of avant-garde and non-Western cinema in challenging the gender ideology of mainstream cinema.

WGST 390 Topics in Women's Studies

3.000 Credits

Prerequisites: WST 275 or WGST 275 or WGST 303 or WGST 303

Examination of problems and issues in selected areas in Women's and Gender Studies. Title in Schedule of Classes will change according to content. Course may be repeated for credit when specific topic differs. (YR)

WGST 3955 Diversity and the Workplace

3.000 Credits

Prerequisites: PSYC 4305 or PSYC 431 or WST 275 or WGST 275 or OB 354 or HRM 405 or WGST 303 or PSYC 275 or SOC 275 or ANTH 275 or HUM 275 or PSYC 303 or SOC 303 or ANTH 303 or HUM 303

This course will: 1) discuss gender, race, ethnicity, disability, age, sexual orientation, and appearance as aspects of diversity; 2) examine social values and practices, and organizational policies and procedures that affect or have affected the employment opportunities of underrepresented groups; 3) examine individual (e.g., prejudice, stereotypes), group (e.g., ingroups and out-groups), and organizational (e.g., climate and culture) processes that affect work place diversity and; 4) discuss "best practices" for promoting an organizational culture that values diversity, along with a diverse work force.

WGST 401 Images of Women in Germany

3.000 Credits

Must be enrolled in one of the following classes:

Sophomore Senior

Junior

This course will focus on the position of women in Germany after WWII and up to and after the unification of East and West Germany. Particular attention will be given to the gendered history of working through the National Socialist past, the division and reconstruction of the two nation-states, and the terrorism in West Germany in the 1970's. Students will examine images of women in films and tie them to the ideologies of gender and status of women in these larger issues of German history. Course readings will be in English. Students wishing to receive German credit for the course must enroll concurrently in GER 380: Praktikum. Students cannot receive credit for both WGST 401 and WGST 501.

WGST 404 Dissed: Differ, Power, Discrim

3.000 Credits

Must be enrolled in one of the following Levels: Undergraduate

Have you ever been dissed? Why are some people targets of disrespect? This class examines the unequal distribution of power - social, economic and political in the United States and other countries that results in favor for privileged groups. We will examine a variety of institutional practices and individual beliefs that contribute to disrespect. We'll look at ways that beliefs and practices, like viewing inequality as consequence of a "natural order," obscure the processes that create and sustain social discrimination. We will engage in the intellectual examination of systems, behaviors and ideologies that maintain discrimination and the unequal distribution of power and resources. Student will not receive credit for both WGST 404 and WGST 504.

WGST 405 Gender Roles

3.000 Credits

Prerequisites: PSYC 171 or SOC 200 or SOC 201 or PSYC 170

This course will investigate the development of sex roles in childhood and adolescence due to either innate physiological differences or sociological patterning, the effect of sex roles upon male-female relationships within our society and the possibility of transcending sociological sex roles in alternate modes of living. Students cannot receive credit for both WGST 405 and WGST 505.

WGST 406 Culture and Sexuality

3.000 Credits

Prerequisites: ANTH 101 or WGST 275 or WST 275 or WGST 303 or PSYC 275 or SOC 275 or ANTH 275 or HUM 275 or PSYC 303 or SOC 303 or ANTH 303

The study of women, men, children, socialization practices and the genesis of sex roles cross-culturally. Students cannot receive credit for both WGST 406 and WGST 406.

WGST 407 Sexual Praxis and Theory

3.000 Credits

Prerequisites: WST 275 or WGST 275 or HUM 275 or PSYC 275 or ANTH 275 or SOC 443 or PSYC 405 or ANTH 406 or ANTH 101 or WGST 303 or ANTH 303 or PSYC 303 or SOC 303 or HUM 303

This course will offer an overview of sexual differences including: the socio-cultural construction of gender, sexual behavior and orientation; sex and sexualities in language and literature; and diversity by race, class and cultural heritage. These topics will enable students to understand human sexuality within and across a continuum removing notions of duality or polarity, in sexual behaviors and orientations. Examples both from within Western society and from non-Western societies may be used to further this position. Theoretical perspectives may encompass sociological and anthropological work, literary theory and criticism, queer theory, and multi-disciplinary discussions/discourse. Texts may include: Sex and the Machine; Readings in Culture; Gender and Technology; The Anatomy of Love; The Lesbian and Gay Studies Reader, Second Skins: The Body Narratives of Transexuality, and Lesbian and Gay Marriage.

WGST 408 Gender, Pwr & Intl Development

3.000 Credits

Must be enrolled in one of the following classes:

Senior

Junior

Prerequisites: or WGST 303 or ANTH 303 or HUM 303 or PSYC 303 or SOC 303

This course provides an overview of gender issues in development in the global South, including the differential effects of development policies on women and men, and the role of social movements in transforming development policy frameworks. Students may not receive credit for both WGST 408 and 508. For graduate credit, students should elect WGST 508

WGST 409 Feminist Theories

3.000 Credits

Prerequisites: WGST 275 or WST 275 or SOC 200 or SOC 201 or PSYC 275 or SOC 275 or ANTH 275 or HUM 275 or WGST 303 or PSYC 303 or SOC 303 or ANTH 303 or HUM 303

This course examines the different perspectives that feminist theorists have offered to analyze the unequal conditions of women's and men's lives. Students taking this course will develop an understanding of how theory functions as a way to know, understand and change the world. They will also be provided with a lens for comparing the assumptions and implications of alternative theoretical perspectives. A particular emphasis of this course is on theorizing the interrelationships among gender, race, class, sexuality and nationality. Course material includes applications of feminist theory to issues such as gender identity formation; sexuality; gender, law and citizenship; women and work; and the history and politics of social movements. Students will not receive credit for both WGST 409 and WGST 509. (AY)

WGST 412 Men and Masculinity

3.000 Credits

Must be enrolled in one of the following Levels:

Undergraduate

May not be enrolled in one of the following Classes:

Sophomore

Freshman

Prerequisites: SOC 200 or SOC 201 or ANTH 101 or WST 275 or WGST 275 or PSYC 275 or SOC 275 or ANTH 275 or HUM 275 or WGST 303 or PSYC 303 or SOC 303 or ANTH 303 or HUM 303

This course addresses the question, "What is a man?" in various historical, cross-cultural and contemporary contexts. A major focus is on the social and cultural factors that underlie and shape conceptions of manhood and masculinity in America as well as in a variety of societies around the globe.

WGST 416 Earl Mod Jpn Paint&Wood Prnts

3.000 Credits

Must be enrolled in one of the following Levels: Undergraduate

Prerequisites: ARTH 101 or ARTH 102 or ARTH 103

Painting and woodblock prints of the Edo/Tokugawa (1600-1868) and Mei II (1868-1912) periods are considered in light of competing developments that on the one hand looked to Japan's classical tradition and on the other to the influence of art and artists from China and from the West. Special attention is given to female artists and images of women. Students cannot receive credit for both WGST 416 and WGST 516.

WGST 420 Kinship and Marriage

3.000 Credits

Must be enrolled in one of the following Levels:

Undergraduate Prerequisites: ANTH 101

A study of the diversity of kinship and marriage systems, and of the history of kinship theory which has played a seminal role in the development of general anthropological history. Students cannot receive credit for both WGST 420 and WGST 520.

WGST 425 Women in Classical Antiquity

3.000 Credits

Must be enrolled in one of the following Levels:

Undergraduate Prerequisites: ARTH 101

This course examines the evidence for the lives of women in Greek, Etruscan and Roman Antiquity, from the Bronze Age through the Imperial Period. Special emphasis will be placed on the archaeological evidence, especially works of art which illustrate women's lives and their relationships with men. Documents such as dedicatory and funerary inscriptions, the poetry of Sappho and Sulpicia, and selections from the writings of Homer, Hesiod, Aristotle, Pliny, Juvenal, and other ancient authors, will also be examined critically, particularly in relationship to the works of art.

WGST 433 Writing Women In Renaissance

3.000 Credits

May not be enrolled in one of the following Classes: Graduate

This course will be taught in English, and will focus on the influence of Italian literary models for the construction of female literary types as well as female voices in France and Italy from 1300 to about 1600. Italian authors studied include three very influential Florentines, Dante, Petrarch and Boccaccio, as well as Castiglione and Asiosto. We will read women poets, patrons, prostitutes and queens from Italy and France such as Veronica Gambara, Isabella di Morra, Vittoria Colonna, Christine de Pizan, Louise Labe and Marguerite de Navarre. At issue will be women's roles and women's images in city and court culture during the early modern period and the interaction of their writings with the literary canons of Italy and France.

WGST 445 20C/21C Women Authors

3.000 Credits

Must be enrolled in one of the following Levels:

Undergraduate

Prerequisites: (COMP 106 or COMP 220 or COMP 270 or COMP 280 or CPAS 40) and (ENGL 230 or ENGL 231 or ENGL 232 or ENGL 233 or ENGL 235 or ENGL 236 or ENGL 237 or ENGL 239 or ENGL 200)

An analysis of images and problems of women as defined by significant British and American women writers of the 20th and 21st centuries. Style and narrative technique will also be closely examined. Students cannot receive credit for both WGST 445 and WGST 545.

WGST 446 Marriage and Family Problems

3.000 Credits

Prerequisites: SOC 200 or SOC 201 or WGST 275 or WST 275 or PSYC 275 or SOC 275 or ANTH 275 or HUM 275 or WGST 303 or PSYC 303 or SOC 303 or ANTH 303 or HUM 303

Sociological analysis of problems encountered within the institution of marriage with particular reference to such issues as

choosing a marriage partner, sexual adjustment, occupational involvement, conflict resolution, child rearing, divorce and readjustment. Students cannot receive credit for both WGST 446 and WGST 546.

WGST 447 Family Violence

3.000 Credits

Must be enrolled in one of the following Levels:

Undergraduate

Prerequisites: SOC 200 or SOC 201 or SOC 301 or SOC 443 or PSYC 405 or WST 405

Sociological analyses of various forms of family violence which occur disproportionately in the lives of girls and women. Topics such as incest, sexual abuse, date rape, wife battering and elder abuse will be situated within the social and cultural context of contemporary gender relationships. Social and political responses to the phenomena will be examined. Students cannot receive credit for both WGST 447 and WGST 547.

WGST 4505 Feminism & Mod. Mid. East

3.000 Credits

May not be enrolled in one of the following Classes:

Sophomore Freshman

Prerequisites: COMP 106 or HIST 101 or HIST 113 or WGST 303

This course provides an analysis of the history, historiography, and sources for the study of feminism in the Middle East since 1800.

WGST 455 Gender and Media Studies

3.000 Credits

Must be enrolled in one of the following Levels:

Undergraduate

Prerequisites: WGST 303 or HUM 303 or ANTH 303 or PSYC 303 or SOC 303 or WGST 275 or HUM 275 or ANTH 275 or PSYC 275 or SOC 275 or WST 275

The course will focus on several feminist approaches used in understanding the media and attempting to create social change through the media. The role of media in the definition and reproduction of gender-based hierarchies and in the renegotiation of gender boundaries will both be explored. To this end, both mainstream and women's media will be examined. The course will take a multicultural and international perspective, incorporating concerns of class, race, ethnicity and nation as these intersect with the study of gender and media. Mainstream and alternative media will be analyzed through readings, films, case studies, in-class collaborative exercises and longer-term projects. News, entertainment and advertising genres will be examined in a variety of media, such as the printed press, television, video, film and the Internet.

WGST 4555 Immigrant Cultures and Gender

3.000 Credits

Prerequisites: ANTH 101 or WGST 275 or WST 275 or PSYC 275 or SOC 275 or ANTH 275 or HUM 275 or WGST 330 or PSYC 303 or SOC 303 or ANTH 303 or HUM 303

The history and culture of immigration since 1850, including: (1) formation and perseverance of immigrant communities and interethnic boundaries; (2) relations between the homeland and the immigrant; and (3) impact of migration on family life and gender roles. Prerequisite and junior or senior standing. Students may not receive credit for both WGST 4555 and WGST 5555. For graduate credit take WGST 5555.

WGST 461 Cops & Cons: Women in Prison

3.000 Credits

Must be enrolled in one of the following classes:

Senior

Junior

Prerequisites: PSYC 275 or SOC 275 or ANTH 275 or HUM 275 or WGST 303 or PSYC 303 or SOC 303 or ANTH 303 or HUM 303 or SOC 200 or SOC 201 or CRJ 240 or CRJ 300

Course uses contemporary theories of gendered organizations to frame analyses of prison policies and practices in employment and incarceration as they reflect and reproduce gender inequalities. Analyses will be framed within a restorative justice model, that is, a critique of the current criminal justice system of retributive justice and a paradigm of what an alternative system could be.

WGST 4650 Sem in US Women's History

3.000 Credits

May not be enrolled in one of the following Classes:

Sophomore Freshman

Prerequisites: HIST 300

Seminar on the historiograpy and key primary sources related to U.S. Women's History. The course covers examples of classic texts in the field as well as significant new works of scholarship, with an emphasis on critical reading, analysis, and historiography of the field. Students gain a deeper understanding of the field, its guiding concepts, foundational texts, newest trajectories, and impact on the field of history as a whole. The graduate version of this course includes weightier readings and assignments.

WGST 466 Feminist Rhetorical Theories

3.000 Credits

Must be enrolled in one of the following Levels:

Undergraduate

May not be enrolled in one of the following Classes:

Freshman

Prerequisites: COMP 106 or COMP 220 or COMP 270 or

COMP 280 or CPAS 40

An introduction to the work of major twentieth century feminists working in rhetoric and related fields. Students examine recurring themes of language, meaning, ethics and ideology, and practice writing strategies which address rhetorical and ethical concerns central to feminist/academic writing.

WGST 470 Black Women / Lit, Film, Music

3.000 Credits

Must be enrolled in one of the following Programs:

AB-Women's and Gender Studies

Prerequisites: FILM 240 or FILM 248 or FILM 385 or AAAS 239 or AAAS 275 or WST 275 or WST 370 or ENGL 231 or ENGL 232 or ENGL 233 or ENGL 237 or ENGL 239 or ENGL 248 or HUM 221 or HUM 222 or HUM 223 or WGST 275 or WGST 370 or ENGL 200

This course will examine works produced by Black women authors, activists, filmmakers and musical performers in order to determine the methods they have incorporated in order to challenge and eradicate the prevailing stereotypes about Black women while advancing their own personal and racial agendas. It will also focus on the extent to which race, gender and class have shaped the creative work of Black women. Students will be required to read, analyze and write their own responses to the works of such firebrands as author Zora Neale Hurston, activist Ida B. Wells, filmmaker Julie Dash and singer Billie Holiday.

WGST 471 Sexual Subcultures in Lit

3.000 Credits

Prerequisites: (ENGL 200 or ENGL 230 or ENGL 231 or ENGL 231 or ENGL 233 or ENGL 235 or ENGL 236 or ENGL 237 or ENGL 239) and (COMP 106 or COMP 220 or COMP 270 or COMP 280 or CPAS 40)

This course surveys primarily contemporary literature by writers who identify as gay, lesbian, bi-sexual, transgender, or queer. By studying the self-representation and culturally unique perspective of this emerging canon of writers, students in this course understand the emergence of LGBTQ literary traditions and understand the cultural diversity within these traditions. Students learn to identify the aesthetic qualities (such as camp, performativity, coded subtexts, homoeroticism, and the relationship between creativity and sexuality), and historical, political, and social concerns that characterize LGBTQ literary and cultural production. Topics covered include the struggle for civil rights before and after Stonewall, coming out narratives, the negotiation of homophobic cultures, post-colonial writers, and memoirs of the LGBTQ experience, as well as the historical emergence of sexual categories and the literary critique of heteronormativity. This course counts toward the English discipline diversity requirement. Students cannot receive credit for WGST 471 and WGST/ENGL 571.

WGST 473 Arab American Women Writers

3.000 Credits

May not be enrolled in one of the following Classes: Freshman

This course examines the literary and cultural contributions of Arab and Arab American women novelists, poets, filmmakers and artists to the development and consolidation of cultures of understanding and coexistence; explores the relations between, among others, citizenship and belonging, race and national security, gender and geographical mobility, and ethnic minorities and mainstream consciousness; stresses how literary and artistic productions of Arab and Arab American women writers and artists fosters alternative visions of socio-cultural coexistence, dialogue, and hospitality by means of technical and stylistic experimental and renovation.

WGST 475 Diversity Iss in Mental Health

3.000 Credits

Prerequisites: WGST 303 or ANTH 303 or HUM 303 or SOC 303 or PSYC 303 or WGST 336 or HPS 336

Diversity Issues in Mental Health explores varied cultural descriptions and models of mental illness. By focusing on the ways that culture shapes how people experience, and respond to, mental illness this class explores cultural representations of mental illness, ranging from discrete illness resulting from a chemical imbalance to a profound threat to order. We seek to understand the cultural, personal, and political underpinnings of mental illness and medical practices in societies throughout the world. The course utilizes an interdisciplinary perspective, drawing from multiple sources of information regarding mental health issues, including feminism, psychiatry, history, sociology, and literature. Issues raised throughout the course include the ways gender, race, culture, religion, and stigma influence the diagnosis of mental illness, patterns of help-seeking behavior, formation of comprehensive mental health policy, and treatment options.

WGST 476 Inside Out Prison exchange

4.000 Credits

Must be enrolled in one of the following classes:

Senior

Junior

This community-based course, taught in a local correctional facility, brings university students and incarcerated students

together to study as peers. Together students explore issues of crime and justice, drawing on one another to create a deeper understanding of how these issues affect our lives as individuals and as a society. The course creates a dynamic partnership between UMD and a correctional facility to allow students to question approaches to issues of crime and justice in order to build a safer and more just society for all. The course encourages outside (UMD) students to contextualize and to think deeply about what they have learned about crime and criminals and to help them pursue the work of creating a restorative criminal justice system; it challenges inside students to place their life experiences into larger social contexts and to rekindle their intellectual selfconfidence and interest in further education.

WGST 478 Women and Gend Studies Intern

3.000 Credits

Prerequisites: ANTH 275 or SOC 275 or WST 275 or PSYC 275 or HUM 275 or WGST 275 or WGST 303 or PSYC 303 or SOC 303 or ANTH 303 or HUM 303

Provides field experience in social welfare or criminal justice agencies e.g., for children/adolescents in residential programs, in abuse remediation, in probation, for chemical dependencies, in victim advocacy, for the elderly, in prisons, for special needs populations, in services, in medical/public health, in police services, and for families and communities. Supervision by approved field instructors. An internship of 80 hours is required for three (3) credits. Instructor and student will work together to determine appropriate intern placement. Approval of instructor and the Women's Studies Director in required.

WGST 481 Gender and Globalization

3.000 Credits

Must be enrolled in one of the following Levels: Undergraduate

Prerequisites: or HUM 303 or SOC 303 or PSYC 303 or WGST 303 ANTH 303

Mass media, politics and academia are full of references to globalization, and a future "world without borders." This interdisciplinary course considers the implication of globalization for women's lives, gender relations and feminism. Topics covered include the global factory, cross-cultural consumption, human rights, global communications, economic restructuring, nationalism and environmental challenges. Rather than survey international women's movements, this course explores how globalization reformulates identities and locations and the political possibilities they create.

WGST 484 Violence Against Women

3.000 Credits

Must be enrolled in one of the following Levels: Undergraduate

May not be enrolled in one of the following Classes: Freshman

Prerequisites: SOC 200 or SOC 201 or WGST 303 or HUM 303 or PSYC 303 or ANTH 303 or SOC 303 or WGST 275 or HUM 275 or PSYC 275 or SOC 275 or ANTH 275 or WST 275

Course examines local and global social violence against women outside family and other intimate relationships. Students consider violations against women's human rights through the life cycle, which are often sanctioned under the guise of cultural practices and misinterpretations of religious tenets. Topics include sex-selective abortion and female infanticide ide (the "missing millions"); female genital mutilation and cosmetic surgeries; prostitution and pornography; trafficking in women; sexual harassment; and women's experiences of war as soldiers, non-combatants and refugees. Topics are "paired", that is, students compare understandings of Western and non-Western social practices related to gender. Students examine both institutionalized sexism and racism, as part of political, economic, and social systems, and sexism and racism as realities affecting individual women's lives.

WGST 486 Queer Theory & Literature

3.000 Credits

Prerequisites: (COMP 106 or COMP 220 or COMP 270 or COMP 280 or CPAS 40) and (ENGL 200 or ENGL 230 or ENGL 231 or ENGL 232 or ENGL 233 or ENGL 235 or ENGL 236 or ENGL 237 or ENGL 239 or AAAS 239)

This course reads theories of sexuality to analyze how writers since 1600 have imagined printed text to reflect and shape desire, particularly same-sex desire. The course questions how same-sex desire appears in literature written before the theorization of "the Homosexual" in the late nineteenth century as well as how writers imagine sexuality before a hetero/homosexual binary appears. Writers may include contemporary theorists (Sedgwick, Foucault, Butler) as well as novelists (Gaskell and Stoker), playwrights (Kushner and Wycherley), and poets.

WGST 487 Monsters, Women & the Gothic

3.000 Credits

Prerequisites: (COMP 106 or COMP 220 or COMP 270 or COMP 280 or CPAS 40) and (ENGL 200 or ENGL 230 or ENGL 231 or ENGL 232 or ENGL 233 or ENGL 235 or ENGL 236 or ENGL 237 or ENGL 239)

This course questions our inheritance of the "the gothic" as a distinct literary style that continues to discipline readers' notions of gender and sexual identity. The course argues that by tracing the gothic's literary history, we may simultaneously witness a history of gender formation. Readings may include English novelists who originated a gothic style in English (Walpole, Radcliffe, Lewis) as well as English and American poets and novelists who have debated as well as resisted the effects of the gothic on readers? (particularly women's) psychology (Christina Rossetti, Austen, King, Stoker).

WGST 490 Topics in Women's Studies

3.000 Credits

Must be enrolled in one of the following Levels:

Undergraduate

Prerequisites: WST 275 or WGST 275 or LIBS 580 or **WGST 303**

Examination of problems and issues related to Women's Studies. Title as listed in Schedule of Classes will change according to specific content. Course may be repeated for credit when specific topics differ.

WGST 498 Womens & Gender St Thesis

Must be enrolled in one of the following Levels: Undergraduate

A thesis project that is the culmination of the minor in Women's Studies. Students meet with the instructor to reflect on past studies and plan current projects, to conduct research that addresses a gender issue in the larger community, and to write a thesis under the direction of the faculty member. Research involving participantobserver in social agencies is encouraged where appropriate.

WGST 499 Independent Studies

1.000 TO 6.000 Credits

Must be enrolled in one of the following Levels: Undergraduate

Provides opportunity for qualified Women's Studies students to pursue in dependent research under the direction of a qualified faculty member. Project must be defined in advance, in writing and must be in a subject not currently offered in the regular curriculum.



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College of Business

Administration

Raju Balakrishnan, Dean Claudia Kocher, Associate Dean

Academic Program Directors

Susan Wells, Undergraduate Programs Michael Kamen, Graduate Programs

Internship Program

Michael Callahan, Program Director Fabia Snage, Program Coordinator

Professors Emeriti

Chou, Yu-Min, PhD, Professor Emeritus of Business Economics and Finance

Cowan, D. Ross, MF, Associate Professor Emeritus of Operations Management

Culp, William H., PhD, CPA, Professor Emeritus of Business Administration

Czarnecki, Richard E., PhD, CPA, Professor Emeritus of Business Administration

Foran, Michael, PhD, Professor Emeritus of Accounting

Fricke, Cedric V., PhD, Professor Emeritus of Business Administration

Lev, Benjamin, PhD, Professor Emeritus of Operations Research Lyons, Thomas F., PhD, Professor Emeritus of Business Administration

Martin, William R. D., MBA, Professor Emeritus of Business Administration

Steel, Robert, PhD, Professor Emeritus of Organizational Behavior

Streeter, Victor J., PhD, Associate Professor Emeritus of Management Information Systems

Waissi, Gary, PhD, Professor Emeritus of Operations Research

Faculty

Ahuvia, Aaron, PhD, Northwestern University, Professor Baker, Susan, MBA, University of Michigan, Lecturer Bayou, Mohamed E., PhD, University of Cincinnati, Professor Beatty, Joy, PhD, Boston College, Associate Professor

Blatz Jr., Robert, JD, LLM, New York University School of Law, Associate Professor

Bublitz, Bruce, PhD, CPA, University of Illinois, Professor Cai, Kelly, PhD, University of Houston, Associate Professor Callahan, Thomas J., PhD, Michigan State University, Associate Professor

Chandra, Charu, PhD, Arizona State University, Professor Chen, Yi-Su, PhD, University of Minnesota, Assistant Professor Freeman, Lee A., PhD, Indiana University, Associate Professor Graybeal, Patty, PhD, Virginia Tech University, Assistant Professor

Green, Brian P. PhD, CPA, Kent State University, Professor Guo, Yi, PhD, Texas A & M, Assistant Professor

Harkness, Michael D., PhD, CPA, University of South Florida, Associate Professor

Hartge, Timothy, MA, University of Michigan, Lecturer

He, Jun, PhD, University of Pittsburgh, Assistant Professor Holowicki, Gerald, MS, Eastern Michigan University, Lecturer Izberk-Bilgin, Elif, PhD, University of Illinois at Chicago, Assistant Professor

Kobelsky, Kevin, PhD, University of California, Assistant Professor

Klein, Barbara D., PhD, University of Minnesota, Associate Professor

Kocher, Claudia, PhD, Michigan State University, Associate Professor

Kumar, Kamalesh, PhD, University of North Texas, Professor Lee, Hei Wai, PhD, University of Illinois at Urbana-Champaign, Professor

Lee, Junghyun, PhD, George Washington University, Assistant Professor

Liu, Zhixin, PhD, The Ohio State University, Assistant Professor Malloy, Janice, PhD, The Ohio State University, Assistant Professor

McCracken, Gail K., JD, CPA, Wayne State University,

Miranda, Maria, PhD, University of New Orleans, Lecturer Padmanabhan, K.H., PhD, Michigan State University, Associate Professor

Park, Cheong Kevin, PhD, University of Kentucky, Assistant Professor

Philipich, Kirk, DBA, Indiana University, Assistant Professor Redding, Lee, PhD, Princeton University, Associate Professor Ro, Young, PhD, University of Michigan, Associate Professor Rossin, Donald F., PhD, University of California at Los Angeles, Associate Professor

Rowland, Martha, MA, Wayne State University, Lecturer Samfilippo, Chris, MBA, Wayne State University, Lecturer Scott, Crystal, PhD, Pennsylvania State University, Assistant Professor

Singh, Vivek, PhD, Virginia Technological University, Assistant Professor

Strandholm, Karen S., JD, PhD, Indiana University, Associate Professor

Urbaczewski, Lise, MS, Eastern Michigan University, Lecturer Valero-Tonone, Magali, PhD, Arizona State University, Assistant Professor

Vlachos, George, MA, State University of New York, Lecturer Wang, Qin, PhD, University of Arizona, Assistant Professor Wimble, Matt, PhD, Michigan State University, Assistant Professor

Xie, Alice, PhD, Syracuse University, Associate Professor

General Information

Mission

The College of Business provides high quality, practice-oriented business programs to well-qualified students on a regional campus of the University of Michigan. While the College primarily maintains a regional student focus, it provides a quality educational experience preparing them for national placement. Our primary mission is to meet the business-related educational needs of our undergraduate and graduate students, supported by new technologies and a variety of teaching methodologies. By providing regional organizations with professionally competent interns and graduates, we strive to meet both the community's human resource needs and our students' employment and education needs. The mission is enhanced by the College's location in a major metropolitan and industrial area. The environment is strongly influenced by the automobile manufacturing industry and its increasingly global outreach.

Our undergraduate and graduate programs are designed to supply students with professional and technical skills essential to being successful in an evolving business environment. Each program is characterized by limited class size. We also offer students outstanding professional internship opportunities.

Our primary mission is complemented by our faculty's commitment to making intellectual contributions. The main focus of this intellectual process is refereed publications in nationally recognized journals that lead to contributions beneficial to academic and business professionals.

The College of Business's tradition of exemplifying high standards for both faculty and students is acknowledged by AACSB International, The Association to Advance Collegiate Schools of Business, which has awarded fully accredited status for both the undergraduate and graduate programs.

Bachelor of Business Administration Program

The Bachelor of Business Administration (BBA) program is a professionally oriented program that builds upon a strong liberal arts foundation and develops the diversified competencies called for in the management of a modern business enterprise. The program also is designed to impart knowledge of the fundamental administrative skills demanded of the leaders in modern public and private organizations. It also can provide a rigorous preparation for graduate study in management science, business administration, law, and related areas.

Approximately one-half of the course requirements of the degree program are in non-business disciplines and provide the foundation for the professional offerings. These requirements are designed to give the student a more profound understanding of the student's own heritage, and of the physical and social universes within which the student lives. They develop the principles and standards of analysis, expression, and conduct.

BBA Program Learning Goals

The following Learning Goals have been developed by the faculty in the College of Business. These goals describe what we want all of our students to know and be able to accomplish upon graduation.

- 1. Students will be knowledgeable about the business disciplines.
- 2. Students will be effective communicators.
- 3. Students will be effective team members.
- Students will be competent in the application of technology.
- Students will be knowledgeable about global business practice and managing a diverse workforce.
- Students will be knowledgeable about ethical principles and their application.
- Students will apply critical thinking skills to business situations.

BBA Program Planning for UM- Dearborn Pre-business Students

Programs of undergraduate study in business administration leading to a bachelor's degree involve approximately four years of college study, the first two years of which can be considered pre-professional preparation in foundation courses covering fundamental subject matter. The third and fourth years constitute the more specialized professional phase of the degree program. It is in the offering of this professional phase that the faculty of the College of Business has principal responsibility.

Students seeking the BBA degree who are admitted to UM-Dearborn as freshmen or sophomores enter the pre-business program of the College of Business. The pre-business program is designed to provide students with a strong liberal arts foundation. Pre-business students declare their major in the BBA program during the term in which they complete their sophomore year and the specific course requirements. Students not enrolled in the BBA program cannot elect more than 30 credit hours in courses offered by the College of Business.

ADMISSION

Admission to the BBA program is competitive and requires that the student has high promise as evidenced by the record compiled in the first two years of study. A student must have completed at least 55 credit hours to be considered for admission to the B.B.A. program. These credit hours must include necessary prerequisites for admission to the B.B.A. program.

Courses required for admission to the B.B.A. program, including those courses that are prerequisite to the required courses, in which a grade of C- or below has been received, must be repeated during the student's next academic term. Prerequisite courses are COMP 105 and 280, ECON 201 and 202, MATH 113 or 115, BA 100, and ACC 298 and 299.

Appropriate and timely sequencing of the required math courses is critical for the successful admission to the BBA program. Students, entering as Freshmen, are required to have completed math through calculus (MATH 113 or 115) by their junior year. Freshmen are required to take the math placement exam prior to their first term of enrollment and begin their math courses in their first term of enrollment.

BBA Program Planning for Transfer Students

Programs of undergraduate study in business administration leading to a bachelor's degree involve approximately four years of college study, the first two years of which can be considered pre-professional preparation in foundation courses covering fundamental subject matter. The third and fourth years constitute the more specialized professional phase of the degree program. It is in the offering of this professional phase that the faculty of the College of Business has principal responsibility.

ADMISSION

A transfer student seeking the BBA degree may be granted regular admission to the BBA program if the student has completed at least 55 semester credit hours at an accredited university or college and if the student has satisfactorily completed prerequisites for the program. Required prerequisites include the equivalent courses to UM-D's ACC 298 and 299; MATH 113 or 115; COMP 105 and 280; ECON 201 and 202; and BA 100.

The UM-Dearborn Undergraduate Admissions Office provides local community colleges with equivalency tables. These tables should be consulted when planning course scheduling. A student who is otherwise admissible but has not satisfied these conditions, may be considered for admission to the pre-business program until the conditions are met.

Courses required for admission to the BBA program, including those courses that are prerequisite to the required courses, in which a grade of C- or below has been received, must be repeated during the student's next academic term. Prerequisite courses are COMP 105 and 280, ECON 201 and 202, MATH 113 or 115, BA 100, and ACC 298 and 299.

Admission is based on the quality and content of both the high school and the college academic records, and standards of evaluation are designed to ensure that each student who is admitted has the intellectual capacity and the preparation to pursue advanced undergraduate work successfully. Admission criteria are applied to all students without regard to race, color, sex, creed or national origin.

Students who plan to transfer to the BBA program at UM-Dearborn after completing two academic years of course work should plan to complete most of the General Education distribution requirements prior to transfer. It is especially important to have completed the requirements in English composition, natural/biological science, principles of economics, principles of accounting, mathematics, and introduction to business.

Appropriate and timely sequencing of the required math courses is critical for the successful admission to the BBA program. Prebusiness students are encouraged to take the math placement exam prior to their first term of enrollment. Students who have not taken the exam prior to their first term of enrollment will be required to complete the exam their first semester and register for math the following term. Transfer students must progress with math every full term of their enrollment until they complete calculus.

TRANSFER OF CREDIT

Full credit will be given for all acceptable courses in which a

student has earned at least a C grade at an accredited college. A maximum of 62 credits from a community college and a maximum of 75 credits from a non-UM university or college are accepted for transfer; the total maximum number of non-UM credits not to exceed 75. A maximum of 90 credits from another UM unit are accepted for transfer. The minimum number of hours at UM and in the College of Business as stated in the section on BBA Degree Requirements must also be earned.

BBA Degree Requirements

The BBA degree will be granted to those students who meet the following requirements:

Satisfactory completion of at least 123 hours of college-level work distributed as follows:

BBA Precore requirements	25 hrs
General Education Distribution requirements	31 hrs
BBA Core requirements	38 hrs
Major requirements	21 hrs
Elective requirements 8-	14 hrs

Satisfactory completion of 48-61 hours at UM-Dearborn, the final 33 hours of which are taken while in the BBA program. A minimum of 21 credits of the 33 hours must be in courses taught in the College of Business.

Achievement of a minimum 2.0 grade point in all UM-Dearborn coursework,in all courses offered by the College of Business, and in the major.

BBA Precore	
BA 100	Perspectives of Business in a Changing World
ACC 298	Financial Accounting
ACC 299	Managerial Accounting
COMP 105	Writing and Rhetoric I
COMP 280	Business Writing and Rhetoric
ECON 201	Principles of Macroeconomics
ECON 202	Principles of Microeconomics
MATH 113	Calculus I: Management, Life and Social
	Science or MATH 115 Calculus I

Note: Each incoming student will take the UM-Dearborn Composition Placement Examination. Freshman must take the exam and enroll in the appropriate level of English Composition in their first term of enrollment. Transfer students must take the exam by the sixth week of the first semester in the College of Business. Performance on the exam will determine which writing courses will be required. Excellent performance on the examination may result in the requirement for Composition 105 and/or 106/280 being waived. Note that demonstrating proficiency does not grant credit for courses not taken. Students exempt from the English Composition requirement must fulfill the 3-6 credit hours in electives.

Note: All incoming freshmen will take the UM-Dearborn Mathematics Placement Exam and enroll in the appropriate level of math their first term of enrollment. Transfer students without credit for precalculus or higher level math are required to take the exam by the sixth week of their first semester and begin math, based on their placement, by their second semester of enrollment.

General Education Distribution Requirements31 hrs	Business Admi	inistration Core
A student seeking a degree from the College of Business must	1	
fulfill the coursework specified below.	BA 300	Career Planning
	BA 320	Project Management
Arts	BA 330	Managerial Communications
ARTH 101, 102, 103, 104, 106	BA 400	Corporate Responsibility
MHIS 100, 120, 130; JASS 240, 248	BE 401	Managerial Economics
MHIS/RELS/HUM 333	BPS 451	Strategic Management
HUM 3335		Quantitative Modeling and Analysis I
110W 3333	DS 300	
Letters	FIN 401	Corporate Finance I
ENGL 200, 230, 231, 232, 233, 235, 236, 237, 238, 239	LE 452	The Legal Environment of Business
	ITTN 6 210/21	
HUM 171, 201, 221, 222, 223		1 Information Systems in Management
PHIL 100, 120, 200, 240	OR	
D.L 1 1 C 1 C. 1	ACC 380/38	1* Accounting Information Systems
Behavioral and Social Sciences		
	MKT 352	Marketing Principles and Policies
A student must elect at least one course from Group A.	OB 354	Behavior in Organizations
	OM 300	Introduction to Operations Management
Group A		•
ANTH 101, 202	*Note: ACC 38	80/381 is a requirement for students pursuing an
PSYC 170, 171	Accounting ma	jor.
SOC 200, 201	0 .	,
	Major Require	ements
Group B	_	
POL 101, 201	All BBA stude	nts must declare and fulfill the requirements for a
		counting, Finance, General Business, Digital
History		ormation Technology Management, Management;
		pply Chain Management, or Human Resource
Any history course excluding HIST 398, 399, 485, 497, 498 and	Management.	pp. chair management, or manan resource
499.	wanagement.	
Biological and Physical Sciences	Accounting Ma	ajor21 hrs
•	Required	
One course must be a laboratory course.	ACC 355	Cost Accounting and Analysis
ASTR 130 or 130&131	ACC 356	
BIOL 100 or 100 & 101	ACC 356 ACC 357	Asset Accounting
BIOL 103, 105, 130, 140		Equity Accounting
CHEM 100, 134, 136, 144, 146	ACC 360	Federal Income Tax
ESCI 275, ENST 203	ACC 457	Auditing
GEOL 118, 218	dent.	0 4 04
NSCI 120, 121		ses from the following
		Controllership
PHYS 100, 125, 126, 150, 151	ACC 416	Advanced Accounting
Notived Science 120 and Dialogy 100 or 100 % 101 may not be	ACC 438	Advanced Federal Income Tax
Natural Science 120 and Biology 100 or 100 & 101 may not be	ACC 439	Not for Profit Accounting
used together to meet the requirement.	FIN 402	Advanced Corporate Finance
C. W. 1771. 11	ITM 382	Advanced Computer Applications
Critical Thinking3 hrs	ITM 383	Information Technology Security
Print and Color Limit 11	LE 453	Commercial Transactions
PHIL 233 Critical Thinking	LE 433	Commercial Transactions
Diversity Requirement	The Accountin	g major provides the student with a foundation to
		er in accounting. *Students preparing for the
Diversity Requirement		
		c Accounting exam need to choose ACC 416 and
AAAS/CRJ/PSYC 322	Certified Public	
AAAS/CRJ/PSYC 322 AAAS/CRJ 403	Certified Public	c Accounting exam need to choose ACC 416 and te requirements.
AAAS/CRJ/PSYC 322 AAAS/CRJ 403 AAAS 404	Certified Public 439 to meet sta	te requirements.
AAAS/CRJ/PSYC 322 AAAS/CRJ 403 AAAS 404 ANTH 320, 373	Certified Public 439 to meet sta	te requirements.
AAAS/CRJ/PSYC 322 AAAS/CRJ 403 AAAS 404 ANTH 320, 373 ANTH/SOC/WGST 481	Certified Public 439 to meet sta Digital Market	te requirements.
AAAS/CRJ/PSYC 322 AAAS/CRJ 403 AAAS 404 ANTH 320, 373	Certified Public 439 to meet sta Digital Market Required	ting Major21 hrs
AAAS/CRJ/PSYC 322 AAAS/CRJ 403 AAAS 404 ANTH 320, 373 ANTH/SOC/WGST 481	Certified Public 439 to meet sta Digital Market Required MKT 363	ting Major
AAAS/CRJ/PSYC 322 AAAS/CRJ 403 AAAS 404 ANTH 320, 373 ANTH/SOC/WGST 481 ECON 325, 342, 344	Certified Public 439 to meet sta Digital Market Required MKT 363 MKT 454	ting Major
AAAS/CRJ/PSYC 322 AAAS/CRJ 403 AAAS 404 ANTH 320, 373 ANTH/SOC/WGST 481 ECON 325, 342, 344 HIST 105, 323, 326 POL/CRJ/WGST 362	Certified Public 439 to meet sta Digital Market Required MKT 363 MKT 454 MKT 455	ting Major
AAAS/CRJ/PSYC 322 AAAS/CRJ 403 AAAS 404 ANTH 320, 373 ANTH/SOC/WGST 481 ECON 325, 342, 344 HIST 105, 323, 326 POL/CRJ/WGST 362 SOC/CRJ 350	Certified Public 439 to meet sta Digital Market Required MKT 363 MKT 454 MKT 455 MKT 458	ting Major
AAAS/CRJ/PSYC 322 AAAS/CRJ 403 AAAS 404 ANTH 320, 373 ANTH/SOC/WGST 481 ECON 325, 342, 344 HIST 105, 323, 326 POL/CRJ/WGST 362 SOC/CRJ 350 SOC/CRJ 443 (PSYC 405)	Certified Public 439 to meet sta Digital Market Required MKT 363 MKT 454 MKT 455	ting Major
AAAS/CRJ/PSYC 322 AAAS/CRJ 403 AAAS 404 ANTH 320, 373 ANTH/SOC/WGST 481 ECON 325, 342, 344 HIST 105, 323, 326 POL/CRJ/WGST 362 SOC/CRJ 350	Certified Public 439 to meet sta Digital Market Required MKT 363 MKT 454 MKT 455 MKT 458	ting Major

ľ	us two courses	from the following
	MKT 382	Understanding Customers
	MKT 402	Marketing Management
	MKT 457	Global marketing and Consumer Culture
	ITM 321	Database Systems I
	ITM 371	Managing Electronic Commerce Systems
	ITM 382	Advanced Computer Applications

Digital marketing is where marketing meets digital media, such as the internet, social media, cell phones and video games. Digital marketing covers activities such as search engine optimization, viral marketing, web analytics, social network marketing, experiment based market research, reputation management. Double majoring in digital marketing and marketing is not permitted.

Finance	Major	18 hrs
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Required

ACC 358	Financial Reporting or ACC 357, Equity
	Accounting
FIN 402	Advanced Corporate Finance
FIN 407	Investment Fundamentals
FIN 447	Derivative Markets
IB 441	International Financial Management

Plus one course from the following

ACC 355	Cost Accounting and Analysis
BE 403	Business Conditions Analysis
FIN 443	Commercial Banking
FIN 445	Corporate Finance Models and Applications
FIN 456	Fixed Income Securities
FIN 484	Seminar: Financial Management
FIN 494	Research: Financial Management
IB 486	Seminar: International Business
ITM 382	Advanced Computer Applications

The Finance major offers flexibility for developing careers in investments, financial institutions and corporate finance. The program offers analytical rigor, theoretical knowledge and teaching methods that stress hands-on applications. Finance internships historically have proven to be among the most numerous and challenging available.

The major in general business has been designed for students seeking a broad business background rather than a specialization in any one functional area of business. Coursework to complete the General Business major must be upper division business credits beyond the BBA core (excluding business internship). General Business students will not be permitted to combine this major with any other College of Business major.

General Business Major

Required

LE 453 Commercial Transactions; Adv. Topics

Plus three courses from 300-400 level COB courses beyond the core. Each must be a different subject.

Plus two courses from the following

CRJ/PHIL 445 Contemporary Ethical Issues

CRJ/POL 302	The Theory of the Law
CRJ/POL 303	Justice
CRJ/POL 316	The American Judicial Process
CRJ/POL 413	American Constitutional Law
CRJ/POL 414	Civil Rights and Liberties
CRJ/POL/PHIL 335	Philosophy of Law
CRJ/POL/WGST 362	Women, Politics, and the Law
CRJ/PSYC/SOC 382	Social Psychology
CRJ/SOC 453	Sociology of Law
ECON 333	Anti-Trust and Regulation
ENST 350	Environmental Law
HPS 456	Health Care and the Law
PHIL/STS 312	Environmental Ethics
POL 415	Problems in Constitutional Law

Required

4	
HRM 305	Human Resource Policy and Administration
MKT 402	Marketing Management
OB 401	Management Skills Development
OM 460	Supply Chain Management

Plus one course from the following ACC 358

ACC 358	Financial Reporting
FIN 402	Advanced Corporate Finance
IB 441	International Financial Management

And one course from the following

ITM 321	Database	Systems 1	I

ITM 382 **Advanced Computer Applications**

These required courses are designed to provide each student with the fundamentals necessary to enter and develop a career in administration. A student may supplement these foundation courses with elective courses from several disciplines or extend and deepen career preparation with more advanced work in a particular area of administration or analysis.

Information Technology Management Major21 hrs

Required

ITM 301	Business Application Programming
ITM 321	Database Systems I
ITM 331	Information Systems Development
ITM 351	Networking and Collaborative Computing
ITM 431	Database Systems II
Plus two courses	from the following
ITM 302	Object-Oriented Programming
ITM 303	iCreate: Mobile Apps

ITM 303	iCreate: Mobile Apps
ITM 371	Managing Electronic Commerce Systems
ITM 382	Advanced Computer Applications
ITM 383	Information Technology Security

The Information Technology Management major is designed to prepare students for positions in system development, system analysis, database administration, networking, and as ITM specialists in user departments such as finance, human resource management, marketing and operations management. The major is also designed to prepare students to assume increasing levels of managerial responsibility as their career progresses.

Marketing Major21 hrs

Required

MKT 402	Marketing Management
MKT 454	Marketing Research

Plus five courses from the following, at least two must be MKT courses.

MKT 360	Marketing and Society
MKT 363	Digital Consumer Search & Marketing
MKT 382	Understanding Customers
MKT 434	Sales Management & Personal Selling
MKT 436	Business to Business Marketing
MKT 455	E-tailing and Retailing
MKT 457	Global Marketing
MKT 458	Communications Strategy and New Media
MKT 463	Digital Analytics & Content
MKT 471	Entrepreneurial Marketing
MKT 488	Marketing Seminar
MKT 498	Marketing Independent Research
ENT 400	Introduction to Entrepreneurship
OM 460	Supply Chain Management
ITM 371	Managing Electronic Commerce Systems
ITM 382	Advanced Computer Applications

Marketing covers the creation of new products and services, the distribution of products from suppliers and manufacturers down to the final consumers, the pricing of products, as well as advertising, sales, and other promotional initiatives. The marketing major provides students an opportunity to develop skills for careers in marketing management, advertising, sales, marketing research, new product development, retailing, international business, purchasing, management of nonprofit organizations, and general business management. Their functional visibility enables high-achieving marketing persons to be aptly recognized, promoted, and compensated. Marketing is also an excellent major for students who are considering starting their own business. Double majoring in digital marketing and marketing is not permitted,

Supply Chain Management Major......21 hrs

Supply Chain Management

Required OM 460

OM 465	Strategic Sourcing				
OM 470	Analysis and Design of Supply Chains				
OM 475	Supply Chain Logistics Management				
OM 480	Enterprise Resource Planning				
us two course	s from the following				

Plu **HRM 305** Human Resource Policy and Administration

MKT 436 Business to Business Marketing OM 493 Operations Management Research

The major in Supply Chain Management provides students with opportunities for careers in e-business, startups, manufacturing, high tech, service and consulting companies. Supply Chain Management encompasses a set of approaches utilized to efficiently integrate suppliers, manufacturers, warehouses and stores so that merchandise is produced and distributed at the right quantities, to the right locations, and at the right time, in order to minimize system-wide costs while satisfying service level requirements. SCM is an interdisciplinary field that emphasizes cross-functional links and seeks to manage those links to enhance a company's competitive advantage.

Required

HRM 305 Human Resource Policy and Administration

Plus three courses from the following

as an ee ee ar	as an ee ecasses from the folio wing				
HRM 406	Staffing, Training & Development				
HRM 407	Compensation & Performance Management				
HRM 408	Management-Union Relations				
OB 402	Organizational Change & Development				

And two	courses	from	the	following

ECON 321	Labor in the American Economy
ECON 421	Economics of the Labor Sector
HRM 406	Staffing, Training & Development
HRM 407	Compensation & Performance Management
HRM 408	Management-Union Relations
HRM 485	Seminar: Human Resource Management
HRM 495	Research: Human Resource Management
OB 401	Management Skills Development
OB 402	Organizational Change & Development
OB 485	Seminar: Organizational Behavior
OB 495	Research: Organizational Behavior
PSYC 4305	Industrial/Organizational Psychology
PSYC 431	Organizational Entry
SOC 442	Sociology of Work

The Human Resources Management major courses are designed as fundamental preparation for positions in human resource management, industrial relations, or general management. A Human Resources Management major would also be valuable to students who are not contemplating a career in human resources, as these courses provide knowledge and skills for selecting, developing, motivating, retaining, evaluating, and directing employees - skills needed by managers in any technical or business domain.

Note: Only one independent study can be applied toward the General Business, Marketing, and Human Resource Management majors. Marketing majors may do more than one if they are iLabs related.

Elective Courses

Students must complete a minimum of 123 credits to earn the BBA degree Elective credits are the non-specific credits each students needs to reach degree completion. College-level courses in any discipline which bear UM-Dearborn or transferable academic credit can apply. College of Business business internships may also apply. Additive credit courses do not carry college-level credit toward program. Courses below the 100 level and most EDF courses are additive credit. Nonbusiness co-ops and their related seminars do not carry credit toward a BBA degree.

Business Minors

Students pursuing any degree may wish to complement their academic program with a minor from the College of Business. Courses cannot apply towards both a major and a minor.

Prerequisites: MATH 104 or 105 and ACC 298 and ACC 299

ACC 355	Cost Accounting and Analysis	
ACC 356	Asset Accounting or ACC 358, Financial	
	Reporting	
ACC 360	Federal Income Taxation	

Plus two courses from the following

ACC 357	Equity Accounting			
ACC 380/381	Accounting Information Systems			
ACC 403	Controllership			
ACC 439	Not-for-Profit Accounting			
ACC 457	Auditing			
*Finance majors may use ACC 358 towards an a				

Finance majors may use ACC 358 towards an accounting minor.

266 University of Michigan-Dearborn		
Finance Minor	15 hrs	
Prerequisites: ACC 298, ECON 201 and 202, MATH 113 or 115, and DS 300 $$		
FIN 401	Corporate Finance	
FIN 402	Advanced Corporate Finance	
FIN 407	Investment Fundamentals	
Plus two courses f		
ACC 358	Financial Reporting	
FIN 443	Commercial Banking: Function and	
FIN 445	Operations Corporate Finance Models and Applications	
FIN 447	Derivative Markets	
FIN 484	Seminar: Financial Management	
IB 441	International Financial Management	
Information Tech	nology Management Minor16 hrs	
ITM 310/311	Information Systems in Management	
ITM 321	Database Systems I	
ITM 351	Networking & Collaborative Computing	
Plus two courses f	rom the following	
ITM 301	Business Applications Programming	
ITM 302	Object-Oriented Programming	
ITM 331	Information Systems Development	
ITM 371	Managing Electronic Commerce Systems	
ITM 382	Advanced Computer Applications	
ITM 383	Information Technology Security	
ITM 431	Database Systems II	
Management Min	107	
Not available to C	ollege of Business students	
Prerequisites: MA	TH 104 or 105 or 113 or 115	
ACC 298	Financial Accounting	
ITM 310/311	Information Systems in Management	
MKT 352	Marketing Principles and Policies	
OB 354	Behavior in Organization	
	from at least two disciplines from ACC 299 .00 level courses offered in the College of	
Marketing Minor		
MKT 352 N	Marketing Principles and Policies	
Plus four courses f	rom the following	
MKT 360	Marketing and Society or MKT 382, Understanding Customers	
MKT 402	Marketing Management	
MKT 402 MKT 434		
MKT 434 MKT 436	Sales Management and Personal Selling Business to Business Marketing	
MKT 455	E-tailing and Retailing	
MKT 457	Global Marketing	
ENT 400	Introduction to Entrepreneurship	
T141 400	madadenon to Entrepreneurship	

Prerequisites for all courses must be met. Students not enrolled in the College of Business BBA program cannot elect more than 30 credit hours in courses offered by the College of Business. BBA students must complete 12 credits outside their major to earn a minor.

Internship Certificate Program

The College of Business Internship Program provides unparalleled opportunities for University of Michigan-Dearborn, College of Business students of all disciplines to enhance their academic experience by applying their education in actual business environments. Through an internship, students apply the skills and knowledge they have developed in the classroom, build a strong track record and enhance their relationship skills with business leaders in the community.

Students who participate in the program get the opportunity to:

- Apply classroom theory to actual work situations
- Test out their interests and better develop their longrange career plans
- Earn elective course credits toward their degree requirements
- Enhance their marketability after graduation
- · Earn money
- Develop experience and maturity by strengthening their problem-solving resourcefulness, skills. confidence, self-discipline, and their sense of responsibility
- Potentially gain faster promotions once they are hired, than their non-internship experienced co-workers
- Develop human relations and communication skills through interaction in career settings

For the internships listed below, the following applies:

- Student must sign and comply with an Internship Contract.
- Successful completion of BA 300 is required before students can participate in the program.
- A minimum cumulative GPA of 2.7 is required to participate.
- During the internship, the student will be required to submit periodic updates via Canvas and submit a final paper summarizing their internship experience.
- A grade of Satisfactory or E will be recorded on your transcript.
- Internship work commitments can be for one or multiple semesters and is negotiated between student and the employer.
- Internship Certificates will be awarded to students completing six hours of COB internship credit.

Students enrolled in BI 350, BI 450, or BI 470 are considered to be full-time by the College of Business. Students must get permission from the Internship office to elect up to two courses while on internship.

Students enrolled in BI 355, BI 455, or BI 475 are considered to be part-time by the College and are expected to manage their overall course load in a manner that is consistent with the employer's needs and the needs of the student.

For the BBA degree, up to six internship credit hours can be applied to elective courses.

Students also have the option of registering for BI 360, which is a zero credit internship. Students who have already completed their elective requirements but still want to participate in the internship program can do so by registering for this option when they go on the internship.

Additional information regarding the Internship Program, please visit their website at: cob.umd.umich.edu/internship.

Additional Academic Information

OFFICE OF STUDENT SERVICES

The Office of Student Services helps students make informed decisions about their course of study. To provide this help, the Office offers students current and accurate information on College of Business academic policies and procedures, coordinates academic advising, provides necessary College forms and materials, and reviews students' academic progress and performance at specified intervals.

The Office offers a systematic program of guidance and advising from admission through graduation. Advising occurs in many forms and at various levels. All newly admitted students are required to attend an orientation advising session prior to their registration in the College. Pre-business students with 60 credits will be required to meet with their advisor each subsequent term until they have declared their major in the BBA degree program. In addition, BBA students, upon reaching 85 credit hours are required to schedule a degree audit advising appointment.

CHANGES IN COURSE ELECTIONS: ADD, DROP, WITHDRAWAL

Add

A student may add courses during the first two weeks of a full term or the first week of a half term or mini-term. Refer to the Office of Registration & Records website at http://www.umd.umich.edu/rr_registration for procedures and dates. Any exceptions for adding courses must be approved by the Academic Standards Committee of the unit in which the student is enrolled.

Drop

A student may drop courses during the first two weeks of a full term or the first week of a half term or mini-term without penalty. Courses may be dropped during the third through the ninth week of a full term, and through the fourth week of a half term. Refer to the Office of Registration & Records website at http://www.umd.umich.edu/rr_registration for procedures and dates.

Students enrolled in a business internship (BI) course are not allowed to drop or withdraw from the course without approval from the Internship Director. Approval to drop courses under circumstances other than stated above will require the approval of the Academic Standards Committee of the College of Business. Petitions to drop a class after the ninth week of a full term or the fourth week of a half term will be considered only under extreme circumstances beyond a student's control, such as illness under the care of a physician which precludes class attendance for periods in excess of a week. Documentation will be required. Failure to receive approval will result in a grade(s) of *E* for the course or courses.

Withdrawal

Refer to this topic under Campus Policies and Procedures in the General Information section of this Catalog.

COURSE PREREQUISITES

The faculty has determined the appropriate prerequisites for each course. These prerequisites exist to make sure the student has the specific background necessary not only to minimally complete the course, but also to assure a broad enough background so the student fully benefits from the course. Students must observe all prerequisites in course planning.

GRADING SYSTEM

Refer to this topic under Campus Policies and Procedures in the General Information section of this *Catalog*.

PASS/FAIL GRADING OPTION

Students enrolled in the College of Business may elect courses with the pass/fail grading option subject to the following conditions:

This option may not be elected by students on academic probation.

Courses to be taken under this option must be specified at the time of registration or within the regular period for adding courses.

Only courses included in the Liberal Arts distribution or to be applied as elective credit may be elected on a pass/fail basis.

In a course offered exclusively on a pass/fail basis, a passing grade will be recorded as S (and not used in computing a student's grade point average), and a failing grade will be recorded as E (and used in computing grade point average). In a course offered with a pass/fail option, a reported grade of C- or above will be recorded as P, and a reported grade of below C- will be recorded as F. (Whether a P or F is recorded, the grade is not used in computing a student's grade point average.) A student may elect at most two courses on a pass/fail basis, excluding internship courses. Courses which are elected on a pass/fail basis in a manner that does not conform to these guidelines will not accrue toward the degree requirements of the student.

Changing from the pass/fail option to a letter grade or *vice versa* is **not permitted** after the first two weeks of a full term or after the first week of a half term.

ABSENCE FROM FINAL EXAMINATIONS

Refer to this topic under Campus Policies and Procedures in the General Information section of this *Catalog*.

INCOMPLETE COURSEWORK

It is the College of Business students' responsibility to obtain a contract for any incomplete coursework request, regardless of which academic unit the courses is in. Refer to this topic under Campus Policies and Procedures in the General Information section of this *Catalog*.

ACADEMIC STANDING

Refer to this topic under Campus Policies and Procedures in the General Information section of this *Catalog*.

Good Scholastic Standing

To be in good scholastic standing, a student must have a 2.0 cumulative grade point average in all UM-Dearborn coursework, in their major, and in all courses offered by the College of Business.

Unsatisfactory Performance

The records of students enrolled in the College of Business are reviewed at the end of each term by the Academic Standards Committee. Two degrees of scholastic deficiency will be used by the committee to identify a student's unsatisfactory performance resulting from D and E grades:

probation withdrawal

Probationary status will be assigned to students who are not in good scholastic standing (cumulative, College of Business, and/or major grade point average below 2.0) but whose records indicate a possibility for removal of deficiencies by continued enrollment. Students are informed of their academic status and required to schedule an advising appointment.

Students whose academic records are so poor as to indicate little possibility of successful completion of their program will be required to withdraw from the College of Business. If the student is enrolled in coursework at the time the withdrawal decision is made, the withdrawal is effective immediately. The student will be informed, in writing, and that term's tuition assessment will be adjusted to zero.

D Grades

While any D grade (D, D-, D+) is passing, it is not considered satisfactory performance. Any deficiency of grade points (below 2.0 overall average) resulting from one or more D grades must be made up before the student is restored to good standing. If the student receives a D grade in a course that is an important prerequisite for other courses, it is recommended that the course be repeated.

Credit is not transferable for courses in which D grades were earned in another college or university

E Grades

Neither credit nor honor points are granted for a course in which a student receives a grade of E.

COURSEWORK AT OTHER INSTITUTIONS

After a student first enrolls in a degree program at UM-Dearborn, he or she may not ordinarily transfer credits from a course taken at another college or university to apply to the requirements of the UM-Dearborn degree. Exceptions to this policy require written permission from the College of Business Student Services Office prior to registration for the course(s).

REPEATING COURSES

Students may repeat a course up to two times for a total of three attempts. Regardless of whether it is higher or lower than the previous grade(s), the last grade assigned in a course will be used in computing the student's cumulative grade point average and credits earned toward degree. Please refer to this topic under Campus Policies and Procedures in the General Information section of this *Catalog*.

STATEMENT ON ACADEMIC INTEGRITY

The College of Business holds in high value integrity in all relationships and activities. As the College develops students for professional business careers, it must demand not only academic excellence, but academic honesty as well. Students engaged in academic misconduct hurt themselves, their fellow students, the reputation of the College and society as a whole. As such, a culture of zero tolerance for academic misconduct has evolved. Certainly,

building a classroom environment that discourages academic misconduct before it surfaces is the ideal. While this can eliminate much of the opportunity for academic misconduct, it is not always sufficient. Consequently, policies that address academic misconduct must be developed. The College's policy is as follows:

- All cases of academic misconduct in which a faculty member deems is serious enough to penalize must be reported in writing to the Associate Dean. The report should include the student's name, course, date, brief description of the offense, and the grade sanction. As has historically been the case, the faculty member has the right to decide what the appropriate grade sanction is.
- The faculty member must inform the student of the decision, and provide him/her with a signed copy of the report.
- The student has the right to appeal the decision through existing College and University channels. The Associate Dean will retain all reports of academic misconduct that have been upheld. Decisions are upheld in two ways: when they are not challenged by the student or when the faculty case has been supported through an appeals process.
- All cases are strictly confidential. With the exception noted below, COB faculty, staff and/or the Hearing Board will not have access to this information.
- The Associate Dean will remand any case of repeat academic misconduct by a College of Business student to the School's Academic Standards Committee for formal action. Except in the rarest of circumstances, two violations will result in expulsion from the College of Business.

PETITIONS FOR ACADEMIC ACTION

Each request to the faculty of the College of Business for special academic action relative to credits, requirements, standing, etc., should be entered on the appropriate petition form (available in the Student Services Office) and forwarded, with appropriate documentation, to the office for review by the Academic Standards Committee.

STUDENT ACADEMIC CONDUCT

A student in the College of Business or any student enrolled in a College of Business course will not engage in academic misconduct, including, but not limited to, plagiarism, cheating, fabrication, aiding and abetting dishonesty or falsification of records and official documents as defined in the Statement of Student Rights and Code of Student Conduct. Definitions of prohibited conduct, sanctions, procedures for applying sanctions, and appellate procedures are specifically set out in the Statement.

STUDENT PERSONAL CONDUCT

Any conduct which can be the grounds for civil or criminal lawsuit shall be subject to sanctions by the College of Business.

RIGHT OF APPEAL

Refer to this topic in the General Information section of this *Catalog*.

CHANGE OF DEGREE PROGRAM BETWEEN SCHOOLS

See Admission under Program Planning for UM-Dearborn Students. Information is available at the College Office.

CLASS STANDING

Refer to this topic under Campus Policies and Procedures in the General Information section of this *Catalog*.

GRADE REPORTS

Refer to this topic under Reporting of Grades in the General Information section of this *Catalog*.

REQUESTS FOR TRANSCRIPTS

Refer to this topic under Transcripts in the General Information section of this *Catalog*.

SECOND BACCALAUREATE DEGREE FROM THE COLLEGE OF BUSINESS

Students that have already earned a BBA may apply to the Office of Undergraduate Admissions if they want to pursue a second degree. Students must meet current admission criteria. If admitted, a second baccalaureate degree will be granted to those students who meet the following minimum requirements:

Satisfactory completion of the BBA Precore, General Education Distribution, BBA Core, and Major coursework required for the degree sought.

Satisfactory completion of at least 33 semester hours of coursework while enrolled in the College of Business as a post-baccalaureate student; at least 21 hours of this course-work must be in courses offered by the College of Business.

Achievement of at least a 2.0 grade point average in all coursework and in courses offered by the College of Business.

INACTIVE STUDENT STATUS

A student may be inactive for a maximum of two consecutive terms and maintain eligibility to register. A student who is declared inactive as a result of not being enrolled for any coursework during a 12-month period must apply for readmission to the College. A decision on readmission will be based upon the past performance of the student and enrollment space available in the College at that time. Upon readmission, a student who has been inactive will be required to satisfy any program requirements that have been added in his/her absence.

ACADEMIC HONORS

Dean's List

A student is honored by inclusion in the Dean's List if he or she meets two conditions:

- 1 has completed at least 12 credit hours toward a degree during the term, and
- 2 has achieved a 3.50 or better term GPA. The Dean's List is compiled after the fall, winter, and summer terms.

Beta Gamma Sigma

Beta Gamma Sigma is the national honor society for business schools accredited by AACSB-The Association to Advance Collegiate Schools of Business. Membership in Beta Gamma Sigma is one of the highest scholastic honors that a student in the BBA program can achieve. It is based on outstanding scholastic achievement as measured by overall grade point average. Invitation for membership to Beta Gamma Sigma is extended to seniors in the top 10 percent of their class and juniors in the top seven percent of their class.

Honor Scholars

Every year, one honor scholar from each major is selected and

recognized at the Annual Honors Convocation. Selection is made by the College of Business's Scholarship Committee based on the students' GPA and achievement of 90 credit hours or more toward degree.

Chancellor's Medallion

The Chancellor's Medallion is awarded at each Commencement Exercise to UM-Dearborn graduates including one from the College of Business. The student is selected by the Scholarship Committee based on his/her quality of character, vitality, intellect, integrity and academic record. The Fall awardee is selected from students who were graduated in August and those who are to be graduated in December. The Winter awardee is selected from students who are to be graduated in April/May.

Graduation with Distinction

Students who are degree candidates in Business and have obtained a cumulative GPA of at least 3.20 but less than 3.60 are recommended for graduation "With Distinction." Such distinctions are noted on transcripts and diplomas.

Graduation with High Distinction

Students who are degree candidates in Business and have obtained a cumulative GPA of at least 3.60 are recommended for graduation "With High Distinction." Such distinctions are noted on transcripts and diplomas.

Course Offerings

Prerequisite courses indicated with an asterisk* may be taken concurrently.

Students not enrolled in the BBA degree program of the College of Business cannot elect more than 30 credit hours in courses offered by the College of Business.

Accounting (ACC)

COURSE OFFERINGS

ACC 298 Financial Accounting

3. 000 Credits

Must be enrolled in one of the following Classes:

Senior

Sophomore

Graduate

Junior

Prerequisites: (MATH 104* or MATH 105* or MPLS 115 or MATH 113* or MATH 115* or MPLS 116)

The first course, of a two-course sequence, to introduce accounting concepts, principles, financial statement preparation, and the uses of accounting information. Topics include fundamental concepts and procedures of financial accounting including income measurement, asset valuation, financial statement preparation and analysis, and uses of accounting information for decision making.

ACC 299 Managerial Accounting

3. 000 Credits

Prerequisites: ACC 298

To introduce managerial accounting concepts and applications. Specific topics include: cost terminology, cost behavior, product costing systems, budgeting, standard costing systems and variance analysis, and cost allocation methods. To connect the materials in this course to concepts covered in the prerequisite course, ACC 299 begins with financial statement analysis. Discussion of ethics and globalization issues will be interwoven into the presentation of course materials.

ACC 304 Auditing & Forensic Examinations

3. 000 Credits

Must be enrolled in one of the following Colleges:

Coll of Engineering & Comp Sci

College of Business

Coll of Arts, Sciences & Letters

Must be enrolled in one of the following Classes:

Senior Junior

Prerequisites: ACC 298

To study forensic examination and investigation techniques including typical embezzlement and financial statement fraud scenarios, fraud risk factors, sources and uses of evidence, and interrogation and surveillance techniques. Specifically, the course presents an introduction to forensic accounting and fraud examination by studying the nature of fraud, how it is committed, and the motivations of those who defraud an organization, owners, and capital markets. Fraud detection includes the recognition of fraud symptoms and approaches to act on those symptoms. Fraud investigation includes the examination of a fraud act, methods used to conceal the act, and other methods specific to detect various types of fraud. Other course topics may include expanding assurance services, advanced internal control testing, and risk based investigations. Special attention will be given to the changing role and services offered by internal auditors and fraud examiners, and responsibility to the public.

ACC 355 Cost Accounting and Analysis

3. 000 Credits

Prerequisites: ACC 299

To study the development, analysis and interpretation of accounting information for planning and controlling costs and revenues. Topics include: cost concepts, cost behavior, product costing systems, cost allocation systems, budgeting, standard costs and variance analysis and performance evaluation techniques.

ACC 356 Asset Accounting

3. 000 Credits

Prerequisites: ACC 299

To study accounting theory and financial statement presentation underlying assets and income determination. Topics include: cash, marketable securities, receivables, inventories, plant assets, natural resources, intangibles and long-term investments.

ACC 357 Equity Accounting

3. 000 Credits

Prerequisites: ACC 356

To study accounting theory and financial statement presentation underlying equities and income determination. Topics include non-current liabilities, bonds, stockholders' equity, revenue recognition, accounting changes, dilutive securities and earnings per share, income tax allocation, pensions, leases and the statement of cash flows.

ACC 358 Financial Reporting

3. 000 Credits

Prerequisites: ACC 298 or (ACC 296 and ACC 297)

This course provides an intermediate level analysis of financial accounting focusing on recognition, measurement, and reporting issues associated with assets, liabilities and owner equity in conjunction with related income determination questions. The course is designed for financial statement information users who need a level of sophistication beyond an introductory level, yet not the complete technical expertise of a financial accountant. (YR)

ACC 360 Federal Income Taxation

3. 000 Credits

Prerequisites: ACC 299

To acquaint the student with the federal income tax, tax research, tax planning, and application of tax laws to taxable entities. The course will introduce the student to a broad range of tax concepts within a framework of financial accounting principles. Emphasis will be placed on the taxation of business entities, individual taxpayers, and the differences between financial and tax accounting. The use of technology to research problem assignments will be used to develop students' business communication and problem solving skills.

ACC 380 Accounting Information Systems

3. 000 Credits

Prerequisites: ACC 299 and ACC 381*

To study the concepts, theory, organization and application of accounting information systems and the flow of accounting data through transaction cycles. Topics include: the principles of accounting systems design, internal control analysis and development and the overall evaluation of networked computer-based accounting systems. Emphasis is placed on transaction processing systems, internal control systems, and computer-assisted decision making for unstructured problems by employing accounting databases.

ACC 381 Accounting Info Sys Lab

1. 000 Credits

Must be enrolled in one of the following Colleges:

College of Business

Must be enrolled in one of the following Classes:

Sophomore Senior

Junior

Prerequisites: ACC 299 and ACC 380*

ACC 381 is a lab component of ACC 380. Students will complete weekly laboratory assignments to reinforce the concepts of ACC 380 to use information technology to solve business problems. In addition, the use of several common applications (e. g. , Word, Excel, Access, and PowerPoint) will also be covered at the beginning to advanced levels.

ACC 403 Controllership

3. 000 Credits

Prerequisites: ACC 355 and (ACC 356 or ACC 358)

Controllership is intended to equip students with both theoretical and practical tools to manage all significant facets of production process costs, revenue streams, budgeting, and the related reporting system. The course focuses on topics such as managing "upstream" cost, cost structures, control tools, establishing standards, reporting processes, analysis to improve per unit profitability, and budgeting. The above topics will be used to develop resource plans to achieve management's objectives. (YR)

ACC 416 Advanced Accounting

3. 000 Credits

Prerequisites: ACC 357

To study selected advanced accounting topics which may include partnerships, business combinations, consolidated financial statements, multinational accounting and reporting, accounting for financial distress situations and regulation of accounting by the SEC. Students will not receive credit for both ACC 416 and ACC 516.

ACC 438 Advanced Federal Income Tax

3. 000 Credits

Prerequisites: ACC 360

To study the basic Federal income tax provisions relating partnerships, estates and trusts and corporations. Topics include: formation of the partnership, partnership distributions, tax-free incorporation, incorporations, corporate distributions, redemptions, liquidations, reorganizations, accumulated earnings tax, net operating losses and S corporations.

ACC 439 Not-for-Profit Accounting

3. 000 Credits

Prerequisites: ACC 356

To study the principles and procedures of accounting for notfor-profit entities. Topics may include: state and local government financial accounting, financial accounting for selected other entities, managerial concepts and current issues. Students will not receive credit for both ACC 439 and ACC 539.

ACC 457 Auditing

3, 000 Credits

Must be enrolled in one of the following Classes:

Senior Graduate

Prerequisites: ACC 380 and (ACC 356 or ACC 358)

To study generally accepted auditing standards, internal control, principal audit objectives, the structure of audit programs, audit procedures, professional legal liability, ethical standards, statistical sampling techniques, the audit of EDP systems, auditor's report and management letters. Senior standing and 12 hours of Accounting coursework, exclusive of taxation, which includes at least 6 hours beyond ACC 299 taken in the School of Management.

ACC 480 Information Tech Eval & Control

3. 000 Credits

Prerequisites: (ACC 380 or MIS 310) and ACC 457*

The course emphasizes the control and evaluation of information systems to ensure accounting and management financial reporting and information processing objectives are accomplished. The course covers the theory of control evaluation, design of internal control, and the evaluation of internal controls in traditional and emerging information technology environments. Emphasis will be placed on current technologies in use by business organizations, emerging technologies, and the application of current profession guidance to evaluate existing and proposed information systems. (YR)

ACC 482 Seminar: Accounting

1. 000 TO 3. 000 Credits

Must be enrolled in one of the following Colleges:

College of Business

Must be enrolled in one of the following Classes:

Senior

To provide students with an opportunity for intensive study in current areas related to the research activities and/or professional activities of faculty members. Permission of College of Business.

ACC 492 Research: Accounting

1. 000 TO 3. 000 Credits

Must be enrolled in one of the following Colleges:

College of Business

Must be enrolled in one of the following Classes:

Senior

To provide the advanced student with the opportunity to undertake a research project under the supervision of a faculty member. At least two weeks prior to registration in the term when such a course is to be elected, an interested student must submit to the dean of the school a written request for permission to elect a research course, on a form available in the school office. The request will include a description of the proposed research project. The dean will review the proposal with faculty members to ascertain availability of relevant faculty supervision and to establish appropriate credit. Permission of the College of Business.

Aviation Management (AVM) COURSE OFFERINGS

AVM 400 Aviation Grd Op/Qual Assurance

3. 000 Credits

May not be enrolled in one of the following Degrees: Bachelor of Business Admin

This course will study the processing and management of passengers, cargo, aircraft, equipment, and facilities at airports; and the current and future trends for using a quality management system such as ISO 9000 in the aviation industry. Credit cannot be applied to College of Business degree programs. (F, W)

AVM 410 Aviation Bus, Fin & Law

3. 000 Credits

May not be enrolled in one of the following Degrees: Bachelor of Business Admin

This course will discuss and examine airports as a business, the source of capital funds, revenues, legal requirements and issues that impact airports and airlines. Credit cannot be applied to School of Management degree programs. (W, S)

Business Administration (BA)

COURSE OFFERINGS

BA 100 Business in a Changing World

3. 000 Credits

May not be enrolled in one of the following Major fields of study:

Accounting

Management

This interdisciplinary course introduces students to how business works. The course emphasizes hands-on, interactive learning. Students will learn about emerging issues and career opportunities in business areas.

BA 300 Career Planning & Develop

1, 000 Credits

Must be enrolled in one of the following Levels:

Undergraduate

Must be enrolled in one of the following Colleges:

College of Business

May not be enrolled in one of the following Major fields of study:

Prebusiness

This course focuses on providing students with the necessary skills to achieve their career goals. Topics include: laying the groundwork to selecting a career, developing job search correspondence, developing job search techniques, developing a networking strategy, developing interviewing skills, asking for references and recommendations, and evaluating and negotiating job offers. Students will be required to develop a job skills portfolio which will include documentation evidencing the application of these skills.

BA 320 Proj Mgmt & Leadership Skills

3. 000 Credits

Must be enrolled in one of the following Classes:

Senior

Junior

This course is intended to be a writing intensive problem based interdisciplinary course in project management skills. Topics covered will include benefits of project management, definition of a project, development of a project plan, execution of a plan, and management of change. Leadership skills will be emphasized as they relate to conflict resolution, motivating and coaching team members and listening to team members. Students will complete and present a project plan using the appropriate project management and presentation software.

BA 330 Managerial Communication

3. 000 Credits

Must be enrolled in one of the following Classes:

Senior

Junior

Prerequisites: COMP 106 or COMP 220 or COMP 270 or

CPAS 40

This course is designed to improve the student's ability to communicate effectively within an organizational setting. Communication theory, strategies, techniques and skills that are essential for success in the business environment will be examined. Specific objectives during the semester will be to examine and improve managerial writing ability and to enhance interpersonal communication skills.

BA 400 Corporate Responsibility

3. 000 Credits

Must be enrolled in one of the following Levels:

Graduate

May not be enrolled in one of the following Classes:

Junior

Sophomore

Freshman

Prerequisites: COMP 280 or COMP 106 or COMP 220 or

COMP 270 or CPAS 40

The focus of this writing intensive interdisciplinary course will be on examining the responsibility, if any, that business should have as part of the solution to the challenges of globalization. As part of this examination, the course will focus on corporate responsible behavior and its relationship to corporate governance and maximizing shareholder value. The ethical, business, and legal cases as they relate to corporate responsible behavior in the areas of

human rights, labor, environment, and corruption will be examined.

BA 480 Seminar: Bus Administration

1. 000 TO 3. 000 Credits

Must be enrolled in one of the following Classes:

Senior

To provide students with an opportunity for intensive study in current selected areas related to the research activities and/or professional activities of faculty members.

BA 490 Research: Bus Administration

1, 000 TO 3, 000 Credits

Must be enrolled in one of the following Colleges:

College of Business

To provide the advanced student with the opportunity to undertake a research project under the supervision of a faculty member. At least two weeks prior to registration in the term when such a course is to be elected, an interested student must submit to the dean of the school a written request for permission to elect a research course, on a form available in the school office. The request will include a description of the proposed research project. The dean will review the proposal with faculty members to ascertain availability of relevant faculty supervision and to establish appropriate credit.

Business Economics (BE)

COURSE OFFERINGS

BE 401 Managerial Economics

3. 000 Credits

Must be enrolled in one of the following Levels:

Undergraduate

Must be enrolled in one of the following Classes:

Senior

Undergraduate NCFD

Junior

Prerequisites: ECON 202 and ECON 201 and (MATH

104* or MATH 105*)

This intermediate level course presents price theory with business applications. Topics include consumption utility theory, production and cost theory, market structures and pricing strategies. Statistical estimation techniques of economic models are presented as well as modern elaborations of price theory. (YR)

BE 403 Business Conditions Analysis

3. 000 Credits

Prerequisites: ECON 201 and ECON 202

To study the basics and recent developments in aggregate economic theories and their applications from business perspectives. Topics include various sectors of aggregate demand and supply and related variables affecting economic performance and conditions.

BE 487 Seminar: Business Economics

1. 000 TO 3. 000 Credits

Must be enrolled in one of the following Colleges:

College of Business

Must be enrolled in one of the following Classes:

Senior

To provide students with an opportunity for intensive study in current selected areas related to the research activities and/or professional activities of faculty members. Permission of the College of Business

BE 497 Research: Business Economics

1. 000 TO 3. 000 Credits

Must be enrolled in one of the following Colleges:

College of Business

Must be enrolled in one of the following Classes:

Senior

To provide the advanced student with the opportunity to undertake a research project under the supervision of a faculty member. At least two weeks prior to registration in the term when such a course is to be elected, an interested student must submit to the dean of the school a written request for permission to elect a research course, on a form available in the school office. The request will include a description of the proposed research project. The dean will review the proposal with faculty members to ascertain availability of relevant faculty supervision and to establish appropriate credit. Permission of College of Business.

Business Internship (BI)

COURSE OFFERINGS

BI 350 Business Internship

3. 000 Credits

Must be enrolled in one of the following Colleges:

College of Business

The internship provides full-time, paid business experience for students in a formal, monitored program. Participating employers hire students within parameters set by the internship program. Students are required to submit a report and other paperwork at the end of each work assignment and participate in an evaluative session with the internship staff.

BI 355 Part-Time Business Internship

1. 000 Credits

Must be enrolled in one of the following Degrees:

Bachelor of Business Admin

Must be enrolled in one of the following Colleges:

College of Business

Must be enrolled in one of the following Classes:

Senior

Junior

The internship provides part-time, paid and unpaid business experience for students in a formal, monitored program. Participating employers hire students within parameters set by the internship program. Students are required to submit a report and other paperwork at the end of each work assignment and participate in an evaluative session within the internship staff. (A maximum of 6 credit hours of internship course work may be applied toward elective graduation requirements.)

BI 450 Business Internship II

3. 000 Credits

Prerequisites: BI 350

The internship provides full-time, paid business experience for students in a formal, monitored program. Participating employers hire students within parameters set by the internship program. Students are required to submit a report and other paperwork at the end of each work assignment and participate in an evaluative session with the internship staff.

BI 455 Part-Time Bus Internship II

1. 000 Credits

Must be enrolled in one of the following Degrees:

Bachelor of Business Admin

Must be enrolled in one of the following Classes:

Senior Junior

Prerequisites: BI 355

The internship provides part-time, paid and unpaid business experience for students in a formal, monitored program. Participating employers hire students within parameters set by the internship program. Students are required to submit a report and other paperwork at the end of each work assignment and participate in an evaluative session within the internship staff. (A maximum of 6 credit hours of internship course work may be applied toward elective graduation requirements.)

BI 460 International Business Intern

1,000 TO 3,000 Credits

Must be enrolled in one of the following Colleges:

College of Business

May not be enrolled in one of the following Major fields of study:

Prebusiness

Must be enrolled in one of the following Classes:

Senior Junior

The internship allows flexibility to engage in applied practical work experience outside of the United States, through paid or unpaid and full or part time work experiences. Participating organizations hire students within parameters set by the Internship Office throughout their experience. Students are required to submit reports, evaluation documents and participate in an assessment session with the internship staff. Students are responsible for their own legal, housing and transportation issues. This course will satisfy general elective credit.

BI 470 Business Internship III

3. 000 Credits

Must be enrolled in one of the following Colleges:

College of Business

May not be enrolled in one of the following Major fields of study:

Prebusiness Prerequisites: BI 450

The internship provides full-time paid business experience for students in a formal, monitored program. Participating employers hire students within parameters set by the internship program. Students will have an increasing level of responsibility and application of academic knowledge, or students will be involved with application of new academic knowledge. Students are required to submit a report and other paperwork at the end of the work assignment and participate in an evaluative session with the internship staff.

BI 475 Part-Time Bus Internship III

1. 000 Credits

Must be enrolled in one of the following Degrees:

Bachelor of Business Admin

Must be enrolled in one of the following Classes:

Senior Junior

Prerequisites: BI 455

The internship provides part-time paid and unpaid business experience for students in a formal, monitored program.

Participating employers hire students within parameters set by the internship program. Student will have an increasing level of responsibility and application of academic knowledge, or students will be involved with application of new academic knowledge. Students are required to submit a report and other paperwork at the end of each work assignment and participate in an evaluative session within the internship staff. (A maximum of 6 credit hours of internship course work may be applied toward elective graduation requirements.)

Business Policy and **Strategy** (BPS)

COURSE OFFERINGS

BPS 451 Strategic Management

3. 000 Credits

Must be enrolled in one of the following Classes:

Prerequisites: FIN 401 and (MIS 310 or ITM 310 or ACC

380) and OB 354 and MKT 352 and OM 400

This course is intended to be a comprehensive and integrative capstone course for the undergraduate business student. The central focus of this course is strategic management as opposed to the functional orientation that the student has experienced in most of his/her previous courses. Emphasis is on strategy formulation and implementation. Topics covered include the analysis of a company's external and internal environment; the development of a strategic vision and organizational objectives: the design of strategy at the functional, business, corporate, and international levels; and the creation of the organizational structure, operational policies and procedures, and reward systems.

Decision Sciences (DS)

COURSE OFFERINGS

DS 300 Quantitative Model and Anlys I

3. 000 Credits

Must be enrolled in one of the following Classes:

Sophomore Senior

Junior

Prerequisites: (MATH 113 or MPLS 116 or MATH 115)

To introduce fundamental concepts and methods in data analysis, probability, estimation, and statistical inference for application in management and management science. Topics include: basic probability theory, discrete and continuous random variables and distributions, sampling and data analysis, sampling distributions, estimation, confidence intervals and hypothesis testing, introductory regression analysis and utilization of statistical software packages.

DS 350 Quantitative Model and Anly II

3. 000 Credits

Prerequisites: DS 300

To continue from DS 300, during the first half of the course, the study of the concepts and methods in data analysis and statistical inference, as well as to introduce, in the second half of the course, basic linear optimization methods and models applied in the formulation, quantification, analysis, and solution of management decision problems. Topics include: simple and multiple linear regression, analysis of variance, sampling, correlation, formulation and solution of linear programming problems, transportation and transshipment models, utilization of software packages for statistical analysis and optimization.

DS 425 **Optimization Modeling and Anly**

3. 000 Credits Prerequisites: DS 350

To continue, from DS 350, the study of optimization methods and models applied in the formulation, quantification, analysis and solution of management decision problems. Topics include: network analysis (including PERT-CPM), goal and multiobjective linear programming, integer programming, dynamic programming, Markovian decision processes, nonlinear programming.

DS 426 **Introduction to Simulation**

3. 000 Credits Prerequisites: DS 350

To introduce the concepts and methods of discrete-event simulation for the modeling and analysis of complex systems. Topics include: basic simulation modeling, modeling complex systems, simulation languages, selection of input probability distributions, random-number generators, generating random variable values, output data analysis for a single system, statistical techniques for comparing alternative systems, validation of simulation models, variance-reduction techniques, experimental design and optimization.

Seminar: Decision Sciences

1, 000 TO 3, 000 Credits

Must be enrolled in one of the following Colleges:

College of Business

Must be enrolled in one of the following Classes:

Senior

To provide students with an opportunity for intensive study in currents elected areas related to the research activities and/or professional activities of faculty members. Permission of the College of Business

DS 499 Research: Decision Sciences

1. 000 TO 3. 000 Credits

Must be enrolled in one of the following Classes:

To provide the advanced student with the opportunity to undertake a research project under the supervision of a faculty member. At least two weeks prior to registration in the term when such a course is to be elected, an interested student must submit to the dean of the school a written request for permission to elect a research course, on a form available from the school office. The dean will review the proposal with faculty members to ascertain availability of relevant faculty supervision and to establish appropriate credit.

Entrepreneurship (ENT)

COURSE OFFERINGS

ENT 400 Intro to Entrepreneurship

Must be enrolled in one of the following Classes:

Senior

Graduate

This course describes the entrepreneurial process and explores issues, concepts, and procedures involved in conceiving of, planning for, and creating a new business. It emphasizes the need for careful identification of products or services to be offered, specification of the target market(s), and the benefits the enterprise will provide to prospective customers, determining resource requirements, locating resource providers, and

developing essential operating and administrative systems. Students will identify an actual business venture they are considering, develop a business plan, and present that plan at the end of the term. (YR)

Finance (FIN)

COURSE OFFERINGS

FIN 200 Personal Finance

3. 000 Credits

College of Business

May not be enrolled in one of the following Classes:

Junior Senior Graduate

To survey financial planning for the individual. Topics include: bank relations, credit, borrowing money, savings, budgeting, investments, stocks and bonds, mutual funds, insurance, real estate, annuities, social security, income taxes, wills, trusts and estate planning.

FIN 401 Corporate Finance

3. 000 Credits

Prerequisites: (ACC 297 or ACC 298) and DS 300 and ECON 201 and ECON202

Introduces the financial goals of a corporation with particular attention to the creation of value. The time value of money and the valuation of financial and real assets receive particular attention. Additional topics include risk and return, market efficiency, short-term financial management, and the domestic and international economic environments.

FIN 402 Advanced Corporate Finance

3. 000 Credits

Prerequisites: FIN 401

To provide the study of advanced topics, with particular attention to capital structure and dividend policy. Additional topics such as hedging, option pricing, agency theory, methods of financing, and corporate control will be presented. Global aspects of these topics will be addressed where appropriate. (YR)

FIN 407 Investment Fundamentals

3. 000 Credits

Prerequisites: FIN 401

To study the current investment scene and analyze the characteristics of securities and the role in investment strategies. Topics include: securities markets, bonds, stocks, options, investment strategies, portfolio theories and management.

FIN 443 Com Bank: Functn and Operatns

3. 000 Credits

Prerequisites: FIN 401

The topics to be included in the course are: commercial bank management, loan portfolio management and international banking. Specific aspects of the commercial banking environment, such as legislation and regulation, are also covered.

FIN 445 Corporate Fin Models and Appls

3. 000 Credits

Prerequisites: FIN 402

This course focuses on the analysis of financial decisions by applying theories and models to practical problems and cases. The subject coverage includes capital budgeting and financing (cost of capital, capital structure, dividend policy, etc.), working capital management (credit, inventory, bank relations, etc.), and other special topics (e. g., mergers and acquisitions). The coursework is appropriate for students seeking careers in corporate financial management, commercial lending, and investment banking.

FIN 447 Derivative Markets

3. 000 Credits

Prerequisites: FIN 401 and (FIN 402 or FIN 407 or FIN 443 or IB 441)

Going beyond investment fundamentals, the focus of this course is on the more speculative aspects of investment. Speculative securities (such as options, warrants, and convertibles) and commodity futures (including financial and currency futures) are covered. The structure of the speculative markets and the role of speculation, such as hedging, risk-shifting, and the establishment of future-spot price relationship are analyzed in the context of a competitive market environment.

FIN 448 Real Estate Financing

3. 000 Credits

Prerequisites: FIN 401

The purpose of this course is to introduce the student to the different types of mortgages, the sources of real estate loans and the workings of the secondary mortgage markets. It will also cover the application, loan processing, underwriting, and closing processes as well as closely related topics such as property appraisal and insurance, title insurance, and foreclosures.

FIN 456 Fixed Income Securities

3. 000 Credits

Must be enrolled in one of the following Colleges:

College of Business

Must be enrolled in one of the following Major fields of study:

Finance

Must be enrolled in one of the following Classes:

Senior

Junior

Prerequisites: FIN 407 and FIN 447 and (MATH 113 or MATH 115 or MPLS 115)

The fixed income market, accompanied by the introduction of sophisticated financial engineering techniques, has grown enormously over the last two decades. Today, the fixed income market has been a vital segment of the global financial market. This course covers major topics associated with this market, including bond pricing, yields, and volatility; term structure of interest rates and yield curve; market structure and analytical techniques for Treasury, municipal, corporate bonds, mortgagebacked securities, asset-backed securities, and bond with embedded options. The fundamental objective of this course is to help students develop analytical skills for pricing fixed income securities and managing interest rate risk. In addition, materials covered in this course are compatible with the Common Body of Knowledge in Analysis of Debt Investments that is required by the Chartered Financial Analysts (CFA) examination. Students will not receive credit for both FIN 456 and FIN 656.

FIN 484 Seminar: Financial Management

1. 000 TO 3. 000 Credits

Must be enrolled in one of the following Colleges:

College of Business

Must be enrolled in one of the following Classes:

Senior

Prerequisites: FIN 401

To provide students with an opportunity for intensive study in currents elected areas related to the research activities and/or professional activities of faculty members. Permission of the College of Business

FIN 494 Research: Financial Mgt

1. 000 TO 3. 000 Credits

Must be enrolled in one of the following Colleges:

College of Business

Must be enrolled in one of the following Classes:

Senior

Prerequisites: FIN 401

To provide the advanced student with the opportunity to undertake a research project under the supervision of a faculty member. At least two weeks prior to the term when such a course is to be elected, an interested student must submit to the dean of the school a written request for permission to elect a research course, on a form available in the school office. The request will include a description of the proposed research project. The dean will review the proposal with faculty members to ascertain availability of relevant faculty supervision and to establish appropriate credit. Permission of the College of Business.

Human Resource Management (HRM)

COURSE OFFERINGS

HRM 305 Human Resource Policy/Admin

3. 000 Credits

Must be enrolled in one of the following Levels:

Undergraduate

May not be enrolled in one of the following Classes:

Sophomore

Freshman

To examine personnel policy making and administration relative to the achievement of the objectives of the firm through the eyes of general management. Topics include: recruitment and selection, wage and salary administration training, evaluation, discipline and industrial relation activities. Cases are analyzed.

HRM 406 Staffing, Training & Develop

3. 000 Credits

Prerequisites: HRM 405

The course examines how to design, administer, and evaluate employee staffing, selection, training, and development activities that support organizational strategies. The course is geared both toward those who are or will be (a) HR managers who will develop and administer staffing and training programs and (b) managers in other functional areas who want to improve their personal effectiveness in selecting and developing employees. Key topics to be covered include: staffing strategy and planning; job design and analysis; external and internal recruiting; employee testing and assessment methods; interviewing; measurement, validation, and decision-making issues in selection; instructional design and delivery; methods for developing employees and managers; career management; laws and regulations affecting staffing and training; evaluation methods for staffing and training activities; and issues in staffing and training for an international workforce. (YR)

HRM 407 Compensation & Performance Mgt

3. 000 Credits

Prerequisites: HRM 405

The course examines how to design, administer and evaluate compensation and performance appraisal programs that support organizational strategies. The course is geared both toward those who are or will be (a) HR managers who will develop and administer pay and appraisal programs and (b)managers in other functional areas who want to improve their personal effectiveness in administering pay performance appraisals. Key topics to be covered include: merit and incentive pay, methods for internally valuing jobs, external labor markets and job pricing, design and administration of pay structures, employee benefits, compensating executives and expatriates, purposes and measurement methods for performance appraisals, performance criteria, rater processes and biases, performance reviews, and team-based pay and performance. (YR)

HRM 408 Management-Union Relations

3. 000 Credits

Prerequisites: HRM 405 and OB 354

To provide interpretation, insight, and understanding of the impact of management and union institutions on employee relations. Topics include labor union structure, aims, and operations, management objectives and functions, collective bargaining agreements, wage bargaining, industrial conflict and dispute settlements, labor relations legislation, and public intervention in management-union activities. A major portion of the course is devoted to a bargaining simulation exercise.

HRM 485 Seminar: Human Resource Mgmt

1. 000 TO 3. 000 Credits

Must be enrolled in one of the following Colleges:

College of Business

Must be enrolled in one of the following Classes:

Senior

To provide students with an opportunity for intensive study in current selected areas related to the research activities and/or professional activities of faculty members. Permission of the College of Business.

HRM 495 Research: Human Rsrch Mgmt

1. 000 TO 3. 000 Credits

Must be enrolled in one of the following Colleges:

College of Business

Must be enrolled in one of the following Classes:

Senior

To provide the advanced student with the opportunity to undertake a research project under the supervision of a faculty member. At least two weeks prior to registration in the term when such a course is to be elected, an interested student must submit to the dean of the school a written request for permission to elect a research course, on a form available in the school office. The request will include a description of the proposed research project. The dean will review the proposal with faculty members to ascertain availability of relevant faculty supervision and to establish appropriate credit.

Information Technology Management (ITM)

COURSE OFFERINGS

ITM 120 Fundamentals of Info Systems

3, 000 Credits

This course introduces the fundamental concepts of computer and information systems, and provides exposure to basic microcomputer application software. Topics include the function and architecture of computer hardware and software technologies, business application of computer and information technologies, and their organizational implications. Microcomputer applications include basics of operating systems, spreadsheet packages, graphics packages, and database management systems. Credit cannot be given for ITM 120 and any of MIS 120, CIS 121, 122, 123. (F, W, S)

Bus Application Programming

3. 000 Credits

This course is an introduction to basic concepts in computer programming with an emphasis on business applications. In the course, students will develop an understanding of fundamental programming logic and learn to use basic programming structures to solve business problems. Students are introduced to program development cycle and programming principles. The course covers principles of program design, programming structures, data types and structures, program testing, and debugging. Emphasis is placed on the implementation of programs with procedural structures, along with graphical user interfaces and event driven code. Upon completion, students should be able to design, code, test, and debug programs based on business requirement using a selected programming language. Credit cannot be given for both ITM 301 and MIS 301.

ITM 302 Object-Oriented Programming

3. 000 Credits

Must be enrolled in one of the following Levels:

Undergraduate

Prerequisites: ITM 301 or MIS 301

This course introduces the basic concepts of object-oriented programming with an emphasis on business applications. Students will develop an understanding of object-oriented modeling and learn to use object-oriented analysis and design techniques to solve simple business problems. Students are introduced to OO application development methodology and environment. The course covers principles of object-oriented programming, objects and classes, abstract data types, implementation of inheritance and polymorphism, database access, and graphic user interfaces. Upon completion, students should be able to design, code, test, and debug programs based on business requirements using a selected object-oriented programming language. Credit cannot be given for both ITM 302 and MIS 302.

ITM 310 Info Systems in Management

3. 000 Credits

Must be enrolled in one of the following Classes:

Sophomore

Junior

Senior

Co-requisites: ITM 311

This course provides an overview of information systems in the business world. It presents an organizational view of how to use information technology to create competitive firms, manage

global organizations, and provide useful products and services to customers. Topics include hardware, software, databases, telecommunications systems, the strategic use of information systems, the development of information systems, and social and ethical issues involved with information systems. Credit cannot be given for both ITM 310 and MIS 310.

ITM 311 Mgmt Information Sys Lab

1. 000 Credits

Must be enrolled in one of the following Colleges:

College of Business

Must be enrolled in one of the following Classes:

Sophomore

Senior

Junior

Prerequisites: ITM 310* Co-requisites: ITM 310

ITM 311 is a lab component of ITM 310. Students will complete weekly laboratory assignments to reinforce the concepts of ITM 310 to use information technology to solve business problems. In addition, the use of several common applications (e. g., Word, Excel, Access, and PowerPoint) will also be covered at beginning to advanced levels.

ITM 321 Database Systems I

3, 000 Credits

Prerequisites: ITM 310 or MIS 310 or ACC 380

This course examines the processes and tools used to design and implement database systems in business. The goal of this course is to provide adequate technical detail while emphasizing the organizational and implementation issues relevant to the management of computerized data in an organizational environment. A class project involving the design and implementation of a database using a microcomputer database management system is performed. Topics include concepts of database systems, conceptual database design, logical database design, physical database design, database implementation, and data retrieval. Credit cannot be given for ITM 321, MIS 321 and CIS 421.

ITM 331 Info Systems Development

3. 000 Credits

Must be enrolled in one of the following Levels:

Undergraduate

Prerequisites: (ITM 310 or MIS 310 or ACC 380) and

(ITM 321* or MIS321)

This course provides a foundation in systems analysis and design concepts, methodologies, techniques, and tools. Students will learn to analyze an organizational problem, define user requirements, design an information system, and plan an implementation. Methodologies covered will include the traditional life cycle approach as well as newer methodologies such as object-oriented approach, joint applications development (JAD), and prototyping. A semester-long project gives students the opportunity to apply these techniques to a business problem. This project will use technologies such as a computer-aided software engineering (CASE) tool, a database management system (DBMS), or a fourth-generation language. Credit cannot be given for both ITM 331 and MIS 331. (F, W, S)

ITM 351 Networking and Collab Comp

3. 000 Credits

Prerequisites: ITM 310 or MIS 310 or ACC 380

This course provides an introduction to data communication, networks, distributed processing and collaborative computing. The course will study the technical and management aspects of computing networks and distributed systems supporting a wide range of organizational functions from organizational process to managerial strategic decision making, from personal to group to organizational computing. The applications of telecommunications in the work settings and management issues of telecommunications will be addressed. The social and organizational implications of the telecommunications technology are also examined. Credit cannot be given for both ITM 351 and MIS 351.

ITM 371 Managing Elec Commerce Syst

3. 000 Credits

Prerequisites: ITM 310 or MIS 310 or ACC 380

This course focuses on technical and managerial issues that must be addressed for the successful deployment of information systems that use the infrastructure of the Internet to support electronic commerce. The course assumes an understanding of databases, computer networks and data transmission, and some experience in some programming language. Topics include business models for electronic commerce; standards, protocols and technical architecture of the Internet; wireless Internet; Internet security and cryptography; online payment systems; intelligent agents; legal, ethical, social and political issues in electronic commerce; globalization and electronic commerce; and electronic commerce applications. A class project involving the creation and management of an electronic commerce initiative is performed. (YR)

ITM 381 Info Systems Project Mgmt

3, 000 Credits

Prerequisites: ITM 310 or MIS 310 or ACC 380

This course examines the management of information system projects in business organizations as well as human and organizational reactions to the changes brought about by new information systems. Topic include project planning, project controls, project reporting, information system projects and organizational change, factors affecting project success and failure, and project management software.

ITM 382 Advanced Computer Applications

3. 000 Credits

Must be enrolled in one of the following Levels: Undergraduate

Prerequisites: ITM 120 or MIS 120 or ITM 310 or MIS 310

The is an advanced course in computer applications, decision modeling, and business problem-solving. Topics will include Visual Basic for Applications (VBA), pivot tables, user interfaces, and application manipulation techniques for both spreadsheet and database applications. Complex formulae will be introduced to enable students to create sophisticated models for solving nested and complex business problems. Credit cannot be given for both ITM 382 and MIS 382.

ITM 383 Info Technology Security

3.000 Credits

Prerequisites: ITM 310 or MIS 310 or ACC 380

This course provides a foundation of IT security, methodologies, techniques, and tools. The course will cover both the managerial and technical sides of IT security. Topics include: security costs and benefits, information assets, security threats, network attacks, security planning, incident response, disaster recovery, and training. Hands-on lab sessions, interactive lectures, discussions, and guest speakers will be used throughout the course.

ITM 431 Database Systems II

3. 000 Credits

Prerequisites: ITM 321 or MIS 321

This capstone course will provide an opportunity for students to work as a member of a project team on a complex, real-world information systems project. The course examines the processes and tools used to develop, implement and administer database systems in business. A class project involving the development of a database using a client/server database management system in performed. Project management methodologies and tools used to manage complex information systems projects are also applied in the course.

ITM 491 Seminar: Manag Info Systems

3. 000 Credits

Must be enrolled in one of the following Classes: Senior

To provide students with an opportunity for intensive study in currents elected areas related to the research activities and/or professional activities of faculty members. Permission of the College of Business

ITM 492 Research: Manag Info Systems

3. 000 Credits

Must be enrolled in one of the following Classes: Senior

To provide the advanced student with the opportunity to undertake a research project under the supervision of a faculty member. At least two weeks prior to registration in the term when such a course is to be elected, an interested student must submit to the dean of the school a written request for permission to elect a research course, on a form available in the school office. The request will include a description of the proposed research project. The dean will review the proposal with faculty members to ascertain availability of relevant faculty supervision and to establish appropriate credit. Permission of the College of Business.

International Business (IB)

COURSE OFFERINGS

IB 441 International Financial Mgmt

3. 000 Credits

Prerequisites: FIN 401

The objective of this course is to orient students to the increasingly internationalized financial environment in which business operates. As such, it attempts to broadly survey topics that frequently confront decision makers in financial management. These topics include the balance of payment mechanism, international capital flow, international monetary system and financial institutions, the mechanics of foreign exchange markets, international credit and capital markets, and financial problems of multinational business.

IB 446 International Business

3. 000 Credits

Must be enrolled in one of the following Colleges:

College of Business

Must be enrolled in one of the following Classes: Senior

Designed as a survey course, International Business attempts to broadly cover the essential elements of international business. Topics will include: business in an international environment, theories of international trade and investment, international finance, corporate policy and strategy, functional management and operations, and international business relations.

IB 486 Seminar: International Bus

1. 000 TO 3. 000 Credits

Must be enrolled in one of the following Colleges:

College of Business

Must be enrolled in one of the following Classes:

Senior

This course explores issues of major importance to international banking. Topics discussed include the global banking environment, the operations of international commercial and investment banks, regulatory issues affecting the global banking industry, and international money and foreign exchange markets. The role, successes and weaknesses of multinational institutions for economic development are discussed along with the recently proposed reform measure. Students taking this course should expect to learn about the various categories of international lending and loan syndication, asset-related and project financing, international retail and private banking. They will gain skills in the various lending techniques practiced in global banking, and will obtain a better grasp of the problems facing international banking institutions today as a result of the continuous globalization of financial markets and the ever increasing consolidation of the industry.

IB 496 Research: Int Business

1,000 TO 3,000 Credits

Must be enrolled in one of the following Colleges:

College of Business

Must be enrolled in one of the following Classes:

Senior

To provide the advanced student with the opportunity to undertake a research project under the supervision of a faculty member. At least two weeks prior to registration in the term when such a course is to be elected, an interested student must submit to the dean of the school a written request for permission to elect a research course, on a form available in the school office. The request will include a description of the proposed research project. The dean will review the proposal with faculty members to ascertain availability of relevant faculty supervision and to establish appropriate credit. Permission of the College of Business

Law and Environment (LE)

COURSE OFFERINGS

LE 252 Personal Business Law

3. 000 Credits

Must be enrolled in one of the following Classes:

Senior

Sophomore

Graduate

Junior

This course is designed for the non-business student and includes business law topics of direct interest in the management of personal business affairs. Topics covered are: product safety regulation, contracts, personal property, real estate, mortgages, landlord-tenant, wills and estates, insurance, employer-employee relations, unfair business practices, and an introduction to the lawmaking and enforcement processes.

LE 452 The Legal Environment of Bus

3. 000 Credits

Must be enrolled in one of the following Classes:

Senior Junior

Prerequisites: COMP 106

To introduce the management student to the functioning of legal systems and the effect of regulation on the business environment. Topics covered include an exploration of legal and ethical forces that impact the policy and practice of business in dealing with customers, employers, owners, and competitors.

LE 453 Commercial Trans: Adv Topics

3. 000 Credits

Must be enrolled in one of the following Classes:

Junior

Prerequisites: LE 452

To study additional topics and complete the survey of basic business law. Topics covered are the sales, commercial paper, and secured transactions sections of the Uniform Commercial Code, and the study of property, estate planning, insurance, and liability of professionals.

Marketing (MKT)

COURSE OFFERINGS

MKT 352 Mktg Principles and Policies

3. 000 Credits

Must be enrolled in one of the following Classes:

Senior

Junior

An introductory course in the marketing activities associated with the free market system. The various components and functions of the marketing activities will be discussed in an integrated framework to provide insight into the role and scope of marketing in the business environment. The components and functions include: product development, pricing, promotion, distribution, consumer behavior and target market analysis.

MKT 360 Marketing and Society

3. 000 Credits

Must be enrolled in one of the following Levels:

Undergraduate

Must be enrolled in one of the following Classes:

Senior

Junior

This course explores the social scientific theories on consumption and consumer culture as well as ethical/public policy issues related to consumption and marketing. Topics will include: economic and sociological perspectives on consumer culture; the origins of consumer tastes, trends, and fashions; the psychology of happiness and how personal well-being is influenced by wealth, consumption, and materialism; and public policy concerns related to marketing and advertising. (YR)

MKT 382 Understanding Customers

3. 000 Credits

Prerequisites: MKT 352

Students in this course will improve their ability to understand what customers want right now, what they are going to want in the future, and how to adjust the marketing mix to build lasting relationships with consumers. To do this, students will learn more advanced models of market segmentation, targeting, and product positioning. This course utilizes concepts developed in

the behavioral sciences (economics, marketing, psychology, sociology, and anthropology) and qualitative research techniques to understand and predict consumer behavior, and enhance students' ability to communicate effectively with target market segments.

MKT 402 Marketing Management

3. 000 Credits

Prerequisites: MKT 352 and ECON 201 and ECON 202

A case-oriented course in which the understanding and insights of the various components and functions of marketing learned in MKT 352 are applied to practical situations. Marketing decisions will be evaluated and decided for a series of real-life cases in a number of areas including: general marketing, pricing, promotion, distribution and market research.

MKT 434 Sales Mgmt & Personal Selling

3. 000 Credits

Prerequisites: MKT 352

The purpose of this course is to provide a general understanding of the practice of sales management. The course is designed to provide a basic framework of what sales managers actually do and how they solve problems they may encounter. Team presentations, case analyses and class discussion are used throughout the course to describe and explain the skills required of sales managers to achieve their objectives.

MKT 436 Business to Business Mktg

3. 000 Credits

Prerequisites: MKT 352

To develop an understanding of that area of marketing that addresses the needs of the organizational customer in industry, government and institutions. The special challenges of the industrial market that confront the marketing manager and sales personnel are discussed in the course. Topics include: assessing industrial marketing opportunities, the organizational buying process, formulating industrial marketing strategy and evaluating industrial marketing strategy and performance.

MKT 454 Marketing Research

3. 000 Credits

Prerequisites: DS 300 and MKT 352

To introduce marketing research concepts and techniques for collection, analysis and interpretation of data for marketing decisions. Topics include: problem definition, research design, questionnaire construction, sampling, attitude scaling, statistical analysis, presentation and evaluation of research findings. A field research project may be included.

MKT 455 E-tailing and Retailing

3. 000 Credits

Prerequisites: MKT 352

This course introduces students to significant issues and analysis frameworks of 21st century retailing strategy and management, including retailing over the Internet, or "E-tailing." E-tailing and retailers are challenged to enhance customer experience, customer service and customer satisfaction. The students will learn the complexities and nuances of shopper behavior, shopper demographics, and how shopper decisions are influenced by store design, store environment, store atmosphere and merchandising, in brick-and-mortar and Internet stores. The course will elevate and enhance students' readiness and advancement in retail, brand management and marketing careers.

MKT 456 Advg and Sales Promotion

3. 000 Credits

Prerequisites: MKT 352

A survey of the principles of advertising and sales promotion, which examines problems related to advertising management. Topics include: the scope of the advertising business, determination of objectives, strategy formulation, creating effective advertising programs, media planning with emphasis on integrating new media into the mix, the role of dealers in promotion, establishing the advertising budget, advertising research and the social and legal aspects of advertising in society.

MKT 457 Global Marketing

3. 000 Credits

Must be enrolled in one of the following Classes:

Sophomore Senior Junior

Prerequisites: MKT 352 and ECON 201 and ECON 202

To provide students with an understanding of the components of marketing in the international environment. A working knowledge of the environment and the complex interrelationship between different components of marketing will be developed. The focus is on evolving a logical and integrated framework for international marketing decisions.

MKT 488 Seminar: Marketing

1. 000 TO 3. 000 Credits

Must be enrolled in one of the following Colleges:

College of Business

Must be enrolled in one of the following Classes:

Senior

To provide students with an opportunity for intensive study in current selected areas related to the research activities and/or professional activities of faculty members. Permission of the College of Business.

MKT 498 Research: Marketing

1. 000 TO 3. 000 Credits

Must be enrolled in one of the following Colleges:

College of Business

Must be enrolled in one of the following Classes:

Senior

To provide the advanced student with the opportunity to undertake a research project under the supervision of a faculty member. At least two weeks prior to registration in the term when such a course is to be elected, an interested student must submit to the dean of the school a written request for permission to elect a research course, on a form available in the school office. The request will include a description of the proposed research project. The dean will review the proposal with faculty members to ascertain availability of relevant faculty supervision and to establish appropriate credit.

Operations Management (OM)

COURSE OFFERINGS

OM 300 Intro to Operations Management

3. 000 Credits

May not be enrolled in one of the following Classes:

Freshman

Prerequisites: MATH 104 or MATH 105 or MPLS 113

Concerned with the strategic, tactical and short-term managerial issues relating to the efficient production of services and

products. Examples of such issues are: manufacturing technology selection, facility location, strategic, tactical and operational planning and control and quality. (F. W. S)

OM 460 Supply Chain Management

3, 000 Credits

Must be enrolled in one of the following Levels:

Undergraduate Prerequisites: OM 400

This course explores the basic concepts of managing flow of materials in a typical enterprise supply chain. Students will examine a complete overview of material flow, for internal and external suppliers, to and from the enterprise.

OM 465 Strategic Sourcing

3. 000 Credits

Must be enrolled in one of the following Classes:

Senior Sophomore Freshman Junior

Prerequisites: OM 300

This course provides an in-depth analysis of the procurement process and supplier management with strong analysis placed on managing a supplier base for both products and services. Both theoretical and quantitative perspectives will be offered. In addition, topics will be addressed from strategic, financial and global perspectives.

OM 470 Analys & Desgn of Supply Chain

3, 000 Credits

Must be enrolled in one of the following Levels:

Undergraduate Prerequisites: OM 400

The purpose of this course is to equip the student with the ability and the tools necessary to recognize, analyze, and resolve significant problems in the operation of a supply chain system through the application of quantitative techniques. This course focuses on the strategic role of the supply chain, key strategic drivers of supply chain performance, and the tools and techniques for supply chain analysis.

OM 475 Supply Chain Logistics Mgmt

3. 000 Credits

Must be enrolled in one of the following Levels:

Undergraduate Prerequisites: OM 400

The overarching course objective is to develop an in-depth understanding of integrative managerial issues and challenges related to developing and implementing a firm's logistics strategy. Attention is directed to the logistical mission confronted by varied types of business organizations. Logistics is positioned as a value-adding process that achieves time and place synchronization of demand stimulation and operations fulfillment. Emphasis will be placed on challenges related to providing logistical support for procurement, manufacturing and market-distribution.

OM 480 ERP in SCM

3. 000 Credits

Must be enrolled in one of the following Classes:

Senior Sophomore Freshman Junior

Prerequisites: OM 300 and ITM 310

This course provides in-depth coverage of the role and impact of enterprise resource planning (ERP) concepts in managing a supply chain. The design of a supply chain information system (SCIS) and its various components is explored utilizing ERP concepts in matching supply and demand through the implementation of an integrated enterprise. Both theory and applications are emphasized in the course. Hands-on experience in the development of some components of SCIS utilizing ERP systems is provided.

OM 483 Seminar: Operations Management

1. 000 TO 3. 000 Credits

Must be enrolled in one of the following Colleges:

College of Business

Must be enrolled in one of the following Classes:

Senior

To provide students with an opportunity for intensive study in current selected areas related to the research activities and/or professional activities of faculty members. Permission of the College of Business.

OM 493 Research: Operations Management

1. 000 TO 3. 000 Credits

College of Business

Must be enrolled in one of the following Classes:

Senior

To provide the advanced student with the opportunity to undertake a research project under the supervision of a faculty member. At least two weeks prior to registration in the term when such a course is to be elected, an interested student must submit to the dean of the school a written request for permission to elect a research course, on a form available in the school office. The request will include a description of the proposed research project. The dean will review the proposal with faculty members to ascertain availability of relevant faculty supervision and to establish appropriate credit. Permission of the College of Business.

Organization Behavior (OB)

COURSE OFFERINGS

OB 354 Behavior in Organization

3. 000 Credit

Must be enrolled in one of the following Classes:

Senior Junior

To study the nature and dynamics of behavior within organizations from an open system theory viewpoint, emphasizing determinants and consequences of individual, interpersonal, small group and intergroup behavior. Group discussions and role-playing techniques will be used to develop leadership skills and methods and to foster understanding of applied problems in organizational behavior.

OB 401 Management Skills Development

3. 000 Credits

Must be enrolled in one of the following Classes:

Senior Junior

Prerequisites: OB 354

This course provides an opportunity to study the concepts, problems and techniques of managing the human resources of an

organization with emphasis on application and skill building. Topics include: skills development for interviewing, counseling and appraising employees; work team leadership and development; group problem solving and decision making; management of intergroup relationship and conflict resolution.

OB 402 Organizational Change & Devlp

3. 000 Credits

Prerequisites: OB 354

The purpose of this course is to introduce the theories, methods and practice of organizational change and development and to provide a conceptual framework for examples of planned change. Topics will include: processes of organizational change, intervention methods, sequencing and integration of change processes, change roles and role relations, change objectives and criteria for change.

OB 485 Seminar: Organizational Behavr

1. 000 TO 3. 000 Credits Must be enrolled in one of the following Colleges: College of Business

Must be enrolled in one of the following Classes:

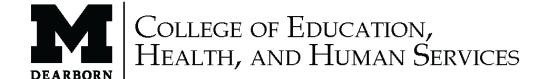
Senior

To provide students with an opportunity for intensive study in current selected areas related to the research activities and/or professional activities of faculty members. Permission of the College of Business.

OB 495 Research: Organizational Behvr

1. 000 TO 3. 000 Credits
 Must be enrolled in one of the following Colleges:
 College of Business
 Must be enrolled in one of the following Classes:

To provide the advanced student with the opportunity to undertake a research project under the supervision of a faculty member. At least two weeks prior to registration in the term when such a course is to be elected, an interested student must submit to the dean of the school a written request for permission to elect a research course, on a form available in the school office. The request will include a description of the proposed research project. The dean will review the proposal with faculty members to ascertain availability of relevant faculty supervision and to establish appropriate credit. Permission of the College of Business.



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College of Education, Health, and Human Services

Administration and Staff

Edward A. Silver, EdD, Dean

Mesut Duran, PhD, Associate Dean for Research and Administrative Affairs

Paul Fossum, PhD, Associate Dean for Academic Affairs

Paul Bielich, MLS, Instructional Learning Manager

Christopher Casey, BA, Instructional Learning Assistant

Karen Claiborne, MPA, Administrative Specialist

Becky Dresselhouse-Nauss, BA, Budget Analyst

Judy Garfield, Customer Service Assistant

Elizabeth Morden, Customer Service Assistant

Otlewski, Regional School Registrar Joann (Teacher Certification)

Catherine Parkins, BA, Customer Service Assistant

Robert Simpson, III, Systems Administrator

Carolyn Williams, Field Placement Coordinator

Academic Program Coordinators

Martha A. Adler, PhD, Coordinator, MA in Education

Bonnie M. Beyer, EdD, Coordinator, Educational Leadership Programs, Coordinator, Education Specialist, Co-Coordinator, Doctor of Education

Stein Brunvand, PhD, Coordinator, MA in Educational Technology

Christopher J. Burke, PhD, Co-Coordinator, Doctor Education

Susan Everett, PhD, Coordinator, MS in Science Education Paul Fossum, PhD, Coordinator, MA in Teaching

Seong Bock Hong, PhD, Coordinator, Early Childhood Program Belinda Lazarus, PhD, Coordinator, Special Ed: LD/EI and **Inclusion Specialist Programs**

Julie Taylor, PhD, Coordinator, Social Studies Education

Professors Emeriti

Paul Carter, EdD, Professor of Education

Joseph Cepuran, PhD, Associate Professor of Public Administration

Claudia Collin, PhD, Assistant Professor of Education

Grace Kachaturoff, EdD, Professor of Education

Raymond P. Kettel, EdD, Associate Professor of Education

Greta B. Lipson, EdD, Associate Professor of Education

Richard Moyer, EdD, Professor of Science Education

Jane A. Romatowski, EdD, Professor of Education

Rosalyn Saltz, PhD, Professor of Education

Daniel G. Sayles, PhD, Associate Professor of Education

Mary Trepanier-Street, EdD, Professor of Education

Darlene Van Tiem, PhD, Associate Professor of Education Roger Verhey, PhD, Professor of Mathematics

Faculty

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Stein Brunvand, PhD, University of Michigan, Associate Professor of Educational Technology

Christopher J. Burke, PhD, University of Illinois at Urbana-Champaign, Associate Professor of Science Education

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Danielle DeFauw, PhD, Oakland University, Assistant Professor of Education

Mesut Duran, PhD, Ohio University, Professor of Education

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Kirsten Dara Hill, PhD, Michigan State University, Associate Professor of Education

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Maiyoua Vang, PhD, University of California-Davis, Assistant Professor of Education

Cooperating Faculty

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Angela Krebs, PhD, Associate Professor of Mathematics Education

Judy Nesmith, MS, Senior Lecturer in Natural Sciences

Charlotte Otto, PhD, Professor of Chemistry

Margaret Rathouz, PhD, Associate Professor of Mathematics Education

Rheta N. Rubenstein, PhD, Professor of Mathematics Education Michael Shelly, EdD, Lecturer in Mathematics

Early Childhood Education Center Staff

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Sarah Kurtjian, BA, Teacher Linda Lapansee, Administrative Assistant Kelly Lenihan, BA, Teacher Cyndi McAuliffe, BA, Teacher Brenda Moner, Accounting Clerk Lia Simpson, Administrative Assistant

EDUCATION AT UM-DEARBORN

Education is not one career; it is many. Individuals specializing in education are qualified to pursue a wide variety of attractive and rewarding professions including teaching, corporate training, recreation, social service, and childcare. Wherever there is a need for people specifically prepared to teach others, there is a need for individuals with a background in education.

Still, most college graduates seeking a career in education elect to become classroom teachers. Teaching offers a wide choice of opportunities to work with persons of different age levels in a variety of specialized fields. It is a satisfying career for those who like to inspire growth in others and continue their own development.

Students admitted to any of the education programs offered at UM-Dearborn are provided with an academic and professional background suited to the challenges of education in a multicultural society. For further information, please visit the College of Education, Health, and Human Services website at www.soe.umd.umich.edu.

Our Work: Education, Health, and the Human Services

The College of Education, Health, and Human Services aims to prepare and sustain exemplary practitioners and administrators for work in the interrelated fields of education, human health, and human services. We do this through emphasis on scholarship, diverse clinical experiences, and practice in effective service delivery.

The College draws broadly upon institutional resources including faculty and programs in other colleges of the University. Additionally, facilities in local school districts, health-related settings, and other public agencies and private corporations regularly provide students with a spectrum of rich experiences.

The College contributes to the University of Michigan-Dearborn's identity as a dynamic metropolitan university where teaching and research interact to develop leaders and new knowledge in the tradition of the University of Michigan and in pursuit of impact in the metropolitan region.

Students in the College of Education, Health, and Human Services participate in the affairs of the unit in a variety of ways including programmatic advisory committees, student groups such as the Student Michigan Education Association (SMEA), and honor groups like the Phi Lambda Theta.

History of the College

Shortly after UM-Dearborn opened in 1959, a small teacher certification program was added to the liberal arts division. By 1969, under the leadership of its first faculty chairman, Paul D. Carter, the teacher certification program had grown into one of the largest academic departments on the campus. With the academic reorganization of the campus in the spring of 1973, the department became the Division of Urban Education with its own regentally

appointed associate dean, Richard W. Morshead. By 1987, the Division of Urban Education had become the School of Education led by Dean Morshead, and, soon, the School was granted authority to offer graduate programs, which expanded under subsequent deans John Poster (who served from 1990 to 2005), Paul Zionts (2005 to 2009), and Edward Silver (2010 to 2013). Graduate degree programs in the unit now include a MA in Early Childhood Education, an MA in Education, a MA in Educational Technology, an MA in Teaching, an MS in Science Education, an MA in Educational Leadership, an MEd in Special Education, an Education Specialist and a Doctor of Education. During the 2012-13 academic year, the Regents of the University of Michigan approved a change in the scope and the name of the School of Education, and, since September 1, 2013, the unit has been known as the College of Education, Health, and Human Services The CEHHS fosters connectedness among the academic endeavors in the unit, providing a unique focus on the interrelated nature of education, human health, and human services. In this way, the College mirrors the intermingling of these spheres in the lives of the professionals who work within them, and addressing the historically fractured nature of the preparation of professionals in these critically important fields.

Accreditation

The College of Education, Health, and Human Services is a fully accredited professional unit of UM-Dearborn. Along with the rest of UM-Dearborn, it carries the approval of The Higher Learning Commission and is a member of the North Central Association of Colleges and Secondary Schools. As a teacher preparation institution, it is a member of the American Association of Colleges for Teacher Education, the Michigan Association of Colleges for Teacher Education, and the Teacher Education Council of State Colleges and Universities. In 2001 its certification programs were approved through the periodic review of the Michigan Department of Education.

Special Facilities and Services

In addition to campus-wide facilities and services described elsewhere in the *Catalog*, the following special facilities and services are of particular interest to education students.

EARLY CHILDHOOD EDUCATION CENTER

The Early Childhood Education Center (ECEC), an auxiliary unit of the College of Education, Health, and Human Services, serves as an education and care site for university student, faculty, staff, and community children. The ECEC enrolls over 200 children, ages one through six, per term. Located in a shared facility with Oakwood Hospital's Center for Exceptional Families (CEF) at 18501 Rotunda Dr. in Dearborn, the two centers collaborate to provide services and programs for children with and without disabilities and their families. The ECEC facility also includes a full day kindergarten and summer programs. The ECEC serves as a teacher preparation facility for students enrolled in a variety of courses offered by the College of Education, Health, and Human Services. The ECEC Advisory Board makes recommendations to the administration regarding policies and decisions related to the center. The center is staffed with teachers having special training in early childhood education and is under the overall direction of a faculty director.

EDUCATION LABORATORIES

Curriculum laboratories are available to offer educational support to students in the areas of English/Language Arts (258 FCS), Science Education (270A FCS), Social Studies (268 FCS), and materials preparation (267 FCS). There is also a Mathematics Education Laboratory located in 2083 CB. These laboratories are designed to meet the needs of students and faculty in the College of Education, Health, and Human Services. These laboratories house an array of textbooks for elementary and secondary students, resource materials, and audiovisual equipment. Computers and other materials helpful in developing lessons with hands-on exploration of the subject matter are also available.

Students are encouraged to use the materials, equipment, and services the facilities provide when preparing for class preparations, practicum assignments, and student teaching. Students who have paid a laboratory fee for a specific course may use the laboratory without any additional charge. Students who have not paid a course fee must pay for the materials they use. Current prices are posted in the Materials Preparation Center. All fees are solely for the support of the Education Laboratories. Two microcomputer labs with the latest educational software are located in Rooms 190 and 194, FCS.

DEAN'S OFFICE

Edward Silver is Dean of the College of Education, Health, and Human Services. Paul Fossum and Mesut Duran are Associate Deans. The Office of the Dean is located in 253 Fairlane Center South Building (FCS), telephone (313) 593-5435.

STUDENT SERVICES OFFICE

The Student Services Office for The College of Education, Health, and Human Services is located in 262 FCS. All matters relating to College of Education, Health, and Human Services student records and teacher certification are handled in this office. Certification applications and advising appointments can be secured here, telephone (313) 593-5090.

FIELD PLACEMENT OFFICE

All matters related to pre-student teaching practica as well as student teaching are handled by the Field Placement Office (261 FCS), telephone (313) 593-5094.

Academic and Professional Standards

All matters in the College of Education, Health, and Human Services having to do with maintaining academic and professional standards are handled by the Professional Standards Committee or by the School's Executive Committee. The Executive Committee is responsible for acting in the place of the Governing Faculty on matters related to any of the School's instructional programs.

The Professional Standards Committee is responsible for acting on student petitions and other similar academic requests. Students may initiate petitions to the committee by securing appropriate forms in the Student Services Office. Such petitions must be signed by the student's education advisor before submission to the Professional Standards Committee. Both committees meet regularly throughout the academic year.

Policy Changes

College of Education, Health, and Human Services policies change periodically. This occurs when teacher certification and/or graduation requirements are changed by the Michigan Department of Education, by the wider campus community, or by the College of Education, Health, and Human Services itself. The primary responsibility for being aware of program requirements and for meeting appropriate standards rests with the student. Students are encouraged to review current policies, graduation, and certification requirements with their advisors through required annual advising. For information regarding academic advising see the General Information section of this *Undergraduate Catalog*.

Statement of Student Rights and Code of Student Conduct

The College of Education, Health, and Human Services adheres to the University policies regarding the Student Academic and Non-Academic Code of Conduct that were approved by the Senior Officers on May 11, 1994. Refer to this topic in the General Information section of this *Undergraduate Catalog* for further information

In addition the College of Education, Health, and Human Services at the University of Michigan-Dearborn holds high value and expectations in all academic undertakings. As the College of Education, Health, and Human Services trains students to educate and serve as role models for future generations, it demands academic excellence and honesty. The values of an academic community are grounded in the honesty of one's efforts and respect for the efforts of others. Students who engage in academic misconduct have a pernicious effect upon themselves, their fellow classmates, the reputation of the College and the University, society, and the future generations that are taught by these individuals. Academic integrity is expected in all aspects of coursework, relationships with fellow students, and the use of all University resources. Procedures describing the processes of adjudication and the jurisdiction of the CEHHS Academic Hearing Board are described on the CEHHS Student Resources web page.

<u>Bachelor's Degree</u> <u>Programs</u>

The College of Education, Health, and Human Services provides undergraduate students with a number of different program options through bachelor's degrees. These degrees are intended for those wishing to acquire a teaching certificate at the elementary and secondary school levels or for those planning on working with children and families.

Individuals who successfully complete undergraduate degree programs in Elementary Education, Early Childhood Education, Elementary Learning Disabilities and Children and Families will receive their bachelor's degree directly through the College of Education, Health, and Human Services. Students completing Secondary Education programs receive a recommendation for their teacher's certificate through the College of Education, Health, and Human Services. Their degrees will be recommended by the College of Arts, Sciences, and Letters.

Undergraduate Degree Program Requirements

The College of Education, Health, and Human Services offers three different baccalaureate degrees: the Bachelor of Arts degree, the Bachelor of Science degree, and the Bachelor of General Studies degree. Where appropriate, these degrees have been combined with programs leading to the Michigan Provisional Teacher's Certificate.

BACHELOR OF ARTS (AB)

Ordinarily, this degree is available through the College of Education, Health, and Human Services to those seeking an elementary teaching certificate. To be recommended for the degree by the faculty, students must satisfy all appropriate residence requirements, distribution requirements, and program requirements. Students seeking secondary certification earn their bachelor's degrees from the College of Arts Sciences and Letters; coordinated programs in the College of Education, Health, and Human Services result in the CEHHS faculty's recommendation for secondary certification.

BACHELOR OF SCIENCE (BS)

This degree is available through the College of Education, Health, and Human Services to those individuals seeking a teaching certificate with a major in one of the natural sciences or in mathematics. It will be granted to those students who earn 60 or more credit hours in mathematics, the natural sciences, computer science, or any combination of these, with at least 20 of these hours in upper division (junior-senior level) courses.

BACHELOR OF GENERAL STUDIES (BGS)

This degree is available to those wishing to pursue the Children and Families program. To be recommended for a BGS degree, a student must satisfy campus distribution requirements as well.

BGS: TWO PLUS TWO OPTION

Students who have completed an associate's degree in an approved area at a community college are eligible to apply for admission to the Bachelor of General Studies degree. Admission, however, is not automatic. Individuals are expected to meet the specific admission requirements for the particular BGS Two Plus Two programs into which they are seeking entry. Further professional and general education studies will be added at UM-Dearborn to those studies already completed by students at the community college level. To be recommended for the BGS degree under this option, students must satisfactorily complete all degree requirements called for by their particular College of Education, Health, and Human Services program.

Details regarding any of the programs cited above can be found in later sections of this *Undergraduate Catalog*.

Admission to the College of Education, Health, and Human Services

APPLICATION PROCEDURE

Individuals seeking a bachelor's degree and recommendation to the Michigan Department of Education for a teaching certificate should apply through the UM-Dearborn Office of Admissions located in the University Center. Individuals holding a bachelor's degree from an accredited institution and seeking certification through one of the College's post-degree programs should apply through the College of Education, Health, and Human Services Student Services Office, 262 FCS.

ADMISSION OF FRESHMEN

Individuals who have qualified for admission as freshmen to UM-Dearborn and wish to specialize in an elementary school teaching major, early childhood education, learning disabilities, or children and families will be admitted to the College of Education, Health, and Human Services. Those who intend to earn a specific secondary school teaching major are to be admitted for their degree to the College of Arts, Sciences, and Letters.

ADMISSION OF TRANSFER STUDENTS

Many individuals enter the College of Education, Health, and Human Services after completing a portion of college work at other two- or four-year institutions. These persons are considered transfer students. Like other students admitted to degree programs at UM-Dearborn, transfer students entering the College of Education, Health, and Human Services will be expected to fulfill all degree/certification requirements. Admission to the College of Education, Health, and Human Services does not necessarily ensure admission to the teacher certification program.

STUDENT READMISSION

- Any student absent from the University for a period of one calendar year (counted from the last day of the term in which the student was last enrolled) must meet the teacher education requirements in effect at the time of readmission.
- Any student applying for readmission with coursework five years or older must have acceptance of this work approved by the College of Education, Health, and Human Services at UM-Dearborn. Consult the School Student Services Office for procedures and readmission form.

Residency Requirements for Transfer Students

All individuals entering the College of Education, Health, and Human Services as transfer students must complete a major part of their total college work in residence at UM-Dearborn. This limits the number of semester hours that are transferable to UM-Dearborn from other institutions. The maximum amount of transfer credit allowed in any such program will depend on the type of institution at which the credit originally was earned. Typically, more credit can be transferred from a four-year institution and used toward a degree program than from a community college. The admission criteria are applied to all students without regard to race, color, sex, national origin, or creed. The table below details the School's transfer credit policy.

In the table below, institutions attended by students prior to their enrollment in a degree program at UM-Dearborn are grouped into three categories. Category A includes all two-year institutions; category B includes all four-year institutions other than the schools and colleges of the University of Michigan (UM); category C is composed of those schools and colleges of the UM which are not located on the Dearborn campus. Maximum transferable credits and minimum residence requirements (both in semester hours) are given.

Categories of Previously Attended Institutions	Transferable Credits (Maximum)	Residence Requirement (Minimum)
A (only)	62	66
B (only)	75	53
C (only)	90	38
A and B (if attended in this sequence)	75 (62 from A)	53
A and C (if attended in this sequence)	90 (62 from A)	38
B and C	90 (75 from B)	38
A, B, and C (if attended in this sequence)	90 (62 from A, remaining from B & C)	38

Courses successfully completed prior to transfer may not correspond exactly to those offered by UM-Dearborn or the UM. Therefore, a broad policy has been established to evaluate them. If, after such evaluation, the student believes that proper weight has not been given to the courses completed prior to transfer, the student should contact the College of Education, Health, and Human Services Student Services Office for re-evaluation. No course in which a student received less than a grade of C, or has been graded on a pass/fail or satisfactory/unsatisfactory scale, will be transferred. No courses elected in the professional component (education courses) during the freshman and sophomore years are admissible to the program, except as general elective credit. Transfer students must meet all residence requirements. The exceptions to this ruling are those persons who complete the Pre-Elementary Associate Degree or the Pre-Secondary Associate Degree at Henry Ford Community College.

Courses at Other Institutions

Once admitted to UM-Dearborn and to the certification program, students are expected to complete their programs of study at UM-Dearborn. When documentable, extenuating circumstances occur, students must request permission to take off-campus courses using the established petition process in the College of Education, Health, and Human Services. Forms and information regarding deadlines are available in the College of Education, Health, and Human Services Student Services Office.

Class Standing and Course Elections

The number of credit hours earned toward graduation at the end of any given term determines a student's class standing. In the case of transfer hours, only the credit accepted toward a degree can be used in deriving the class standing of a student. Freshmen and sophomores are classified as lower-division students while junior and seniors are considered upper-division students.

CLASS STANDING

First two years of pre-professional study: Lower-division students

Freshman 0 to 24 credit hours Sophomore 25 to 54 credit hours

Last two years of undergraduate study: Upper-division students

Junior 55 to 84 credit hours Senior 85 to 128+ credit hours

Authorization to elect education courses in the professional sequence of courses at the University of Michigan is limited to upper-division students in good academic standing. Students must have at least junior class standing (55 semester hours), a cumulative GPA of 2.75, have taken the Campus Composition Placement Test, and passed the MTTC Professional Readiness Examination.

Academic Advising

Upon admission to a specific program in the College of Education, Health, and Human Services, each student is assigned a faculty advisor. This practice is aimed at helping the student plan a course of study that will fulfill the curriculum requirements in the most efficient manner.

Although all students are responsible for fully understanding the requirements of the programs they elect, they also are expected to meet regularly with their advisor. Undergraduates and others seeking provisional teaching certificates are required to meet with their College of Education, Health, and Human Services advisor at least once a year. This procedure ensures that all students are kept abreast of periodic modifications in the curriculum and in certification regulations. Teacher certification students enrolled in other academic units at UM-Dearborn such as secondary certification candidates with a concentration in the College of Arts, Sciences, and Letters are also expected to comply with this policy. Students may request an advisor assignment, or a change in advisor, by contacting the College of Education, Health, and Human Services Student Services Office.

Academic Standards

SCHOLASTIC STANDING

Students should consult the General Information section of this Undergraduate Catalog on campus-wide policies governing scholastic standing. The College of Education, Health, and Human Services reviews the records of all its degree students at the end of each term. If a certification student's grade point average for one term drops below 2.75, the student is placed on academic probation and may not register for education methods courses in the professional sequence. If the overall average remains below 2.75 for another term, the student may not be allowed to register as a student in a teacher certification program. Other undergraduate students (those not seeking a teaching certificate) must maintain a grade point average of at least 2.5.

MAXIMUM CREDIT HOUR LOADS

Students electing more than 18 credit hours in a full term (Fall, Winter, Summer) must have written permission from the School's Dean. If the student's GPA is below 3.0, this practice is especially discouraged. Students enrolled in the student teaching term must petition to elect any courses other than student teaching and its accompanying seminar.

GRADES OF INCOMPLETE AND ABSENCE FROM FINAL EXAMS

A student must request permission to have an "Incomplete" mark (I) or an "Absent from Final Exam" mark (X) appear on his/her transcript by obtaining an Incomplete Request/Contract form from the College of Education, Health, and Human Services Student Services Office. This form must be taken to the instructor for approval and signature. These marks are not automatically assigned. The instructor will determine the time limit if it is to be less or more than the four-month campus deadline for "Incompletes" and less than five weeks for the final examination. If the deadline date stated in the contract is not met, these marks will automatically convert to an E.

PASS/FAIL GRADING OPTIONS

The College of Education, Health, and Human Services allows students enrolled in any program to use the pass/fail grading system. However, this is limited to elective credit only and rules specific to each program or specialty may require grades other than "pass" in pertinent courses. Note the following conditions for enrolling in pass/fail courses:

- 1. The student cannot be on academic probation.
- 2. The student may elect a total of two courses on an optional pass/fail basis toward the academic program.
- 3. Only one pass/fail course may be elected during a term.
- Education courses, when used in a student's professional education sequence, may not be elected on an optional pass/fail basis.
- Distribution requirements may not be elected on an optional pass/fail basis.
- 6. Courses offered only on a nongraded basis are not regulated by this policy.
- 7. Courses in a student's teaching major and/or minor may not be elected for optional pass/fail credit.
- 8. The optional pass/fail grade will count for residency, certification and degree requirements but will not enter into the computation of a student's grade point average.
- 9. Courses taken for optional pass/fail credit must be specified on the registration form or otherwise identified within the usual time permitted for adding classes. After the add/drop period has elapsed, the student is not permitted to change from a pass/fail to a letter grade or vice-versa. Students may drop an optional pass/fail class within the usual add/drop period. Petitions requesting a change of pass/fail to a letter grade or vice-versa will not be accepted after the first two weeks of the term.

For further information, refer to other sections in this *Undergraduate Catalog*.

Honors

GRADUATING WITH DISTINCTION

At the time of graduation, the College of Education, Health, and Human Services honors its academically outstanding undergraduate degree candidates by recommending that they graduate with either distinction or high distinction. Those graduating seniors who have achieved an overall grade point average of at least 3.2 will be recommended for a degree with distinction. Those who have achieved an overall grade point average of at least 3.6 will be recommended for a degree with high distinction.

DEAN'S LIST

At the beginning of each term, those students enrolled in a College of Education, Health, and Human Services undergraduate degree program who have established a noteworthy academic record during the previous term are publicly recognized. In conjunction with the Office of Academic Affairs, the Dean of the School publishes the names of those degree students who have earned a grade point average of 3.5 or better while carrying a minimum course load of 12 earned GPA credit hours during the immediately preceding term. Only credit earned at UM-Dearborn is used in determining whether or not a student meets the requirements for this honor.

Other Awards

In addition to the Dean's List, the College of Education, Health, and Human Services also recommends candidates for other awards. See the General information section of this *Catalog* for additional awards.

<u>Teacher Certification</u> <u>Programs</u>

In recommending students for teacher's certificates, the College of Education, Health, and Human Services functions, indirectly, as an arm of the Michigan Department of Education. All such certificates awarded to students at the UM are issued at the request of an appropriate faculty body by the Michigan Department of Education in Lansing irrespective of the particular campus attended (Ann Arbor, Dearborn, Flint).

Elementary Provisional Certificate

The initial teaching certificate awarded the beginning elementary school teacher is the Michigan Elementary Provisional Teacher's Certificate. This certificate is valid for teaching all subjects in kindergarten through fifth grade and in subject areas (majors and minors) if an endorsement on the certificate has been obtained in grades six through eight. One is also qualified to teach all subjects in self-contained classrooms through grade eight. The Provisional Teacher's Certificate is valid for six years and may be renewed twice (for three years each time) provided that renewal conditions are met. Legislative or other state action may change these specifications. Therefore, students are advised to contact the College of Education, Health, and Human Services' Student Services Office, located in the Fairlane Center South (FCS), to learn of the most recent policies.

Secondary Provisional Certificate

The teaching certificate awarded to the beginning secondary school teacher is the Michigan Secondary Provisional Teacher's Certificate. This certificate is valid for teaching in grades six through twelve in those areas where the applicant has completed a major or minor , and passed the appropriate state mandated tests. It is valid for six years and may be renewed twice (for three years each time) provided that renewal conditions are met. Legislative or other state action may change these specifications. Therefore, students are advised to contact the Student Services Office in the College of Education, Health, and Human Services to learn of the most recent policies.

General Requirements for a Teacher's Certificate

In order to be awarded an elementary or secondary provisional teacher's certificate, students at UM-Dearborn must be recommended for the certificate by the Governing Faculty of the College of Education, Health, and Human Services. The general procedure to be followed in obtaining such a recommendation is outlined below. It should be noted, however, that progression from one step to another is not automatic; students are expected to be individually responsible for understanding and meeting the requirements and provisions of the programs they pursue.

QUALIFYING FOR A PROVISIONAL TEACHER'S CERTIFICATE

To qualify for certificate recommendation, an individual must fulfill the following requirements:

- Earn a bachelor's degree from UM-Dearborn or another accredited institution with an overall GPA of 2.75; a minimum GPA of 2.75 in the major; a minimum GPA of 2.75 in the minor; and a minimum GPA of 2.75 in the Professional Sequence. Irrespective of where the degree is earned, each candidate shall satisfactorily complete directed teaching and all required methods courses and practica at UM-Dearborn.
- If acquiring both the bachelor's degree and a teacher's certificate from UM-Dearborn, the individual shall complete the degree with the appropriate number of semester hours depending on the program selected.
- 3. Comply with the four-phase program described below.
- 4. Meet all Michigan Department of Education Teacher Certificate requirements including state mandated tests.
- Satisfy the School faculty that the applicant possesses attributes that are necessary and desirable for successful teaching.

College of Education, Health, and Human Services Four-Phase Program

The College of Education, Health, and Human Services at UM-Dearborn is committed to the ideal of quality in the field of teacher education. It recognizes that not everyone who wishes to be a teacher is capable of meeting program requirements that relate to teacher competency. Therefore, the College of Education, Health, and Human Services is selective in admitting students into its teacher preparation programs and in making recommendations for teacher certification.

A four-phase screening procedure is employed to help identify those people most likely to perform at the level of excellence defined by the School. Further, this procedure is useful in assisting students with career decisions. The screening procedure is divided into four successive phases, each with its own set of academic and professional admission standards. Students are expected to have successfully met all of the requirements at one phase before entering the next. Each student is responsible for knowing and meeting all program requirements as listed in this *Undergraduate Catalog*. The "College of Education, Health, and Human Services Four-Phase Checklist" is as follows:

PHASE 1 – Admission to College of Education, Health, and Human Services

Three types of students are considered for admission to the College of Education, Health, and Human Services at this entry level phase:

1. First time in any college (FTIAC) students

Campus admission standards for SAT, ACT, and high school Grade Point Average (GPA) are used in determining admission.

2. Transfer students

Campus admission standards are used for students transferring 54 or fewer semester hours. College of Education, Health, and Human Services admission standards (a minimum cumulative GPA of 2.75/4.0 scale) are used for students transferring 55 or more semester hours

3. Degreed persons seeking certification only

College of Education, Health, and Human Services admission standards are used for individuals with a bachelor's degree earned at a regionally accredited institution. The individual must have a cumulative GPA of 2.75 or higher in their major, minor, and overall to be admitted to the College of Education, Health, and Human Services and Teacher Certification Program.

Important: Fingerprinting and criminal background checks are required for work in school settings. Such work is required of all certification students. All background checks must be completed in the first semester of admission to the College of Education, Health, and Human Services and on file in the Field Placement Office (Room 261 FCS).

NOTE: Admission to a Teacher Certification program--see Phase 2--is a separate procedure from admission to the College of Education, Health, and Human Services itself.

PHASE 2 – Admission to Teacher Certification Program

Admission to a College of Education, Health, and Human Services Teacher Certification program (elementary/secondary) requires all of the following:

- meeting minimum score requirements on the Michigan Test for Teacher Certification (MTTC) Professional Readiness Examination (Reading, Mathematics, Writing),
- a minimum of 55 semester credit hours or an earned degree with a cumulative GPA of 2.75/4.0 scale. Grades earned at all institutions are used in this calculation for students transferring into the College of Education, Health, and Human Services with the exception of degreed persons seeking certification only (see Phase 1, number 3),
- submission to College of Education, Health, and Human Services of results from the Campus Composition Placement Test (telephone 593-5100 to arrange for the exam), This test must be taken within the first semester that a student is enrolled in classes.
- completion of COMP 105 and 106 (and COMP 227 when required).
- 5. Major(s) and/or minor(s) must be formally declared on a *Change of Degree/Concentration* Petition.
- 6. submission of completed Application for Admission Teacher Certification Program form (available in College of Education, Health, and Human Services Student Services Office, 262 FCS). This form includes a statement of intent regarding allowing or not allowing MTTC score reporting to faculty advisors in the College of Education, Health, and Human Services and College of Arts, Sciences & Letters

 valid Internet Criminal History Access Tool (ICHAT). A criminal background check will be conducted using ICHAT before placement in any field experience. If any offense is found, you must make an appointment with the Associate Dean.

Note: When all Phase 2 requirements have been met, students receive a formal letter of admission to the Teacher Certification Program.

PHASE 3 - Eligibility for Student Teaching

Eligibility for directed (student) teaching (elementary or secondary) requires all of the following:

- passing scores from pertinent MTTC Subject Area Tests. Effective Fall 2010 elementary certification students will need to pass the "elementary education test" and their major or minor (depending on program selection) for student teaching eligibility. Secondary certification students must pass the tests in their major and their minor,
- 2. senior student status (minimum of 85 semester hours earned),
- completion of at least one full term (12 semester hours) of study at UM-Dearborn,
- 4. a minimum cumulative GPA of 2.75/4.0 scale as well as a minimum GPA of 2.75 in the major(s), minor(s), and the professional sequence,
- 5. completion of professional sequence courses,
- submission of a signed "Evaluation of Oral Expression" form to the Field Placement Office (261 FCS),
- 7. attendance at a Student Teaching Application and Placement meeting and submission of all forms distributed.
- valid TB clearance, criminal background check, CPR certification, and evidence of training for dealing with infectious diseases/blood borne pathogens on file,
- EDF 450 is required of all Elementary Certification students, and
- 10. Valid Internet Criminal History Access Tool (ICHAT). A criminal background check will be conducted using ICHAT before placement in any field experience. If any offense is found, you must make an appointment with the Associate Deep.

PHASE 4 - Eligibility for Degree and Recommendation for Certification

Recommendation for a degree and/or a Michigan Teaching Certificate (elementary/secondary) requires all of the following:

- submission of completed Degree/Diploma Application form to the Enrollment Services Office (the form and applicable deadlines are available online at www.umd.umich.edu/rr_apply-graduate/). Note: Secondary Certification students must submit their Degree/Diploma Application form as a student in the College of Arts, Sciences and Letters and fill out a Program Completer Form to be submitted to the College of Education, Health, and Human Services certification officer
- acceptable scores from all relevant Michigan Tests for Teacher Certification (MTTC),
 - a) Elementary Certification students: Elementary Education Test and major or minor.
 - b) to be recommended for any additional major(s), minor(s), endorsement(s), all relevant tests must be taken and passed. Results must be in by the time recommendations are prepared for the state by the UM-Dearborn certification officer.

- Secondary Certification students: Subject area tests for which student wishes to be recommended. (At least one major and one minor are required.)
- successful completion of the chosen program, major(s), minor(s), professional sequence, and supplementary requirements,
- 4. a minimum cumulative GPA of 2.75/4.0 scale as well as a minimum GPA of 2.75 in the major(s), minor(s) and professional sequence.

Based on this record of achievement, a decision to recommend or not to recommend for degree and/or certification will be made.

Professional Semester/Directed Teaching (Student Teaching)

Each student enrolled in a teacher certification program at UM-Dearborn, whether pursuing an elementary or a secondary provisional certificate, is expected to spend one full academic term exclusively in professional work. This period of time is called the "professional semester." Directed Teaching (student teaching) and its related seminar serve as the core for this particular term. This entails a full day's teaching load and all school-related activities at a University-negotiated site. Most students elect their professional semester courses during the second half of the senior year. The professional semester for elementary and secondary certification students is as follows:

Elementary Professional Semester

EDD 435	Directed Teaching	11 hrs	
EDD 437	Seminar	1 hr	
Secondary Professional Semester			
Secondary Prof	essional Semester		
•	essional Semester Directed Teaching	12 hrs	

Opportunities for directed teaching are available only in the University's fall and winter terms. Students wishing to elect directed teaching in the fall term are required to attend an application meeting the preceding January and those desiring to elect it during the winter term are required to attend an application meeting the preceding March. Meeting dates, times, and locations will be posted on the Field Placement Office website and in the Fairlane Center South. Requirements for acceptance into the professional semester are outlined in the Four-Phase program.

INCOMPLETES, UNSATISFACTORY GRADES, AND WITHDRAWALS

No student will be assigned to, or registered for, directed teaching with incomplete work in the Professional Sequence of courses. Moreover, once a student has been assigned to a directed teaching contact and then has had registration denied because of incomplete work, the student will be prohibited from receiving any future directed teaching assignment for that semester.

Any student, who has withdrawn from or received an unsatisfactory grade in directed teaching, whether through the action of a school district, the University, or by personal choice, will have a request for future placement carefully reviewed by the School's Executive Committee. Reassignment to directed teaching is not guaranteed, nor is it an automatic process.

Students must file petitions for reassignment consideration.

General Field Placement Policy

Students in the teacher preparation program are assigned field placements, either as practicum students or as student teachers, in public or private schools. Field placement shall be made in accordance with the policies and procedures set forth by the College of Education, Health, and Human Services and to be in compliance with accreditation standards.

The student is expected to maintain a professional attitude in order to conform to the expectations of the placement school and the University. Appropriate academic preparation is required as outlined in the elementary and secondary programs of the School. Professional responsibilities during the Directed Teaching term are detailed in the "UM-Dearborn Directed Teaching Handbook" which is located on the CEHHS Field Placement website.

The public and private schools exercise the right to screen the University's students. Acceptance or rejection of students is not controlled by the University. A placement school may reject a University student for several reasons, including a lack of placement positions in the school or a determination that the University student's presence in the school or classroom may disrupt or interfere in some way with the educational process.

Currently there is no way in which the University can require the placement school to state specific reasons for rejection.

If a University student is repeatedly denied placement by the field schools, the College of Education, Health, and Human Services will recommend career counseling and terminate matriculation in the teacher certification program.

Elementary School Certification Program

This program has been specifically developed for students intending to teach in either the elementary school or the middle school. It permits them to meet the requirements for both a bachelor's degree and the Michigan Elementary Provisional Certificate. The curriculum consists of two parts, the first involving academic study, and the second consisting of professional preparation.

ACADEMIC PROGRAM REQUIREMENTS (MAJORS AND MINORS)

Students entering this program are required to complete all core courses pre-professional and all requirements for a selected major(s). Academic majors and/or minors can be selected from the following fields: English as a Second Language (ESL)-minor only, Language Arts, Mathematics, Integrated Science, Reading and Social Studies — major only. Students desiring to pursue an Early Childhood major with elementary certification should follow the program outlined under "Early Childhood Education." students desiring to pursue the Learning Disabilities major with elementary certification should follow the program outlined under "Elementary Education Learning Disabilities Program," and courses in the major and/or minor may not be elected on a pass/fail basis. Courses that apply to the majors and minors are listed below under "Areas of Study for Majors and Minors."

CORE COURSES REQUIREMENTS

Core courses are generally completed in the freshman and sophomore year.

Selections must be from courses numbered 100-200 unless otherwise stated.

COMP 105	Writing and Rhetoric I
COMP 106	Writing and Rhetoric II
ENGL 327	Advanced Exposition
LIBR 465	Literature for Children
EXPS 282	History and Civics in Elementary School3 hrs
EXPS 283	Geography and Econ in Elementary School 3 hrs
EXPS 220	Science in Elementary School 3 hrs
NSCI 231	Inquiry: Physical Science*
NSCI 232	Inquiry: Earth/Planetary
	Science* 3 hrs
NSCI 233	Inquiry: Life Science*
EXPS 420	Science Capstone
MATH 385	Math for Elementary Teachers I 3 hrs
MATH 386	Math for Elementary Teachers II 3 hrs
MATH 387	Math for Elementary Teachers III3 hrs

*Note: Two of the three NSCI distribution courses may be transferred to UM-Dearborn. Great Experiments 240, 242, or 340, 342 and NSCI 120, 121 may not be used to satisfy Science distribution requirements. NSCI 233 and BIOL 100/101 may not both be elected for credit in the College of Education, Health, and Human Services.

PRE-PROFESSIONAL REQUIREMENTS

Pre-professional courses are generally completed in the freshman and sophomore year.

EDA 205	Introduction to Education	3 hrs
EDC 240	Psychology of Child Development	3 hrs
EDC 241	Practicum in Child Development	1 hr
EDF 450	Health, Nutr & PE Clsrm Tchrs	2 hrs
EDT 210	Technology for Elementary Grades	3 hrs
EXPS 250	Visual & Perf/Arts Elem Clsrm	3 hrs

OTHER REQUIREMENTS

- The Campus Composition Placement Exam (CCPT) is required of all students, i.e., UM-Dearborn undergraduates and transfer students Transfer students who have been given credit for COMP 105 and 106 but receive a prescription from the CCPT for COMP 099 must enroll in an additional composition course (COMP 227).
- Application to the College of Education, Health, and Human Services Teacher Certification Program is required of all students. The timing of this application is detailed on the four-phase checklist.
- The Michigan Professional Readiness Examination must be taken and scores must be at the state-approved level for admission.
- 4. A cumulative grade point average (GPA) of 2.75 on a 4.0 scale is required overall, in the major, in the minor(s), and in the professional sequence courses.
- All requirements as identified in the School's four-phase screening program must be met for a teacher certification. (See four-phase checklist.)
- Minimum number of hours to graduate is 128 semester hours.

AREAS OF STUDY FOR MAJORS AND MINORS

INTEGRATED SCIENCE

MAJOR

A minimum of 36 semester hours from the following:

Required	courses*
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EXPS 220	Science in Elementary School	3 hrs
NSCI 231	Inquiry: Physical Science	3 hrs
	(see Note #3 below)	
NSCI 232	Inquiry: Earth/Planetary Science	3 hrs
	(see Note #3 below)	
NSCI 233	Inquiry: Life Science	3 hrs
	(see Note #3 below)	
EXPS 420	Science Capstone	3 hrs
NSCI 331	Physical Science	3 hrs
NSCI 332	Earth/Planetary	3 hrs
NSCI 333	Life Science	3 hrs
Physical Sci	ience	3-4 hrs
Earth/Plane	tary Science	3-4 hrs
Life Science	e	3-4hrs

^{*}Biology 240, 242, or 340, 342 and NSCI 120, 121 cannot be used for this major.

MINOR

A minimum of 24 semester hours from the following:

Required courses*

EXPS 220	Science in Elementary School	3 hrs
NSCI 231	Inquiry: Physical Science	3 hrs
	(see Note #3 below)	
NSCI 232	Inquiry: Earth/Planetary	
	Science. (see Note #3 below)	3 hrs
NSCI 233	Inquiry: Life Science	3 hrs
	(see Note #3 below)	
EXPS 420	Science Capstone	3 hrs
NSCI 331	Physical Science	3 hrs
NSCI 332	Earth/Planetary	
NSCI 333	Life Science	3 hrs

^{*}Great Experiments 240, 242 or 340, 342 and NSCI 120, 121 cannot be used for this minor.

Notes

- An overall GPA of 2.75 or better is required for a major or a
- For a major, 6 or more semester hours must be in courses above 300 level, in addition to EXPS 420.
- Equivalents for transfer students (NSCI 231, 232, 233): two of the three NSCI distribution courses may be transferred to UM-Dearborn.
- Astronomy can satisfy Earth/Planetary Science requirement.
- At least 15 semester hours in UM-Dearborn courses required for a major.

LANGUAGE ARTS

MAJOR

A minimum of 36 semester hours from the following:

Required	courses	18	hrs
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COMP 105	Writing and Rhetoric I	3 hrs
COMP 106	Writing and Rhetoric II	3 hrs
ENGL 323	Advanced Creative Writing	3 hrs
ENGL 327	Advanced Exposition	3 hrs

LIBR 465	Literature for Children	
ENGL 3xx	Literature course	3 hrs
OR ENGL 4xx	Literature course	3 hrs
Select one of th	e following	3 hrs
LING 461	Modern English Grammar	3 hrs
LING 482	History of English Language	3 hrs
Complete by	electing English, Linguistics, Speed	h, Modern
Foreign Langua	age, or JASS 310, 330 or 340*. Note	: Ling 280,
	y 200 level literature courses are prered	•

Eng 223 and any 200 level literature courses are prerequisites 15 hrs

*Note: No more than three courses in any one area for a major except English Literature.

MINOR

A minimum of 24 semester hours from the following:

Required courses	s 21 hrs	
COMP 105	Writing and Rhetoric I	3 hrs
COMP 106	Writing and Rhetoric II	3 hrs
LIBR 465	Literature for Children 3 hrs	

ENGL 223 **ENGL 327** LING 280

Complete by electing one course from English, Linguistics, Speech, modern Foreign Language, JASS 310, 330 or

- 1. An overall GPA of 2.75 or better is required for a major or a
- For the major, at least 15 semester hours must be in courses 300 or above; 9 semester hours at 300 or above for a minor.
- At least 15 semester hours in UM-Dearborn courses required for a major.

MATHEMATICS

MAJOR

A minimum of 30 semester hours from the following:

Required courses

Select one of the following

	MATH 104	Pre-calculus (Management, Life and	
		Social Science	4 hrs
	OR		
	MATH 105	Pre-calculus	4 hrs
	MATH 113	Calculus I: Management, Life and Social Science	
	OR		
	MATH 115	Calculus I	4 hrs
	MATH 385	Math for Elementary Teachers I	3 hrs
	MATH 386	Math for Elementary Teachers II	3 hrs
	MATH 387	Math for Elementary Teachers III	3 hrs
	MATH 442	Geometry for Teachers	3 hrs
	MATH 443	Algebra for Teachers	3 hrs
	MATH 444	Probability and Statistics for Teachers	3 hrs
R	Recommended	electives	4-6hrs
	MATH 131	Conceptual Mathematics	4 hrs
	MATH 200	Math Proof and Structures	

^{*}Note: No more than 2 courses in any one area for a minor except English Literature.

EDD 467

EDD 468

EDD 469

EDD 471

EDD 476

EDD 498

EXPS 460

Practicum Reading Instruction...... 1 hr

Tchg Rdg/Lang Arts Elem Grds3 hrs

Rdg Instr: Models and Methods......3 hrs

Literacy Assessment for Instr.....4 hrs

Expl Writing w/Child & Young Adults......3 hrs

Capstone: Trds/Iss in Lit Theory3 hrs

MATH 291 Nature of Mathemati MATH 363 Introduction to Statis MATH 391 Topics in Mathemati MATH 445 Number and Pro Teachers MATH 446 Discrete Math/Mode	ra	Elective S JASS 310, 330 MINOR	Constructivist Education	
		Required course EDA 419 EDD 447 EDD 467 EDD 468 EDD 471 EDD 476 EDD 498 Elective	Early Literacy/Lang Development	
MATH 385 Math for Elementary MATH 386 Math for Elementary MATH 387 Math for Elementary MATH 442 Geometry for Teacher	Teachers I 3 hrs Teachers II 3 hrs Teachers III 3 hrs Teachers III 3 hrs 3 hrs 3 hrs 3 hrs 3 hrs	JASS 310, 330 Notes 1. An overall of minor. SOCIAL STUD	GPA of 2.75 or better is required for a major or a	
MATH 200 Math Proof and Structure MATH 227 Intro to Linear Algebra Math 297 Nature of Mathemati Introduction to Statis MATH 391 Topics in Mathemati MATH 444 Data Analysis, Probate Teachers	tics	Required course EXPS 282 EXPS 283 HistoryHIST 101 HIST 103 HIST 3601 Political Science POL 101 3 hrs	History & Civics in Elem School	3 hrs
 An overall GPA of 2.75 or better minor. For the major, 15 or more semester 300 or above; 6 or more semester required for a major. MATH 104 and 113 are the recocalculus courses for elementary mathematics major or minor. 	er hours must be in courses hours for a minor. in UM-Dearborn courses mmended pre-calculus and	GEOG 206 GEOG electiv Economics ECON 2001	World Regional Geography	
READING MAJOR A minimum of 32 semester hours from the seminary of the seminar	Development	 For the may above At least 1 required for 	GPA of 2.75 or better is required for a major. jor at least 9 hours must be in courses 300 or 2 semester hours in UM-Dearborn courses c a major. A SECOND LANGUAGE	

ENGLISH AS A SECOND LANGUAGE

MINOR ONLY

Students must demonstrate experience in learning a modern second language or coursework in a modern second language or permission of Program Coordinator or take one semester course in a modern language.

A minimum of 21 semester hours from the following:

Required courses

EDD 447	Teaching English as a Second Language	23 hrs
EDD 448	Practicum in Teaching English as a	
	Second Language	1 hr
EDC 455	Assessment in Second Language	
	Learning (K-12)	2 hrs
ENGL/		
LING 474	Second Language Acquisition: English.	3 hrs
LING 480	Concepts of Linguistics	3 hrs
LING 476	Sociolinguistics	3 hrs
G 1 44 64	C 11	<i>C</i> 1
Select two of the	following	6 hrs
ANTH/LING	425 Language and Society	3 hrs
ENGL/LING	461 Modern English Grammar	3 hrs
ENGL/LING	482 History of the English Language	3 hrs
ENGL/LING	484 World Englishes	3 hrs

Notes:

- 1. EDD 447/448 is a pre-requisite for EDC 455/555
- LING 480 is a pre-requisite for LING/ENGL 461/561, LING/ENGL 482/582, LING/ENGL 484/584, LING 474/574 and LING 476/576.

PROFESSIONAL REQUIREMENTS

The professional sequence of education courses consists of a minimum of 44 semester hours of credit. This concentration of study represents the core of your professional preparation. At least two practicums are required prior to student teaching. The semester hours are distributed as follows:

Foundations

EXPS 410

EDD 485

EDD 491

EDD 495

EDA 340	The Foundations of	`American E	1 3 hrs
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Multiculturalism in School and Society 3 hrs

Teaching Science in Elementary Grades 3 hrs

Teaching Social Studies in Elem. Grades 3 hrs

Multicultural education

Educational Psychology 3 hrs
Educating the Exceptional Child
Management of Classroom Behavior
Social Development of Guidance
Techniques 3 hrs
es (See Note #1 below)
Methods of Teaching Math in K-8 3 hrs
Teaching Reading and Language Arts in
Elementary Grades
Practicum in Reading Instruction* 1 hr
Reading Instruction: Models & Methods* 3 hrs

*Note: EDD 467 and 471 are to be taken concurrently. Both require EDD 468 as a prerequisite.

Social Studies in Elementary Grades

Professional Semester (See Notes #3 & #5 below)

EDD 435	Directed Teaching in the Elementary
	School
EDD 437	Seminar: Teaching in the Elementary
	Grades 1 h

Notes

- Enrollment in all the required EDD courses is open only to those who are officially enrolled and in good academic standing in a certification program at UM-Dearborn (junior standing required) with a cumulative GPA of 2.75 or higher.
- 2. A UM-Dearborn cumulative GPA of 2.75 or better is required overall for the Professional Sequence.
- 3. Passing the MTTC Professional Readiness Examination is required.
- Eligibility for directed teaching requires passing scores from the MTTC (Michigan Tests for Teacher Certification) subject area test: Elementary certification (elementary education and major or minor depending on program selection), Secondary certification (major and minor tests).
- Recommendations for other certification endorsements require passing scores from relevant MTTC subject area tests.

ELEMENTARY CERTIFICATION REQUIREMENTS

The program as outlined above meets the state's teacher certification requirements at the time of this writing. However, changes by the University or the State may affect some program requirements. Therefore, the student is strongly advised to inquire about possible changes by checking with their advisor in the College of Education, Health, and Human Services.

Learning Disabilities Education/Elementary Certification

LEARNING DISABILITIES

DISTRIBUTION REQUIREMENTS

Required courses	s 56 hrs
COMP 105	Writing and Rhetoric I
COMP 106	Writing and Rhetoric II
ENGL 327	Advanced Exposition
LIBR 465	Literature for Children
EXPS 282	History & Civics in Elem Sch3 hrs
EXPS 283	Geography & Econ in Elem Sch 3 hrs
EXPS 220	Science in Elementary School
NSCI 231	Inquiry: Physical Science
NSCI 232	Inquiry: Earth/Planetary
	Science
NSCI 233	Inquiry: Life Science
MATH 385	Math for Elementary Teachers I
MATH 386	Math for Elementary Teachers II
MATH 387	Math for Elementary Teachers III 3 hrs
Supplementary C	Content Requirements
EDA 419	Early Literacy/Language Development3 hrs
EDF 450	Health, Nutr & PE Clsrm Teachers2 hrs
EXPS 250	Visual & Perf Arts Elem Clsrm 3 hrs
Pre-Professional	Studies
EDA 205	Intro to Education
EDC 241	Psych of Child Dev Practicum
EDT 210	Technology for Elementary Education3 hrs
Electives:	2 hrs

MAJOR

A minimum of 30 semester hours from the following:

Required courses

EDC 401*	Introduction to Learning Disabilities	3 hrs
EDN 403*	Assessment of the Learner	3 hrs
EDN 404*	Assessment Practicum	1 hr
EDN 401*	Strategies in Learning Disabilities	3 hrs
EDN 402*	Social Vocational Transitions	3 hrs
PDED 405	Special Education Legislation	
	and Litigation	3 hrs
EDC 417	Classroom Management	3 hrs
EDC 240	Psychology of Child Development	3 hrs
EDN 406	Collaboration in the Classroom	3 hrs
EDD 413	Elementary Directed Teaching	2 hrs
EDD 420	Secondary Directed Teaching	2 hrs
EDN 408	Directed Teaching Seminar	1 hr
المنت المستقم المستسمة	hlf D h	1 C

Completion with a grade of B or better is necessary before enrollment in EDD 413 and EDD 420.

PROFESSIONAL REQUIREMENTS

The professional sequence of education courses consists of a minimum of 42 semester hours of credit. This concentration of study represents the core of your professional preparation. At least two practicums are required prior to student teaching. The semester hours are distributed as follows:

Foundations

EDA 340	The Foundations of American Ed
Psychology	
EDC 300	Educational Psychology
EDC 460	Educating the Exceptional Child3 hrs
Methodologies (See Note #1 below)
EDD 452	Methods of Teaching Math in K-8 3 hrs
EDD 468*	Teaching Reading and Language Arts in
	Elementary Grades
EDD 467	Practicum in Reading Instruction* 1 hr
EDD 471	Reading Instruction: Models & Methods* 3 hrs
EDD 485	Teaching Science in Elementary Grades 3 hrs
EDD 495	Teaching Social Studies in Elem. Grades 3 hrs
EDD 491	Social Studies in Elem Grades Practicum 1 hr

*Note: EDD 467 and 471 are to be taken concurrently. Both require EDD 468 as a prerequisite.

Professional Semester (See Notes #3 & #5 below)

EDD 435	Directed Teaching in the Elementary
	School11 hrs
EDD 437	Seminar: Teaching in the Elementary Grds 1 hr

Notes

- Enrollment in all the required EDD courses is open only to those who are officially enrolled and in good academic standing in a certification program at UM-Dearborn (junior standing required) with a cumulative GPA of 2.75 or higher.
- 2. A UM-Dearborn cumulative GPA of 2.75 or better is required overall for the Professional Sequence.
- 3. Passing the MTTC Professional Readiness Examination is required.
- 4. Eligibility for directed teaching requires passing scores from the MTTC (Michigan Tests for Teacher Certification) subject area test: Elementary certification (elementary education)

- and major or minor depending on program selection, Secondary certification (major and minor tests).
- Recommendations for other certification endorsements require passing scores from relevant MTTC subject area tests

Early Childhood Education/Elementary Certification

The Early Childhood Education Program is designed for those intending to work with children, birth through eight years of age. Within the basic elementary education degree curriculum, it enables students to meet State requirements for a Michigan Provisional Elementary Teacher's Certificate and the Early Childhood Endorsement (ZS) as well as to gain special competencies in the area of early childhood. It prepares individuals for careers in childcare centers, working with young children and their families, birth through kindergarten, as well as in the elementary grades 1-5. The program includes a concentrated study of the young child in infant/toddler, preschool, and early school contexts with extensive opportunities for field experiences in a variety of settings.

The requirements of the Early Childhood Education Program for undergraduates are as follows:

DISTRIBUTION REQUIREMENTS

Early Childhood and Elementary Certification

Required courses COMP 105 COMP 106 ENGL 327	Writing and Rhetoric I
LIBR 465	Literature for Children
EXPS 282	History & Civics in Elem Sch 3 hrs
EXPS 283	Geography & Econ in Elem Sch3 hrs
EXPS 220	Science in Elementary School 3 hrs
NSCI 231	Inquiry: Physical Science
NSCI 232	Inquiry: Earth/Planetary
	Science 3 hrs
NSCI 233	Inquiry: Life Science
MATH 385	Math for Elementary Teachers I 3 hrs
MATH 386	Math for Elementary Teachers II
Supplementary (Content Requirements
EDA 419	Early Literacy/Language Development3 hrs
EDF 450	Health, Nutr & PE Clsrm Teachers2 hrs
EXPS 250	Visual & Perf Arts Elem Clsrm 3 hrs
EXPS 407	Inquiry Primary Grades:
	Math & Science
Pre-Professional	Studies
EDA 205	Intro to Education
EDC 240	Psych of Child Development3 hrs
EDC 241	Psych of Child Dev Practicum
EDT 210	Technology for Elementary Education 3 hrs
	,

OTHER REQUIREMENTS

 The Campus Composition Placement Test (CCPT) is required of all students, i.e., UM-Dearborn undergraduates and transfer students. Transfer students who have been given credit for COMP 105 and 106 but receive a prescription from the CCPE for COMP 099 must enroll in an additional composition course (COMP 227). This test

must be taken within the first semester that a student is enrolled in class.

- Application to the College of Education, Health, and Human Services Certification Program is required of all students. The timing of this application is detailed on the four-phase checklist.
- The MTTC (Michigan Tests for Teacher Certification)
 Professional Readiness Examination must be taken and
 scores must be at the state-approved level for admission.
- A cumulative GPA of 2.75 on a 4.0 scale is required overall, in the major, in the minor(s), and in the professional sequence courses.
- All requirements as identified in the School's four-phase screening program must be met for a teaching certificate recommendation. (See four-phase checklist.)
- 6. Minimum number of hours to graduate is 128 credit hours.

EARLY CHILDHOOD MAJOR REQUIREMENTS

MAJOR

A minimum of 34 semester hours from the following:

Required courses

EDB 422	Leadership, Advocacy & Admin in EC Prog. 3 hrs
EDC 414	Early Childhood Ed. For Young Child with
	Special Needs
EDC 442	Early Childhood: Family, School,
	Community
EDC 445	Developmental Assessment of the Young
	Child
EDD 406	Strategies in Early Childhood Education3 hrs
EDD 410	Practicum in Early Childhood Education 1 hr
EDD 411	Directed Teaching: Early Childhood4 hrs
EDD 412	Seminar: Early Childhood
EDC 431	Constructivist Education
EDC 440	Child: Birth to Three
EDD 446	Family Center Intervention Strategies EC3 hrs
EDC 446	Cognitive and Memory Development3 hrs
OR	
EDD 416	Creative Tchg in Early Childhood3 hrs

Notes

- With the approval of the Early Childhood Program Coordinator, a maximum of six credit hours of freshman and sophomore level transfer courses in early childhood will be considered for general credit toward the early childhood major.
- 2. An overall GPA of 2.75 or better is required for the major.
- 3. At least 15 semester hours in UM-Dearborn courses required for a major.
- 4. A grade of S is required in EDD 411.

EARLY CHILDHOOD AND ELEMENTARY CERTIFICATION-PROFESSIONAL SEQUENCE

The professional sequence of early childhood elementary education courses consists of:

Foundations

EDA 340	The Foundations of American Education 3 hrs
Psychology	
EDC 300	Educational Psychology
EDC 412	Soc Dev & Positive Guidance Tech 3 hrs
Methodologies	s (See Note #1 below)
EDD 452	Methods of Teach. Math. in K-8 3 hrs
EDD 468	Teaching Reading/Language Arts
	Elementary Grades

EDD 467	Practicum in Reading Instruction* 1 hr
EDD 471	Reading Instruction: Models and Methods* 3 hrs
EDD 485	Teaching Science in the Elementary Grades 3 hrs
EDD 495	Social Studies in the Elem. Grades 3 hrs
EDD 491	Social Studies in Elem Grades Practicum 1 hr

*EDD 468 is a prerequisite for these courses.

Notes

- 1. Enrollment in all the required EDD courses is open only to those who are officially enrolled and in good academic standing in a certification program at UM-Dearborn.
- 2. A GPA of 2.75 or better is required overall for the Professional Sequence.
- 3. A grade of S is required in EDD 411. Also required is one full term of study at UM-Dearborn (12 semester hours). Election of EDF 450 is required prior to directed teaching.
- 4. Eligibility for directed teaching requires acceptable scores from the MTTC Subject Area Test, "Elementary Education," major or minor depending on program selection and one full term of study at UM-Dearborn (12 semester hours).
- Recommendations for all other certification endorsements including major(s)/minor(s) require acceptable scores from relevant MTTC subject area tests.

Post-Degree Programs in Early Childhood

Post-degree students wishing to obtain Michigan Elementary Teaching Certification and persons with provisional certificates wishing to maintain certification validity and to qualify for the Michigan (Early Childhood Endorsement (ZS) are also eligible for admission to the Early Childhood Education Program. All relevant Michigan Tests for Teacher Certification (MTTC) are required. Course requirements for these students will vary according to the individual undergraduate coursework of the student. Students working toward the M.A. degree and/or the Professional Education Certificate can qualify for the Michigan Early Childhood Endorsement (ZS) by pursuing appropriate coursework. Upon the student's successful completion of a prescribed Early Childhood sequence and a passing score on the MTTC Early Childhood test, the College of Education, Health, and Human Services will recommend to the State of Michigan that the student is qualified to receive an Early Childhood Endorsement (ZS) on the student's Elementary Teaching Certificate

Inquiries for additional information and program guides can be directed to the College of Education, Health, and Human Services Graduate Student Services Office, (313) 593-5090.

Secondary School Certification Program

UM-Dearborn students may earn a bachelor's degree while securing a recommendation for a Secondary Provisional Teacher's Certificate. Programs are intended for those who wish to teach in either amiddle school or senior high school. Students in this program will have two advisors, one in the College of Arts, Sciences, and Letters (CASL) to help plan the degree program and

another, in the College of Education, Health, and Human Services, to assist in planning the certification program.

Note: Education courses, or courses in the major or minor, may not be elected for pass/fail credit.

CAMPUS DEGREE/CERTIFICATION PROGRAM

Students, upon the successful completion of certification requirements, will receive their certification recommendation through the College of Education, Health, and Human Services and their degree recommendation from CASL. Therefore, they should be properly enrolled in the College of Education, Health, and Human Services and CASL. Students are responsible for meeting all of the appropriate degree requirements legislated by the particular unit that is to recommend their degree. The College of Education, Health, and Human Services and its faculty, therefore, can accept no responsibility for seeing that students are properly acquainted with their various degree requirements. Instead, students are to seek such information from the advisors available in their own particular degree recommending unit.

CERTIFICATION ADVISING

All secondary certification students must have an advisor in the College of Education, Health, and Human Services. Usually the education advisor will be assigned at the time the student first enrolls in the certification program. It is the policy of the College of Education, Health, and Human Services that all undergraduates and others seeking provisional teaching certificates are to meet with their certification advisors once a year, during either the fall or winter terms. By means of this practice, the individual secondary certification student can be kept abreast of periodic modifications in the curriculum and in certification regulations.

CERTIFICATION REQUIREMENTS

A person desiring to earn a secondary teacher's certificate must meet all of the conditions listed below.

- 1. The satisfactory completion of a degree program with an overall GPA of 2.75 or higher.
- 2. The satisfactory completion of a teaching major and a teaching minor, each with a GPA of 2.75 or higher.
- The successful completion of the courses below is required of everyone desiring to qualify for a secondary certification recommendation:
- EDA 205 Introduction to Education EDT 211 Technology in Secondary Education. All requirements as identified in the School's four-phase program listed below must be met for a teaching certificate recommendation.

College of Education, Health, and Human Services Four-Phase Program

The College of Education, Health, and Human Services at the UM-Dearborn is committed to the ideal of quality in the field of teacher education. It recognizes that not everyone who wishes to be a teacher is capable of meeting program requirements that relate to teacher competency. Therefore, the College of Education, Health, and Human Services is selective in admitting students into its teacher preparation programs and in making recommendations for teacher certification.

A four-phase screening procedure is employed to help identify those people most likely to perform at the level of excellence defined by the School. Further, this procedure is useful in assisting students with career decisions. The screening procedure is divided into four successive phases, each with its own set of academic and professional admission standards. Students are expected to have successfully met all of the requirements at one phase before entering the next. Each student is responsible for knowing and meeting all program requirements as listed in this *Undergraduate Catalog*. The "College of Education, Health, and Human Services Four-Phase Checklist" is as follows:

PHASE 1 Admission to The College of Education, Health, and Human Services

Three types of students are considered for admission to the College of Education, Health, and Human Services at this entry level phase:

1. First time in any college (FTIAC) students

Campus admission standards for SAT, ACT, and high school Grade Point Average (GPA) are used in determining admission.

2. Transfer students

Campus admission standards are used for students transferring 54 or fewer semester hours. College of Education, Health, and Human Services admission standards (a minimum cumulative GPA of 2.75/4.0 scale) are used for students transferring 55 or more semester hours.

3. Degreed persons seeking certification only

College of Education, Health, and Human Services admission standards are used for individuals with a bachelor's degree earned at a regionally accredited institution. The individual must have a cumulative GPA of 2.75 or higher in their major, minor, and overall to be admitted to the College of Education, Health, and Human Services and Teacher Certification Program.

Important: Fingerprinting and criminal background checks are required for work in school settings. Such work is required of all certification students. All background checks must be completed in the first semester of admission to the College of Education, Health, and Human Services. Live Scan fingerprinting is being offered by Integrated Biometric Technology (IBT) by appointment only. Instruction/application forms are available at the College of Education, Health, and Human Services Field Placement Office (Room 261 FCS). To make an appointment for your Live Scan fingerprinting, contact IBT at www.miibtfingerprint.com or call 1-866-2952.

NOTE: Admission to a Teacher Certification program--see Phase 2--is a separate procedure from admission to the College of Education, Health, and Human Services itself.

PHASE 2 Admission to the College of Education, Health, and Human Services Teacher Certification Program

Admission to a College of Education, Health, and Human Services Teacher Certification program (elementary/secondary) requires all of the following:

- meeting minimum score requirements on the Michigan Test for Teacher Certification (MTTC) Professional Readiness Examination (Reading, Mathematics, Writing),
- 2. a minimum of 55 semester credit hours or an earned degree with a cumulative GPA of 2.75/4.0 scale. Grades earned at all institutions are used in this calculation for students transferring into the College of Education, Health, and

- Human Services with the exception of degreed persons seeking certification only (see Phase 1, number 3),
- submission to College of Education, Health, and Human Services of results from the Campus Composition Placement Test (telephone 593-5100 to arrange for the exam), This test must be taken within the first semester that a student is enrolled classes.
- 4. completion of COMP 105 and 106 (and COMP 227 when required).
- 5. Major(s) and/or minor(s) must be formally declared on a *Change of Degree/Concentration* Petition.
- 6. submission of completed Application for Admission Teacher Certification Program form (available in College of Education, Health, and Human Services Student Services Office, 262 FCS). This form includes a statement of intent regarding allowing or not allowing MTTC score reporting to faculty advisors in the College of Education, Health, and Human Services and College of Arts, Sciences & Letters.
- valid Internet Criminal History Access Tool (ICHAT). A
 criminal background check will be conducted using ICHAT
 before placement in any field experience. If any offense is
 found, you must make an appointment with the Associate
 Dean

Note: When all Phase 2 requirements have been met, students receive a formal letter of admission to the Teacher Certification Program.

PHASE 3 Eligibility for Student Teaching

Eligibility for directed (student) teaching (elementary or secondary) requires all of the following:

- passing scores from pertinent MTTC Subject Area Tests. Secondary certification students must pass the tests in their major and their minor,
- 2. senior student status (minimum of 85 semester hours earned),
- completion of at least one full term (12 semester hours) of study at UM-Dearborn,
- 4. a minimum cumulative GPA of 2.75/4.0 scale as well as a minimum GPA of 2.75 in the major(s), minor(s), and the professional sequence,
- 5. completion of professional sequence courses,
- 6. submission of a signed "Evaluation of Oral Expression" form to the Field Placement Office, (261 FCS),
- 7. attendance at a Student Teaching Application and Placement meeting and submission of all forms distributed,
- valid TB clearance, criminal background check, CPR certification, and evidence of training for dealing with infectious diseases/blood borne pathogens on file,
- Valid Internet Criminal History Access Tool (ICHAT). A
 criminal background check will be conducted using ICHAT
 before placement in any field experience. If any offense is
 found, you must make an appointment with the Associate
 Dean.

PHASE 4 Eligibility for a Recommendation for a Degree and/or a Michigan Teaching Certificate

Recommendation for a degree and/or a Michigan Teaching Certificate (elementary/secondary) requires all of the following:

 submission of completed Degree/Diploma Application form to the Enrollment Services Office (the form and applicable deadlines are available online at www.umd.umich.edu/rr_apply-graduate/). Note: Secondary Certification students must submit their Degree/Diploma

- Application form as a student in the College of Arts, Sciences and Letters and fill out a Program Completer Form to be submitted to the College of Education, Health, and Human Services certification officer
- acceptable scores from all relevant Michigan Tests for Teacher Certification (MTTC),
 - a) Elementary Certification students: Elementary Education Test and major or minor
 - b) to be recommended for any additional major(s), minor(s), endorsement(s), all relevant tests must be taken and passed. Results must be in by the time recommendations are prepared for the state by the UM-Dearborn certification officer.
 - Secondary Certification students: Subject area tests for which student wishes to be recommended. (At least one major and one minor are required.)
- successful completion of the chosen program, major(s), minor(s), professional sequence, and supplementary requirements,
- 4. a minimum cumulative GPA of 2.75/4.0 scale as well as a minimum GPA of 2.75 in the major(s), minor(s) and professional sequence.

Based on this record of achievement, a decision to recommend or not to recommend and/or certification will be made.

Secondary Teaching Major and Minor Requirements

Secondary education students pursuing a bachelor's degree in the College of Arts, Sciences, and Letters should not confuse the requirements for their teaching major with those for their academic concentration in CASL. The courses required to complete a teaching major are determined by the College of Education, Health, and Human Services in compliance with the state certification code. The courses required for a degree concentration are prescribed by the CASL and are a part of the student's degree program. Often the two sets of requirements overlap so that by fulfilling concentration requirements, the student also, in most cases, completes most of the requirements for a teaching major. Occasionally, however, students must exercise caution when electing individual courses so that one set of requirements is not ignored while fulfilling the other. The student's faculty advisor in the College of Education, Health, and Human Services will be able to assist in planning an overall certification program that simultaneously meets both sets of requirements in an expeditious manner.

AREAS OF STUDY FOR MAJORS AND MINORS

The teaching majors and minors currently available for secondary certification students are listed below:

Biology

Chemistry

Computer Science (minor only)

Earth Science

Economics

English

English as a Second Language (minor only)

French

German (minor only)

History

Integrated Science (major only)

Learning Disabilities (major only)

Mathematics

Required courses 20 hrs

Physics BIOL 130 Introduction to Organismal Political Science and Environmental Biology Introduction to Molecular and Cellular Biology Psychology (minor only) **BIOL 140** Social Studies (major only) Cell and Molecular Biology Sociology (minor only) Select at least one course from major list Spanish Speech (minor only) Organismal Biology Select at least one course from major list **BIOLOGY MAJOR** Population and Environmental Biology Select at least one course from major list A minimum of 32 semester hours is required. Required courses BIOL 130/131L Introduction to Organismal and 1. An overall GPA of 2.75 or better is required for a major or a Environmental Biology4 hrs BIOL 140/141L Introduction to Molecular and Cellular For the major, 16 semester hours must be in courses Biology4 hrs numbered 300 or above; for the minor, 7 semester hours in courses numbered 300 or above. Cellular and Molecular Biology...... 6-8 hrs At least 15 semester hours in UM-Dearborn courses Select two courses from below. One must be a laboratory course. required for a major. *BIOL **CHEMISTRY** 306/307L General Genetics4hrs **BIOL 370** Principles of Biochemstiry......3 hrs **MAJOR BIOL 380** A minimum of 32 semester hours is required. BIOL 385/L Required courses BIOL 405/L Applied & Environ Microbiology......4 hrs *BIOL 406 BIOL 450/L CHEM 144/L General Chemistry IB4 hrs BIOL 455/L **BIOL** 470/472L **BIOL** 471/473L CHEM 225 **BIOL 474/L** Molecular Biology......4 hrs Organic Chemistry II......3 hrs **CHEM 226 BIOL 485 CHEM 227** Organic Lab......2 hrs **CHEM 303** Inorganic Chemistry I......3 hrs Select two courses from below. One must be a laboratory course. BIOL 303/L Comparative Animal Physiology......4 hrs **CHEM 368** BIOL 309/L Introduction to Mycology4 hrs BIOL 310/L Histology4 hrs Select at least one from the following: BIOL 311L Embryology4 hrs **CHEM 348 BIOL 312/L** Comparative Anatomy of Vertebrates 5 hrs Inorganic Chemistry II3 hrs **CHEM 403** Invertebrate Zoology4 hrs **BIOL 324** CHEM 447/L Instrumental Methods of Analysis 4 hrs BIOL 333/L Plant Biology4 hrs **CHEM 469** BIOL 335/L Plant Physiology......4 hrs **CHEM 470** BIOL 350/L Introduction to Neurobiology......4hrs BIOL 353 Select one from the following CHEM 450 Advanced Organic Synthesis Select two courses from below. One must be a laboratory course. BIOL 304/L **CHEM 452** Advanced Inorganic Synthesis **BIOL 315/L** Aquatic Ecosystems4 hrs BIOL 320L Field Biology4 hrs **CHEM 481** Physicochemical Measurements2hrs *BIOL 360/361L Population Genetics and Evolution......4hrs BIOL 419 MINOR BIOL 420/L Advanced Field Ecology4 hrs A minimum of 20 semester hours is required. Electives Required courses Select from above 0-4 hrs CHEM 134/L General Chemistry IA4 hrs *One course in genetics: either BIOL 306, or 360, must be selected. MINOR A minimum of 20 semester hours is required.

CHEM146/L General Chemistry IIB4 hrs

3 hrs

ECON 301

3 hrs

CHEM 225	Organic Chemistry I	3 hrs
CHEM 226	Organic Chemistry II	3 hrs
CHEM 303	Inorganic Chemistry I	3 hrs
CHEM 344/L	Quantitative Analysis	4 hrs

Notes

- An overall GPA of 2.75 or better is required for a major or a minor.
- 2. For the major, 16 semester hours must be in courses 300 or above; for the minor, 7 semester hours in courses numbered 300 or above.
- 3. At least 15 semester hours in UM-Dearborn courses required for the major.

Chemistry/Instructional Track

The Chemistry/Instructional Track concentration is an interdisciplinary program leading to a BS degree in Chemistry, and to a Michigan Provisional Secondary Teaching Certificate. It is a collaboration between the Department of Natural Sciences and the College of Education, Health, and Human Services. For further information, contact Angela Allen, advisor, at the Dept. of Nat. Sciences, (313) 593-5627.

COMPUTER SCIENCE

MINOR ONLY

A minimum of 20 semester hours is required.

Prerequisites: One year of calculus, either MATH 115 and MATH 116 or MATH 113 and MATH 114. (Not included in the 20 hours.)

Required courses

Computer and In	formation Sciences
CIS 150	Computer Science I4 hrs
CIS 200	Computer Science II4 hrs
CIS 275	Discrete Structures4 hrs
Computer Litera	cy and Basic Programming6hrs
CIS 350 OR	Data Structures & Algorithm Analysis4 hrs
CIS 381	Industrial Robots
EDT 211	Technology for Secondary Education3 hrs
Recommended E	Electives 6 hrs
CIS 400	Programming Languages4 hrs
MATH 447	Microcomputers in Math for Teachers 2 hrs
CIS 29_	(A programming language) 2-3hrs
Additional Elect	ives
MATH 462	Math Modeling
MATH 472	

The State Certification requirements for Computer Science require three (3) programming languages. The Above program requires C++. Students must select two additional languages to meet the three language requirement. One recommended language is LOGO (MATH 447). Students with significant background in a language may petition for a waiver of the course teaching that language.

(or other electives approved by academic advisor)

Notes

STAT 325

- 1. An overall GPA of 2.75 or better is required for a minor.
- For the minor, 9 semester hours at 300 or above are required.

EARTH SCIENCE

MAJOR

A minimum of 32 semester hours is required.

Required courses

GEOG 203	Weather & Climate
GEOL 218/L	Historical Geology4 hrs
GEOL 340	Remote Sensing
GEOL 342	Physical Oceanography
GEOL 377	Field Methods
ASTR130	Introduction to Astronomy
ASTR131	Introduction to Astronomy Laboratory 1 hr
Electives	
ESCI 330	Land Use Management
GEOG 310	Economic Geography
GEOL 332	Hazardous Waste Management 3 hrs

Groundwater Hydrology3 hrs

GEOL 118/L Physical Geology......4 hrs

MINOR

A minimum of 24 semester hours is required.

Required courses

GEOL 370

GEOL 372

GEOL 375

	.5	
GEOG 203	Weather & Climate	j
GEOL 118/L	Physical Geology4 hrs	,
GEOL 218 /L	Historical Geology4 hrs	,
GEOL 342	Physical Oceanography3 hrs	j
GEOL 377	Field Methods 1 hr	
ASTR130	Introduction to Astronomy3 hrs	,
ASTR131	Introductory Astronomy Laboratory 1 hr	
Electives	5 hrs	,
ESCI 330/L	Land Use Management4 hrs	,
	GEOL 332 Hazardous Waste Management	
GEOL 340	Remote Sensing	,
GEOL 370	Environmental Geology	,
GEOL 372	Energy Resources	
0202072	Elicity Resources	•

NOTES

 An overall GPA of 2.75 or better is required for a major or a minor

GEOL 375/L Groundwater Hydrology4hrs

2. At least 15 semester hours of courses at UM-Dearborn required for a major.

ECONOMICS

MAJOR

A minimum of 30 semester hours is required.

Required courses

ECON 201	Principles of Macroeconomics	
ECON 202	Principles of Microeconomics 3 hrs	
ECON 302	Intermediate Microeconomics	
ECON 348	International Trade	
	ECON 351Environmental Economics	
ECON 361	U.S. Economic History	
Select two of the	following	

MINOR

A minimum of 21 semester hours is required.

ENGL 323

ENGL 327

ENGL 383

Required cour			LING 425	Language and Society	
ECON 201	Principles of Macroeconomics 3 hrs		ENGL 461	Modern English Grammar	
ECON 202	Principles of Microeconomics 3 hrs	ECON	N 30 ILINGe#6# dia	te Colon temporary il shet 3 rhus l Theory	
ECON 302	Intermediate Microeconomics		ENGL 465	Discourse Analysis	3 hrs
ECON 348	International Trade		ENGL 477	African American English	
	ECON 351Environmental Economics	3 hrs	ENGL 482	History of the English Language	
			ENGL 484	World Englishes	3 hrs
ECON 361	U.S. Economic History3 hrs		LING 476	Sociolinguistics	3 hrs
Notes	CDA (2.75 1			courses is to be selected with the approval	
 An overall a minor. 	GPA of 2.75 or better is required for a major and			diffication advisors in accordance with the I requirements. Among the electives, JASS	
	ajor, 15 semester hours must be in courses 300 or			COMM 335 are allowed	
	emester hours at 300 or above for a minor.				
3. At least required fo	15 semester hours in UM-Dearborn courses or a major.		Supplementary	requirement (not included in the 20 hrs):	
-			LIBR 470	Literature for Young People	3 hrs
<u>ENGLISH</u>				05 and 106 are required but do not count	toward
MAJOR			the English min		
A minimum of	30 semester hours is required.		3.7		
Required cour	ses		Notes 1 An overall	GPA of 2.75 or better is required for a maj	or or a
=			minor.	5111 of 2.75 or bener is required for a maj	or or a
	e following			jor, 18 semester hours must be in courses	300 or
ENGL 461 ENGL 482	Modern English Grammar			nester hours at 300 or above for a minor.	
ENGL 462	History of the English Language 3 his			semester hours in UM-Dearborn courses re	equired
Select one of th	e following		for a major.		•
ENGL 323	Advanced Creative Writing3 hrs				
ENGL 327	Advanced Exposition		ENGLISH AS	A SECOND LANGUAGE	
Select one of th	e following		MINOR ON	$\mathbf{L}\mathbf{Y}$	
ENGL 383	American English 3 hrs			demonstrate experience in learning a r	nodern
LING 425	Language and Society3 hrs			e or coursework in a modern second langu	
ENGL 461	Modern English Grammar3 hrs			Program Coordinator, or take one cours	
LING 464	Contemporary Rhetorical Theory3 hrs		modern languag		
ENGL 465	Discourse Analysis				
ENGL 477	African American English		A minimum of	21 semester hours from the following:	
ENGL 482	History of the English Language3 hrs		Required cour	202	
ENGL 484	World Englishes		EDD 447	Teaching English as a Second Language	3 hrs
LING 476	Sociolinguistics		EDD 447 EDD 448	Practicum Teaching English as a Second	
	courses are to be selected with the approval of the		EDC 455	Language	I hr
	dification advisors in accordance with the English		EDC 455	Assessment in Second Language	2.1
concentration i	requirements. Among the electives, JASS 310,		T. 101 151	Learning (K-12)	
JASS 330 and C	COMM 335 are allowed21 hrs		ENGL 474	Second Language Acquisition	3 crs
* *	requirement (not included in the 30 semester		LING 480	Concepts of Linguistics	
hours):			LING 476	Sociolinguistics	
LIBR 470	Literature for Young People		0.1	C.11	<i>(</i> 1
Note: COMP 1	05 and 106 are required but do not count toward			e following	
the English maj			ENGL 461	Modern English Grammar	
MINOR				History of the English Language 3 425 Language and Society	3 hrs
	of 20 semester hours is required.		LING/ENGL	484 World Englishes	3 hrs
Required cour	•		Notas		
=			Notes: 1. EDD 447/	448 is a pre-requisite for EDC 455.	
	e following			0 is a pre-requisite for LING/ENGL	461
ENGL 461	Modern English Grammar3 hrs			GL 482, LING/ENGL 484, LING 474 and	
ENGL 482	History of the English Language3 hrs		476.		21110
Select one the f	ollowing3 hrs				
	Creative Writing 2 hrs		FRENCH		

FRENCH

MAJOR

A minimum of 30 semester hours in coursework beyond secondyear proficiency is required.

Prerequisite:	French	202	or	equivalent	French	language
proficiency (no	ot counted	l towa	rd m	ajor).		

Required courses

FREN 301	Advanced Conversation and Composition.
	3 hrs
FREN 302	Advanced Conversation and Composition
FREN 332	French Cinema 3 hrs
One specialized	language course from the following
FREN 305	Language of Business
FREN 306	A Cultural Introduction to French Business
FREN 408	Writing and Translating
Two civilization	/culture courses from the following 6 hrs
FREN 336	French Civilization of the Past
FREN 337	France in the Twentieth Century
FREN 338	France of Today
FREN 339	Francophone Literature and Civilization
	-

One literature co	urse from the following
FREN 330	French Literature: Middle Ages - 18 th Century
FREN 331	French Literature: 19th and 20th Century
	·
FREN 334	Workshop in French Theater
FREN 339	Francophone Literature and Civilization
FREN 433	Contemporary French Theater
	1 3

Additional credit hours from other French area offerings 9 hrs

MINOR

A minimum of 20 semester hours of coursework beyond second year proficiency is required.

Prerequisite

French 202 or equivalent French language proficiency (not counted toward minor).

Required courses

FREN 301	Advanced Conversation and Composition.
FREN 302	Advanced Conversation and Composition
FREN 332	French Cinema 3 hrs
	anguage course from the following
FREN 305	Language of Business
FREN 306	A Cultural Introduction to French
	Business
FREN 408	Writing and Translating
One civilization/	culture courses from the following
FREN 336	French Civilization of the Past
FREN 337	France in the Twentieth Century3 hrs
FREN 338	France of Today
FREN 339	Francophone Literature and Civilization 3 hrs
TREN 337	Trancophone Enerature and Civinzation5 ins
One literature co	urse from the following
FREN 330	French Literature: Middle Ages –
	18th Century
FREN 331	French Literature: 19 th and 20 th Century3 hrs
11CE1 (331	Trenen Entertaine. 19 and 20 Century 1113
FREN 334	Workshop in French Theater
FREN 339	Francophone Literature and Civilization 3 hrs
FREN 433	Contemporary French Theater 3 hrs
Additional credit	hours from other French area offerings2-3hrs

Notes

- FREN 339 is listed under two headings. Students may count it under one or the other of the headings as they wish, but not under both.
- Concentrators are encouraged to strengthen their knowledge of French language and culture by participating in any of the approved study-abroad programs.
- 3. For the major, 30 credit hours of upper-level courses (courses numbered 300 or higher) are required; 20 credit hours of upper-level courses are required for the minor.
- 4. An overall GPA of 2.75 or better is required for a major or a minor
- At least 15 semester hours in UM-Dearborn courses required for a major.
- 6. Acceptable scores from the MTTC Subject Area Test in French are required for Teacher Certification.

HISTORY

MAJOR

A minimum of 30 semester hours is required.

Required courses

HIST 101	Ancient World	3 hrs
HIST 103	Modern World	3 hrs
HIST 111	American Past I	3 hrs
HIST 112	American Past II	3 hrs
HIST 300	The Study of History	3 hrs
HIST 361	United States Economics History	3 hrs
HIST 3601	Michigan History	3 hrs

Balance of courses to be selected from three different global areas: Asia, Europe, Africa, the Americas, Russia or the Middle East......

9hrs

MINOI

A minimum of 21 semester hours is required.

HIST 101	Ancient World History	3 hrs
HIST 103	Modern World History	
HIST 111	American Past I	3 hrs
HIST 112	American Past II	3 hrs
HIST 361	United States Economics History	3 hrs
HIST 3601	Michigan History	3 hrs

Notes

- An overall GPA of 2.75 or better is required for a major or a minor.
- 2. For the major, 15 semester hours must be in courses 300 or above; 9 semester hours at 300 or above for a minor.
- 3. 15 semester hours in UM-Dearborn courses required for a major. 9 semester hours in UM-Dearborn courses required for a minor.

INTEGRATED SCIENCE

MAJOR

A minimum of 36 semester hours is required spread over three of the four subject areas for Integrated Science. The remaining subject area will constitute your minor. You must minor in one of these four disciplines.

Required courses 8 hrs

BIOL 130/L Introduction to Organismal and Environmental Biology

BIOL 140/L Introduction to Molecular and Cellular Biology

	e from the following		NA A TELLENA A TEL	ICC	
BIOL 301/L	Cell Biology		<u>MATHEMATI</u>	<u>ics</u>	
BIOL 304/L	Ecology		MAJOR		
BIOL 306	General Genetics			30 semester hours from courses numbered	d above
BIOL 320/L	Field Biology		MATH 105 is re		
BIOL 360	Population Genetics and Evolution			- quii vui	
BIOL 385/L	Microbiology	4 hrs	Required cours	ses	
CI · ·		10.1	MATH 115	Calculus I	
Chemistry		12 hrs	MATH 116	Calculus II	4 hr
Required cour	rses		MATH 215	Calculus III	4 hr
	24LGeneral Chemistry IA	4 hrs	MATH 200	Mathematical Proof and Structures	2 hr
OR			MATH 216	Introduction to Differential Equations	3 hr
	General Chemistry IIA	4 hrs	MATH 227	Intro to Linear Algebra	3 hr
OR	General Chemistry in Linear		MATH 331	Survey of Geometry	3 hr
	General Chemistry IIB	4 hrs	MATH 412	First Course in Modern Algebra	3 hrs
CHEWII 10/E	•		MATH 486	Secondary School Mathematics for	
CHEM 225	Organic Chemistry I	3 hrs		Teachers	3 hr
	rse from the following			electives	
CHEM 226	Organic Chemistry II		MATH 276	Discrete Mathematics	
CHEM 227	Organic Chemistry Laboratory	2 hrs	MATH 315	Applied Combinatorics	
CHEM 303	Inorganic Chemistry		MATH 372	Computing with Mathematica	
CHEM 344/L	Quantitative Analysis	4 hrs	MATH 395	Elementary Number Theory	3 hr
			MATH 413	Linear Algebra	3 hr
Earth Science		12 hrs	MATH 455	Complex Variables	3 hr
Doguinad com	mana		MATH 462	Mathematical Modeling	3 hr
Required cour		4 hera	MATH 480	History of Mathematics	
GEOG 203	Physical GeologyWeather and Climate			·	
				requirements (not included in the 30 hours)	
	roduction to Astronomy		CIS150	Computer Science I	
3 hrs	Today 1 - 41 - 4 - Andrew Today		STAT 325	Applied Statistics I	3 hr
ASTR131	Introduction to Astronomy Lab		MINOD		
1 hr			MINOR	20	1 .1
Select one course	e from the following	1-4 hrs		20 semester hours from courses numbered	a above
	Historical Geology		MATH 105 is re	equired.	
GEOL 332	Hazardous Waste Management		Required cours	ses	
GEOL 340	Remote Sensing		MATH 115	Calculus I	4 hr
GEOL 342	Oceanography		MATH 116	Calculus II	
GEOL 370	Environmental Geology		MATH 200	Math. Proof and Structures	
GEOL 377	Field Methods		MATH 200	Intro to Linear Algebra	
GLOL 311	Tield Wethods	1 111	MATH 331	Survey of Geometry	3 III
Physics		12 hrs	MATH 486	Secondary School Mathematics for	5 111
Required cou	rses	8 hrs	WII 1111 400	Teachers	3 hr
	Introductory Physics I			1 cachers	5 111
OR	,		Recommended of	electives	3-4 hr
	General Physics I	4 hrs	MATH 215	Calculus III	4 hr
11110 100/2	34.14.1 1 1.3 01 .0 0 1		MATH 276	Discrete Mathematics	
AND			MATH 315	Applied Combinatorics	
D11110 10 11			MATH 372	Computing with Mathematica	
	Introductory Physics II	4 hrs	MATH 395	Elementary Number Theory	
OR			MATH 412	First Course in Modern Algebra	
PHYS 151/L	General Physics II	4 hrs	MATH 455	Complex Variables	
Calaat ama aayraa	from the fellowing	4 h.m.	MATH 462	Mathematical Modeling	
	c from the following		MATH 480	History of Mathematics	
PHYS 305	Contemporary Physics		1V1/A111 +0U	mistory or maniematics	5 111
PHYS 360/L	Instrumentation for Scientists		STAT 325	Applied Statistics I	3 hr
PHYS 401	Mechanics.		OR	**	
PHYS 403	Electricity and Magnetism		_	ata analysis and probability	
PHYS 405	Optics				
PHYS 406	Thermal and Statistical Physics	3 hrs		requirement (not included in the 20 hours)	
MINOR			CIS150	Computer Science I	4hr
	20 additional hours is required in	one of the	OR		
	ove. See information above under Ma		a programmir	ng course	3 hr
subject areas abo	5. See miormanon above unuel Ma	yv1.			

Additional Notes:

- 1. An overall GPA of 2.75 or better is required for a major.
- At least 15 hours of UM-Dearborn courses are required for a major.

MATH 105 is re	quired.			
Required courses				
MATH 115	Calculus I			
MATH 116	Calculus II			
MATH 215	Calculus III			
MATH 200	Mathematical Proof and Structures 2 hrs			
MATH 216	Introduction to Differential Equations 3 hrs			
MATH 227	Intro to Linear Algebra			
MATH 331	Survey of Geometry			
MATH 412	First Course in Modern Algebra			
MATH 486	Secondary School Mathematics for			
WH 1111 100	Teachers			
Recommended (electives			
MATH 276	Discrete Mathematics 3 hrs			
MATH 315	Applied Combinatorics 3 hrs			
MATH 373 MATH 372	Computing with Mathematica			
MATH 395	Elementary Number Theory			
MATH 413	Linear Algebra 3 hrs			
MATH 455	Complex Variables 3 hrs			
MATH 462	Mathematical Modeling			
MATH 480	History of Mathematics			
Supplementary	requirements (not included in the 30 hours)			
CIS150	Computer Science I			
STAT 325	Applied Statistics I			
MINOR				
A minimum of	20 semester hours from courses numbered above			
MATH 105 is required.				
MATH 105 is re	equired.			
MATH 105 is re Required cours MATH 115				
Required cours	ses			
Required cours MATH 115	ses Calculus I4 hrs			
Required cours MATH 115 MATH 116 MATH 200	Ses Calculus I			
Required cours MATH 115 MATH 116	Calculus I			
Required cours MATH 115 MATH 116 MATH 200 MATH 227	Calculus I			
Required cours MATH 115 MATH 116 MATH 200 MATH 227 MATH 331	Calculus I			
Required cours MATH 115 MATH 116 MATH 200 MATH 227 MATH 331 MATH 486	Calculus I			
Required cours MATH 115 MATH 116 MATH 200 MATH 227 MATH 331 MATH 486	Calculus I			
Required cours MATH 115 MATH 116 MATH 200 MATH 227 MATH 331 MATH 486 Recommended of MATH 215	Calculus I 4 hrs Calculus II 4 hrs Math. Proof and Structures 2 hrs Intro to Linear Algebra 3 hrs Survey of Geometry 3 hrs Secondary School Mathematics for Teachers 3 hrs electives 3-4 hrs Calculus III 4 hrs			
Required cours MATH 115 MATH 116 MATH 200 MATH 227 MATH 331 MATH 486 Recommended of MATH 215 MATH 276	Calculus I			
Required cours MATH 115 MATH 116 MATH 200 MATH 227 MATH 331 MATH 486 Recommended of MATH 215 MATH 276 MATH 315	Calculus I			
Required cours MATH 115 MATH 116 MATH 200 MATH 227 MATH 331 MATH 486 Recommended of MATH 215 MATH 276 MATH 315 MATH 372	Calculus I			
Required cours MATH 115 MATH 116 MATH 200 MATH 227 MATH 331 MATH 486 Recommended of MATH 215 MATH 276 MATH 315 MATH 372 MATH 395	Calculus I			
Required cours MATH 115 MATH 116 MATH 200 MATH 227 MATH 331 MATH 486 Recommended of MATH 215 MATH 276 MATH 315 MATH 372 MATH 395 MATH 412	Calculus I			
Required cours MATH 115 MATH 116 MATH 200 MATH 227 MATH 331 MATH 486 Recommended of MATH 215 MATH 276 MATH 315 MATH 372 MATH 395 MATH 412 MATH 455	Calculus I			
Required cours MATH 115 MATH 116 MATH 200 MATH 227 MATH 331 MATH 486 Recommended of MATH 215 MATH 276 MATH 315 MATH 372 MATH 395 MATH 412 MATH 455 MATH 455 MATH 462	Calculus I			
Required cours MATH 115 MATH 116 MATH 200 MATH 227 MATH 331 MATH 486 Recommended of MATH 215 MATH 276 MATH 315 MATH 372 MATH 395 MATH 412 MATH 455 MATH 455 MATH 462 MATH 480	Calculus I			
Required cours MATH 115 MATH 116 MATH 200 MATH 227 MATH 331 MATH 486 Recommended of MATH 215 MATH 276 MATH 315 MATH 372 MATH 395 MATH 412 MATH 455 MATH 455 MATH 462 MATH 480 STAT 325	Calculus I			
Required cours MATH 115 MATH 116 MATH 200 MATH 227 MATH 331 MATH 486 Recommended of MATH 215 MATH 276 MATH 315 MATH 372 MATH 395 MATH 412 MATH 455 MATH 455 MATH 455 MATH 462 MATH 480 STAT 325 OR	Calculus I			
Required cours MATH 115 MATH 116 MATH 200 MATH 227 MATH 331 MATH 486 Recommended of MATH 215 MATH 276 MATH 315 MATH 372 MATH 372 MATH 395 MATH 412 MATH 455 MATH 462 MATH 480 STAT 325 OR a course in data	Calculus I			
Required cours MATH 115 MATH 116 MATH 200 MATH 227 MATH 331 MATH 486 Recommended of MATH 215 MATH 215 MATH 276 MATH 315 MATH 372 MATH 372 MATH 395 MATH 412 MATH 455 MATH 462 MATH 480 STAT 325 OR a course in da Supplementary	Calculus I			
Required cours MATH 115 MATH 116 MATH 200 MATH 227 MATH 331 MATH 486 Recommended of MATH 215 MATH 276 MATH 315 MATH 372 MATH 372 MATH 395 MATH 412 MATH 455 MATH 462 MATH 480 STAT 325 OR a course in data	Calculus I			

1. An overall GPA of 2.75 or better is required for a major or a minor.

- 2. For the major, 12 semester hours must be in courses 300 or above; 6 semester hours at 300 or Above for a minor.
- 3. At least 15 semester hours in UM-Dearborn courses required for a major.

PHYSICS

MAJOR

A minimum of 32 semester hours is required.

Required course	es	
PHYS 150/L	General Physics I	4 hrs
PHYS 151/L	General Physics II	4 hrs
PHYS 305	Contemporary Physics	3 hrs
PHYS 401	Mechanics	
PHYS 403	Electricity and Magnetism	3 hrs
Electives		15 hrs
PHYS 320	Environmental Physics	3 hrs
PHYS 360/L	Instrumentation for Scientists	4 hrs
PHYS 405	Optics	3 hrs
PHYS 406	Thermal and Statistical Physics	3 hrs
PHYS 453	Quantum Mechanics	3 hrs
PHYS 457	Atomic and Nuclear Physics	3 hrs
PHYS 460	Advanced Physics Laboratory II	3 hrs
PHYS 463	Solid State Physics	3 hrs

MINOR

A minimum of 20 semester hours is required.

Required courses

	Introductory Physics I	4 hrs
OR DUVE 150/I	Ganaral Physics I	4 hra
PH 13 130/L	General Physics I	4 IIIS
AND		
PHYS 126/L	Introductory Physics II	4 hrs
OR		
PHYS 151/L	General Physics II	4 hrs
PHYS 305	Contemporary Physics	3 hrs
Additional hours	selected from the following	9 hrs
PHYS 320	Environnemental Physics	
PHYS 360/L	Instrumentation for Scientists	4 hrs
PHYS 401	Mechanics	3 hrs
PHYS 403	Electricity and Magnetism	3 hrs
PHYS 405	Optics	3 hrs
PHYS 453	Quantum Mechanics	
PHYS 457	Atomic and Nuclear Physics	3 hrs
PHYS 460	Advanced Physics Laboratory II	
PHYS 463	Solid State Physics	

Notes

- An overall GPA of 2.75 or better is required for a major or a minor.
- 2. For the major, 18 semester hours must be in courses 300 or above; 9 semester hours in courses 300 or above for a minor.
- 3. At least 15 semester hours in UM-Dearborn courses required for a major.

POLITICAL SCIENCE

MAJOR

A minimum of 30 semester hours is required.

Required courses

POL 101	Introduction to American Government3 hrs
POL 201	Introduction to Comparative Government3 hrs

POL 313	American State Government	3 hrs
POL 316	American Judicial Process	3 hrs
POL 325	Environmental Politics	3 hrs
POL 371	International Relations	3 hrs
HIST 103	Modern World History	3 hrs

MINOR

A minimum of 21 semester hours is required.

Required courses

POL 101	Introduction to American Government	.3	hrs
POL 201	Introduction to Comparative Government	.3	hrs
POL 313	American State Government	.3	hrs
POL 316	American Judicial Process	.3	hrs
POL 325	Environmental Politics	.3	hrs
POL 371	International Relations	.3	hrs
HIST 103	Modern World History	.3	hrs

Notes

- An overall GPA of 2.75 or better is required for a major or a minor.
- 2. For the major, 15 semester hours must be in courses 300 or above; 9 semester hours in courses 300 or Above for a minor.
- 15 semester hours in UM-Dearborn courses required for a major. 9 semester hours in UM-Dearborn courses required for a minor.

PSYCHOLOGY

MINOR ONLY

A minimum of 21 semester hours is required.

Required courses 12 hrs

PSYC 170	Psychology as a Natural Science	3 hrs
PSYC 171	Psychology as a Social Science	3 hrs
PSYC 300	Life-Span Developmental Psychology	3 hrs
PSYC 320	Social Psychology	
Select one of the	following	3 hrs
PSYC 315	Personality Development	3 hrs
PSYC 4445	Personality Assessment	4hrs
PSYC 450	Personality Theory	3 hrs
Select two of the	following	6 hrs
PSYC 321	Attitudes and Social Behavior	
PSYC 322	Psychology of Prejudice	3 hrs
PSYC 363	Cognitive Psychology	3 hrs
PSYC 418	Cognitive Development	3 hrs
PSYC 421	Group Processes	
PSYC 461	Learning & Memory	
PATI 401		

Notes

- An overall GPA of 2.75 or better is required for a major or a minor.
- 2. Eighteen (18) semester hours must be in courses 300 or above for a minor.
- PSYC 407 satisfies the EDC 302 (Adolescent Development) requirement for secondary certification students if taken prior to Fall 1996.

SOCIAL STUDIES

MAJOR ONLY

A minimum of 36 semester hours is required.

required courses	7 m3	
SOC 200	Principles of Sociology	3 hrs
SOC 201	Contemporary Social Problems	3 hrs
SOC 382	Social Psychology	
Select one of the	following	3 hrs
SOC 422	Structure of American Society	3 hrs
SOC 423	American Social Classes	
SOC 449	The Black Family in Contemporary	
	America	3 hrs
Select one of the	following	3 hrs
SOC 445	The Family	
SOC 446	Marriage and Family Problems	
SOC 447	Family Violence	
500 447	Tanniy Violence	5 1113
Select two of the	following	6 hrs
SOC 403	Minority Groups	
SOC 430	Population Problems	
SOC 443	Development of Sex Roles	
SOC 455	Sociology of Religion	
SOC 458	Sociology of Education	
SOC 460	America in a Global Society	
SOC 465	Deviant Behavior/Social Disorganization	
SOC 469	Juvenile Delinquency	
	• •	

Notes

- An overall GPA of 2.75 or better is required for a major or a minor
- Fifteen semester hours must be in courses 300 or above for a minor.

SPANISH

MAJOR

A minimum of 30 semester hours of coursework beyond secondyear proficiency is required.

Prerequisite: SPAN 202 or equivalent Spanish language proficiency (hours do not count toward major).

Required courses	s 9 hrs	
SPAN 301	Advanced Conversation and	
	Composition I3	hrs
SPAN 302	Advanced Conversation and	
	Composition II3	hrs
SPAN 305	Language of Business	hrs
One civilization/	culture courses from the following	3hrs
SPAN 356	Spanish Civilization and Culture3	hrs
SPAN 357	Latin American Civilization and Culture3	hrs
SPAN 358	Spain in the Twentieth Century3	hrs
One literature co	ourse from the following	hrs
SPAN 350	Masterpieces of Latin American	
	Literature3	hrs
SPAN 351	Masterpieces of Spanish Literature3	hrs
Two 400-level la	anguage courses from the following 4-5	hrs
SPAN 406	Advanced Written Expression	hrs
SPAN 409	Oral Expression	hrs
SPAN 420	Introduction to Translation	hrs

Additional credit hours from other Spanish area offering 10-11 hrs

MINOR

A minimum of 20 semester hours of coursework beyond secondyear proficiency is required.

Prerequisite: SPAN 202 or equivalent Spanish language proficiency (hours do not count toward minor).

O hero

Required courses	39 hrs
SPAN 301	Advanced Conversation and
	Composition I
SPAN 302	Advanced Conversation and
	Composition II
SPAN 305	Language of Business
One civilization	/culture courses from the following 3hrs
SPAN 356	Spanish Civilization and Culture 3 hrs
SPAN 357	Latin American Civilization and Culture3 hrs
SPAN 358	Spain in the Twentieth Century 3 hrs
One literature co	urse from the following 3 hrs
SPAN 350	Masterpieces of Latin American Literature
SPAN 351	Masterpieces of Spanish Literature
One 400-level la	nguage course from the following 2-3 hrs
SPAN 406	Advanced Written Expression
SPAN 409	Oral Expression
SPAN 420	Introduction to Translation
Additional credit	hours from other Spanish area offering2-3 hrs

Notes

- Concentrators must take at least one course that deals specifically with Spanish (peninsular) topics such as SPAN 351, 356, or 358 and at least one course that deals with the Latin American topics such as SPAN 350 or 357.
- Concentrators are encouraged to strengthen their knowledge of Spanish language and Hispanic culture by participating in any of the approved study-abroad programs.
- 3. For the major, 30 credit hours of upper-level courses (courses numbered 300 or higher) are required; 20 credit hours of upper-level courses are required for the minor.

- An overall GPA of 2.75 or better is required for a major or a minor.
- 5. At least 15 semester hours in UM-Dearborn courses are required for a major.
- 6. Acceptable scores from the MTTC Subject Area Test in Spanish are required for teacher certification.

SPEECH

MINOR ONLY

A minimum of 21 semester hours is required.

Prerequisite: SPEE 101, Fundamentals of Public Speaking, and COMM 220, Survey of Mass Communication (hours not counted toward minor).

Required course

LIBR 470	Literature for Young People	
	rses from the following with faculty advisement he College of Education, Health, and Human	
	12 hrs	
SPEE 310	Interpersonal Communications 3 hrs	
SPEE 320	Public Argument and Advocacy 3 hrs	
SPEE 330	Argumentation and Debate3 hrs	
SPEE 340	Theories of Persuasion	
SPEE 400	Speech Skills for Professionals	
SPEE 430	Small Group Communication	
Select two cours	ses from the following with faculty advisement in	
CASL and the C	ollege of Education, Health, and Human Services 3 hrs	
JASS302Press	s, Law and Ethics3 hrs	
COMM 420	Critical Media Studies	
COMM 430	International Communication	

Notes

- 1. An overall GPA of 2.75 or better is required for a minor.
- 2. The 21 semester hours must be in courses 300 or above for a minor.
- 3. It is strongly recommended that students elect COMM 302 and COMM 420.

PROFESSIONAL REQUIREMENTS

Preparation for a teaching credential consists of required courses in education. At least two practicums and methods courses in the academic major and minor are required prior to directed teaching.

Professional Sequence

A minimum of 34 semester hours of coursework is required.

Foundations

EXPS 410

EDA 340	The Foundations of American Education 3 hrs	,

Multiculturalism in School and Society......3 hrs

Multicultural education

Psychology	
EDC 300	Educational Psychology
EDC 302	Adolescent Dev & Clsrm Mgmt3 hrs
EDC 304	Practicum Adolescent Dev & Clsrm Mgmt,,,1 hr
EDC 460	Educating the Exceptional Child

Methodologies	(See Note #1 below)	
EDD 469	Reading in the Content Areas	3 hrs
Methods Cou	urse in Selected Major/Minor and practicum	
EDD 440	Teaching English in Second Grades	3 hrs
EDD 441	Practicum: English in Second Grades	. 1 hr
EDD 450	Teaching Mathematics in Secondary	
	Grades	3 hrs
EDD 451	Practicum: Mathematics in Secondary	
	School	. 1 hr
EDD 480	Teaching of Science in the Secondary	
	Grades	3 hrs
EDD 481	Practicum in Science: Secondary Grades	. 1 hr
EDD 490	Teaching of Social Studies	
	in Secondary Schools	3 hrs
EDD 489	Practicum in Social Studies: Secondary	
	Schools	. 1 hr
EDD 496	Second Language Teaching: Secondary	
	Level	3 hrs
EDD 497	Practicum in Second Language Teaching:	
	Secondary Level	. 1 hr
Mathods cou	urse in minor if different than major	
OR	arse in minor ir different tilan major	
	ective2-	3 hre
Education Cit	2-	.5 111 8
Note: See CEH	HS advisor for Schedule of Classes offerings.	
Professional Se	emester (See Notes #3, #4, & #5 below)	
EDD 421		
	1	2 hrs
EDD 424		

Notes

- Enrollment in all the required EDD courses is open only to those who are officially enrolled and in good academic standing in a certification program at UM-Dearborn (junior standing required), with a cumulative GPA of 2.75 or higher.
- A GPA of 2.75 or better is required overall for the Professional Sequence.
- 3. Taking and passing the MTTC Professional Readiness Examination.
- Eligibility for directed teaching requires acceptable scores from the MTTC (Michigan Tests for Teacher Certification) subject area tests: major and minor, and one full term of study at UM-Dearborn (12 semester hours).
- 5. Eligibility for other endorsements requires acceptable scores from the relevant MTTC subject area tests.

Methods courses are open only to students officially admitted into: the School's certification programs (Elementary, Secondary) or the Children and Families program. Therefore, credit for successfully completing such courses will be awarded by the School only to those students who, at the time of enrolling in such courses, are officially admitted and are in good academic standing. These courses are: EDD 421, EDD 424, EDD 440/441, EDD 450/451, EDD 469, EDD 480/481, EDD 490/489, and EDD 496/497.

The program as outlined above meets the Michigan Department of Education teacher certification requirements at the time of this writing. However, changes by the University or the Michigan Department of Education may affect some program requirements. Therefore, the student is strongly advised to find out about possible changes by checking with the Office of Student Records in the College of Education, Health, and Human Services and/or with an Education advisor.

Other Bachelor's Degree Programs

The College of Education, Health, and Human Services awards the Bachelor of General Studies degree (BGS) in the following program.

Children and Families BGS

The Children and Families Program is a Bachelor of General Studies degree. This program is a four-year degree program without elementary teaching certification, designed for students who wish to pursue careers in child care centers, teaching and administration, social service agencies or in other work with children and families. The 2+2 Children and Families BGS Program is designed to combine selected two-year community college associate degree programs with two years of coursework at the UM-Dearborn. The associate degrees eligible for this program must be covered by articulation agreements between the community college and the UM-Dearborn, College of Education, Health, and Human Services, or are accepted with permission of the Children and Families Program Advisor.

The UM-Dearborn students may be admitted to the Children and Families Program with a minimum grade point average of 2.5.

COURSEWORK AT COMMUNITY COLLEGE

Credits earned to complete designated community college associate degrees will be accepted for the UM-Dearborn BGS degree as lower-division credit (up to a maximum of 62 hours). Courses not applied toward meeting BGS distribution requirements or program prerequisites will be utilized as elective courses or general credit toward the Children and Families BGS degree. (Examples of the variety of community college associate degrees that could be appropriate for this 2+2 program are: Early Childhood Education and Care, and Family Support Services.) Currently, articulation agreements exist with Schoolcraft College and Macomb Community College, Washtenaw Community College as well as a transfer agreement with Oakland Community College.

COURSES TO BE TAKEN AT UM-DEARBORN

Students must complete Composition 220 (COMP 220) at UM-Dearborn.

Students must complete at least 48 hours in courses numbered 300 or above, of which at least 21 hours must be in the College of Education, Health, and Human Services. Courses must be distributed such that three areas of focus are developed, including: 1) Child Studies (Area I); 2) Behavioral Studies (Area II); and 3) an Elective area (Area III) to be chosen by the student with advisor approval. A minimum of 12 upper-level hours must be in Child Studies (Area I) and 9 upper-level hours in Behavioral Studies (Area II) must be earned at UM-Dearborn.

The remaining coursework at UM-Dearborn (to total the required 58-60) will be elected from either lower- or upper-division courses. These can be used to complete distribution requirements, to meet specific prerequisites, or to meet requirements and strengthen background in the Child Studies area.

To complete the program, students must have a 2.5 grade point average overall, 2.5 in Child Studies (Area I) and 2.5 in Behavioral Studies (Area II), and at least a 2.0 in the Elective area (Area III). A total of 120 credit hours is necessary to graduate.

AREAS OF STUDY

The student will elect courses in three areas of study, as follows:

Area I Child Studies 31-40 hrs Area II Behavioral Science 15+ hrs Area III Elective Area 12+ hrs

*Elective Area selected with advisor approval from: Health and Society Anthropology Business Mathematics Communication Natural Science Comp. Info. Science Political Science **Education (highly Psychology recommended) Sociology Spanish English French Women's Studies

German

ADDITIONAL DISTRIBUTION REQUIREMENTS FOR CHILDREN AND FAMILIES BGS

The following categories must be represented as part of the 58+ hours required to be taken at the UM-Dearborn. (Note that these will also satisfy requirements of one of the three BGS degree areas of study.)

Human Develop	oment to be chosen from*: 2-3 hrs
EDC 302	Adolescent Development
ANTH 415	Nutrition and Human Development 3 hrs
PSYC 300	Life-Span Development Psychology 3 hrs
PSYC 315	Personality Development
PSYC 404	Parent-Child Relations
PSYC 405	Gender Roles
PSYC 442	Psychopathology of Childhood 3 hrs
PSYC 450	Personality Theory
Cultural Diversi	ty to be chosen from:
EXPS 410	Multiculturalism in School and Society 3 hrs
ANTH 409	Human Growth and Culture 3 hrs
ANTH 421	Education and Culture
ANTH 425	Language and Society
ANTH 482	Psychological Anthropology 3 hrs
PSYC 321	Attitudes and Social Behavior 3 hrs
PSYC 322	Psychology of Prejudice 3 hrs
PSYC 432	Socialization of the Child 3 hrs
SOC 350	Sociology of Poverty
PSYC 320	Social Psychology
SOC 403	Minority Groups
SOC 423	American Social Classes
Child Child V	Velfare to be chosen from*2-3 hrs
EDB 421	Current Issues in Early Ed
SOC 477	Introduction to Social Welfare 3 hrs
SOC 478	Sociology/Social Work Internship 3 hrs
SOC 482	Methods: Social Work Practice 3 hrs
*Other courses	may be substituted with written permission of

*Other courses may be substituted with written permission of Children and Families Program Advisor.

CHILD STUDIES (Area I)	31-40 hrs
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Required courses

EDC -240	Psych. of Child Development	3 hrs
*EDC -241	Practicum in Child Development	1 hr

^{*} The student may select an alternative third area of study (i.e., one which is not listed above) if approved by the Children and Families Program Advisor.

^{**} If Education is selected as the Elective Area, the following courses may not be elected: EDD 452, EDD 467, EDD 468, EDD 471, EDD 485 and EDD 495.

EDC 414	Young Child with Special Needs	
EDD 406	Teaching Strategies for Early Childhood	2.1
	Education	
EDD 410	Practicum in Early Child Education	1 hr
EDD 412	Seminar: E.C. Education	2 hrs
**EDD 418+ OR **EDD 411+	Children and Families Internship Directed Teaching: Early Childhood	4 hrs
EDD 442	Early Childhood: Family, School, Comr	nunity
	Collaboration	3hrs
EDC 445	Devel. Assess of Young Child	3hrs
EDD 419	Early Literacy	3hrs
EDF 450	Health, Nutrition, & PE/Clsm teachers	

**Students interested in teaching in preschools, Head Start or child care programs must elect EDD 411. Transcripts will read Children and Families: Early Childhood. Students interested in working with children and families in agencies must elect EDD 418. Transcripts will read Children and Families: Family Support.

+This course requires a satisfactory grade.

Electives*	
EDB 422	Leadership, Advocacy, & Administration
	of Early Childhood programs
EDC 412	Social Development and
	Positive Guidance Techniques3hrs
EDC 431	Constructivist Education
EDC 445	Developmental Assessment
EDC 446	Cognition & Memory Development3hrs
EDD 416	Workshop: Creative Teaching Early
	Childhood
EDA 419	Early Literacy and Language Development
EDD 427	Art in Elementary School
EDD 433	Early Childhood Spec. Ed. Practicum 1 hr
EDD 446	Family-Centered Intervention Strategies
	for Early Intervention and
	Early Childhood Special Education 3 hrs
LIBR 465	Literature for Children

*Other College of Education, Health, and Human Services courses may be substituted with written permission of Children and Families Advisor

BEHAVIORAL STUDIES (Area II)	15+ hrs
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Required course

SOC 445

Transfer students	must take		
EDC 440	Child: Birth to	Three	3 hrs

OR SOC 446	Marriage and Family Problems	
	Educational Psychologyrom the following	3hrs

- - three area disciplines below are recommended.:

The Family

ANTH 275, 340, 345, 406, 409*, 415*, 420, 421*, 425*, 455, 482*

PSYC 275, 300*, 315*, 320*, 321*, 322*, 363, 370, 375, 404*, 405*, 407, 412, 415*, 440, 442*, 444, 450*, 461, 465, 472

SOC 201, 275, 350*, 382*, 383, 403*, 411, 422, 423*, 426, *ECD 341 waived for those employed as Head Start Teachers

430, 435, 436, 443*, 445, 446, 447, 449, 454, 456, 457, 458, 460, 465, 468, 469, 477*, 478*, 482*

Additional courses may be used with the approval of the Early Childhood Coordinator.

* Courses with an asterisk may also be used to satisfy Children and Families upper-level distribution requirement in Human Development, Cultural Diversity, or Child Welfare.

ELECTIVES (Area III)

Select from the following list with approval of advisor:

Anthropology Mathematics Natural Science Business Communication Political Science Psychology Education (highly recommended) English Social Studies French Sociology German Spanish Health and Policy Studies Women's Studies

NOTE: Course numbers and offerings may have changed; please consult your faculty advisor regarding updated course numbers..

Other Programs

Substitute Teacher Program

The Substitute Teacher Program is designed for students who wish to pursue work as a substitute classroom teacher in K-12 school settings. The program is designed to combine 60 credit hours from community college programs with 30 credit hours of coursework at the UM-Dearborn. UM-Dearborn students may also be admitted to the Substitute Teacher Program upon completion of 60 credit hours with a minimum grade point average of 2.75.

ADMISSION AND APPLICATION PROCEDURE

Individuals seeking entry into the Substitute Teacher Program and transferring credit from another institution should apply through the College of Education, Health, and Human Services Student Services Office (262 FCS).

Many individuals enter the College of Education, Health, and Human Services after completing a portion of college work at other two- and four-year institutions. These persons are considered transfer students. Admission to the College of Education, Health, and Human Services Substitute Teacher Program does not constitute admission to a teacher certification program. Like other students admitted to programs at UM-Dearborn, transfer students entering the College of Education, Health, and Human Services will be expected to fulfill all program requirements.

Potential candidates must observe established procedures in having their credentials evaluated for the Substitute Teacher Program. Request forms are available in the Student Services Office (262 FCS). Credentials are evaluated for acceptable courses required by the program. A maximum of 60 credit hours coursework will be accepted for the UM-Dearborn Substitute Teacher Program. An additional 30 credit hours in a planned program of study are required at UM-Dearborn to complete the program. Students may choose a program emphasis in either elementary or secondary education.

SCHOLASTIC STANDING

A GPA of 2.75/4.0 scale or better is required for admission to the Substitute Teacher Program. Once admitted to the Substitute Teacher Program, students must continue to maintain a 2.75 GPA. The College of Education, Health, and Human Services reviews the records of all its students at the end of each term. If a student's grade point average for one term drops below 2.75, the student is placed on academic probation. If the overall average remains below 2.75 for another term, the student may not be allowed to re-register as a student in the Substitute Teacher Program or any other teacher education program.

PROGRAM REQUIREMENTS

Requirement for completion: 90 credit hours Required from UM-Dearborn: 30 credit hours

Program in Elementary Education

Required courses 30 hrs

EDA 340

Required courses		
EDA 340	Foundations of American Education 3 hrs	
EDC 300	Educational Psychology	
EDC 301	Practicum in Educational Psychology 1 hr	
EDC 240	Psychology of Child Development3 hrs	
EDC 241	Practicum in Psychology of Child Dev 1 hr	
EDC 417	Management of Classroom Behavior 3 hrs	
EDC 443	Family/School/Community Collaboration hrs	
EDC 460	Educating the Exceptional Child3 hrs	
EDD 468	Teaching Reading/Language Arts 3 hrs	
EXPS 410	Multiculturalism in School and Society3 hrs	
EDF 450	Health/Nutrition/PE: Elementary Schools2 hrs	
LIBR 465	Literature for Children	
EDT 210	Technology in Elementary Education3 hrs	
In the event the	at any of the above-listed courses have been	
	community college and are accepted by UM-	
Dearborn, the fol	lowing electives are available:	
Elementary Electives in Education		
EDB 421	Current Issues in Early Childhood	
EDD 421	Education	
EDC 454	Evaluation of Classroom Learning	
EDC 434 EDD 493	Simulation and Gaming	
	_	
ELEMENTARY ELECTIVES IN THE CONTENT		
ELEMENTAL	RY ELECTIVES IN THE CONTENT	
AREA		
	9 hrs	
AREA		
AREA Math	Math for Elementary Teachers I 3 hrs Math for Elementary Teachers II 3 hrs	
AREA Math MATH 385		
AREA Math MATH 385 MATH 386 MATH 387	Math for Elementary Teachers I 3 hrs Math for Elementary Teachers II 3 hrs Math for Elementary Teachers III 3 hrs	
AREA Math MATH 385 MATH 386 MATH 387 Science	Math for Elementary Teachers I 3 hrs Math for Elementary Teachers II 3 hrs Math for Elementary Teachers III 3 hrs 12 hrs	
AREA Math	Math for Elementary Teachers I 3 hrs Math for Elementary Teachers II 3 hrs Math for Elementary Teachers III 3 hrs Math for Elementary Teachers III 3 hrs Science in the Elementary School 3 hrs	
AREA Math MATH 385 MATH 386 MATH 387 Science	9 hrs Math for Elementary Teachers I 3 hrs Math for Elementary Teachers III. 3 hrs Math for Elementary Teachers III. 3 hrs 12 hrs Science in the Elementary School 3 hrs Inquiry: Physical Science 3 hrs	
AREA Math	9 hrs Math for Elementary Teachers I 3 hrs Math for Elementary Teachers III. 3 hrs Math for Elementary Teachers III. 3 hrs Math for Elementary Teachers III. 3 hrs Science in the Elementary School 3 hrs Inquiry: Physical Science 3 hrs Inquiry: Earth/Planetary 3 hrs	
AREA Math	9 hrs Math for Elementary Teachers I 3 hrs Math for Elementary Teachers III 3 hrs Math for Elementary Teachers III 3 hrs Math for Elementary Teachers III 3 hrs 12 hrs Science in the Elementary School 3 hrs Inquiry: Physical Science 3 hrs Inquiry: Earth/Planetary 3 hrs Science 3 hrs	
AREA Math	9 hrs Math for Elementary Teachers I 3 hrs Math for Elementary Teachers III. 3 hrs Math for Elementary Teachers III. 3 hrs Math for Elementary Teachers III. 3 hrs Science in the Elementary School 3 hrs Inquiry: Physical Science 3 hrs Inquiry: Earth/Planetary 3 hrs	
AREA Math	Math for Elementary Teachers I 3 hrs Math for Elementary Teachers II 3 hrs Math for Elementary Teachers III 3 hrs Math for Elementary Teachers III 3 hrs 12 hrs Science in the Elementary School 3 hrs Inquiry: Physical Science 3 hrs Inquiry: Earth/Planetary 3 hrs Science 3 hrs Inquiry: Life Science 3 hrs	
AREA Math	Math for Elementary Teachers I 3 hrs Math for Elementary Teachers II 3 hrs Math for Elementary Teachers III 3 hrs Math for Elementary Teachers III 3 hrs Science in the Elementary School 3 hrs Inquiry: Physical Science 3 hrs Inquiry: Earth/Planetary 3 hrs Science 3 hrs Inquiry: Life Science 3 hrs Inquiry: Life Science 3 hrs	
AREA Math	Math for Elementary Teachers I 3 hrs Math for Elementary Teachers II 3 hrs Math for Elementary Teachers III 3 hrs Math for Elementary Teachers III 3 hrs 12 hrs Science in the Elementary School 3 hrs Inquiry: Physical Science 3 hrs Inquiry: Earth/Planetary 3 hrs Science 3 hrs Inquiry: Life Science 3 hrs	
AREA Math	Math for Elementary Teachers I 3 hrs Math for Elementary Teachers II 3 hrs Math for Elementary Teachers III 3 hrs Math for Elementary Teachers III 3 hrs 12 hrs Science in the Elementary School 3 hrs Inquiry: Physical Science 3 hrs Inquiry: Earth/Planetary 3 hrs Science 3 hrs Inquiry: Life Science 3 hrs Inquiry: Life Science 3 hrs History & Civics Elem Schools 3 hrs	
AREA Math	Math for Elementary Teachers I 3 hrs Math for Elementary Teachers II 3 hrs Math for Elementary Teachers III 3 hrs Math for Elementary Teachers III 3 hrs Science in the Elementary School 3 hrs Inquiry: Physical Science 3 hrs Inquiry: Earth/Planetary 3 hrs Science 3 hrs Inquiry: Life Science 3 hrs Inquiry: Life Science 3 hrs	
AREA Math	Math for Elementary Teachers I 3 hrs Math for Elementary Teachers II 3 hrs Math for Elementary Teachers III 3 hrs Math for Elementary Teachers III 3 hrs 12 hrs Science in the Elementary School 3 hrs Inquiry: Physical Science 3 hrs Inquiry: Earth/Planetary 3 hrs Science 3 hrs Inquiry: Life Science 3 hrs Inquiry: Life Science 3 hrs See chosen from the following areas: 3 hrs History & Civics Elem Schools 3 hrs Geography & Econ Elem Schools 3 hrs	
AREA Math	Math for Elementary Teachers I 3 hrs Math for Elementary Teachers II 3 hrs Math for Elementary Teachers III 3 hrs Math for Elementary Teachers III 3 hrs 12 hrs Science in the Elementary School 3 hrs Inquiry: Physical Science 3 hrs Inquiry: Earth/Planetary 3 hrs Science 3 hrs Inquiry: Life Science 3 hrs Inquiry: Life Science 3 hrs History & Civics Elem Schools 3 hrs	
AREA Math	Math for Elementary Teachers I 3 hrs Math for Elementary Teachers II 3 hrs Math for Elementary Teachers III 3 hrs Math for Elementary Teachers III 3 hrs 12 hrs Science in the Elementary School 3 hrs Inquiry: Physical Science 3 hrs Inquiry: Earth/Planetary 3 hrs Science 3 hrs Inquiry: Life Science 3 hrs Inquiry: Life Science 3 hrs See chosen from the following areas: 3 hrs History & Civics Elem Schools 3 hrs Geography & Econ Elem Schools 3 hrs	
AREA Math	Math for Elementary Teachers I 3 hrs Math for Elementary Teachers II 3 hrs Math for Elementary Teachers III 3 hrs Math for Elementary Teachers III 3 hrs 12 hrs Science in the Elementary School 3 hrs Inquiry: Physical Science 3 hrs Inquiry: Earth/Planetary 3 hrs Science 3 hrs Inquiry: Life Science 3 hrs Inquiry: Life Science 3 hrs Geography & Econ Elem Schools 3 hrs Geography & Econ Elem Schools 3 hrs Visual & Perf Arts/Elem Classroom 3 hrs SECONDARY EDUCATION	

Foundations of American Education 3 hrs

EDC 300	Educational Psychology	3 hrs
EDC 301	Practicum in Educational Psychology	1 hr
EDC 302	Adolescent Development	3 hrs
EDC 417	Management of Classroom Behavior	3 hrs
EDC 443	Family/School/Community Collaboration	3 hrs
EDC 454	Evaluation of Classroom Learning	3 hrs
EDC 460	Educating the Exceptional Child	3 hrs
EDD 469	Reading in the Content Areas	3 hrs
EDT 211	Technology in Secondary Education	3 hrs
EXPS 410	Multiculturalism in School and Society	3 hrs
PDED 425	The Educator and the Law	2 hrs

In the event that any of the above-listed courses have been completed at a community college and are accepted by UM-Dearborn, the following electives are available:

Secondary Electives

Electives are chosen as needed based on subject area content.

Post-Degree Programs

Application forms for any post-degree program can be obtained from the College of Education, Health, and Human Services Student Services Office (262 FCS). or online at http://www.soe.umd.umich.edu/soe post cert/.

Certification Only Program (Elementary - COE, Secondary - COS)

Candidates with a degree from an accredited institution and wishing to earn a Michigan Elementary or Secondary Provisional Certificate, must meet the following requirements for these programs:

- A bachelor's degree from an accredited institution is required for admission along with acceptable scores on the MTTC Professional Readiness Examination for the postdegree certification only program. Students must have a 2.75 GPA overall and in their major and minor to be admitted to the College of Education, Health, and Human Services teacher certification program. Once admitted to the teacher certification program, students must continue to maintain a 2.75 GPA.
- To be eligible for directed teaching (student teaching), students must take and pass the relevant MTTC subject area test, and "Elementary" test for seekers of elementary certification; the major and minor tests for seekers of secondary certification.
- 3. When the desired major/minor is incomplete and the GPA for the major and/or minor is between 2.50 and 2.74, a minimum of 12 semester hours for the major and nine (9) semester hours for a minor must be completed with UM-Dearborn courses and the cumulative GPA must be 2.75 or better
- 4. Potential candidates must observe established procedures in having their credentials evaluated for the certification program. Request forms are available in the Student Services Office of the College of Education, Health, and Human Services. Credentials are evaluated for acceptable majors, minors, and those supplementary courses, required by the program.
- At least two practica at UM-Dearborn shall be required of all COE/COS students prior to student teaching.

- 6. A maximum of six semester hours (non-UM-Dearborn courses) will be accepted, if applicable, toward the professional sequence, not including directed teaching or seminar. The cumulative GPA in the professional sequence must be 2.75 or better. No community college courses can be used for credit in the professional sequence of required courses. Grades earned in professional sequence courses must observe the criteria established for directed teaching eligibility.
- When there is evidence to warrant an adjustment in requirements for an admitted COE/COS student, the Professional Standards Committee will act accordingly. Students desiring re-evaluations may use the established petition process.
- To be eligible for certification, students must have acceptable scores from the Michigan Tests for Teacher Certification Subject Area Tests for every major, minor and endorsement
- No credit toward program is allowable for ROTC and/or physical education.
- 10. Foreign transcripts must be evaluated by:

Educational Credential Evaluators, Inc. PO Box 514070

Milwaukee, WI 53203-3470 Telephone: (414) 289-3400 or

World Evaluation Services Bowling Green Station PO Box 5087 New York NY 10274-5087 Telephone: (212) 966-6311

- 11. An English language proficiency test may be required for non-native English speakers.
- 12. For all practicums and student teaching, the following are required:
 - a. TB clearance,
 - b. Criminal background clearance
 - Evidence of training for dealing with infectious diseases and blood-borne pathogens and,
 - d. CPR certification

Individuals entering this program are required to meet the basic certification requirements at the time they are admitted, and which are appropriate for the particular certificate desired. To enroll, it is necessary to apply for admission to the UM-Dearborn as a "Certification Only Student," through the College of Education, Health, and Human Services. Forms are available in the College of Education, Health, and Human Services Student Services Office.

Professional Education Certificate Program (PEC)

The Professional Education Certificate Program is for persons with a Michigan Provisional Teaching Certificate wishing to earn a Professional Education Certificate. Upon the expiration of the Michigan Provisional Teaching Certificate, teachers are required by state law to secure a Professional Education Certificate in order to retain a valid teaching credential. In recommending individuals for this certificate, the University forwards requests to the Michigan Department of Education that, in turn, issues the certificate. Application forms for this program are available in the College of Education, Health, and Human Services Student Services Office (262 FCS) or online at http://www.soe.umd.umich.edu/soe post cert/.

CURRICULUM

Individuals already holding a valid Michigan provisional certificate can qualify for a Michigan Professional Education Certificate by completing the 18 semester hour post-degree program offered at UM-Dearborn through the College of Education, Health, and Human Services. This program is ideal for the working teacher who wants to maintain a valid teaching credential but is not interested in pursuing a graduate degree.

The Professional Education certificate program is tailor-made to fit the particular professional needs and goals of the individual student. To meet residency requirements, students must satisfactorily complete at least 12 semester hours of advisor-approved courses in a planned 18-hour program. Occasionally, some post-degree credit earned at other accredited institutions may also be applied toward the student's program. Such credit, however, is allowed only when written permission is obtained prior to enrollment in any such course or credit-granting workshop. The entire course of study, however, can be completed at UM-Dearborn by attending classes during late afternoons, early evenings, and summers. Correspondence courses are not accepted.

ADMISSION

- Admission to this post-degree program (PEC) requires formal application to the program, a Michigan Provisional Teaching Certificate, and an approved bachelor's degree. Official copies of transcripts and a copy of the teaching certificate are required.
- The plan of study is agreed upon with an advisor who will meet regularly with the student to advise and monitor progress of the 18 semester hour plan of work. It is the student's responsibility to make annual appointments with the advisor.

When the renewal of a provisional certificate is desired, nine semester hours of approved credit will permit the student to file an application for renewal of the existing provisional certificate. Effective September 1, 2013

First Provisional Renewal requires completion of *ONE OF THE FOLLOWING*:

Possession of a current or expired Michigan provisional certificate

6 semester hours in a planned course of study since the issuance of the provisional certificate at an approved educator preparation institution.

OR

180 State Continuing Education Clock Hours (SCECHs) appropriate to the grade level and content endorsement(s) of the certificate held since the issuance of the provisional certificate.

OR

Combination of semester credit hours and SCECHs (30 SCECHs equate to 1 semester credit hour) since the issuance of the provisional certificate.

OR

Completion of an approved master's or higher degree in areas appropriate to K-12 teaching at any time at an approved educator preparation institution.

Second Provisional Renewal requires completion of *ONE OF THE FOLLOWING*:

Possession of a current or expired Michigan provisional certificate

6 semester hours in a planned course of study since the issuance of the provisional certificate at an approved educator preparation institution.

OR

180 State Continuing Education Clock Hours (SCECHs) appropriate to the grade level and content endorsement(s) of the certificate held since the issuance of the provisional certificate.

Combination of semester credit hours and SCECHs (30 SCECHs equate to 1 semester credit hour) since the issuance of the provisional certificate.

OR

Completion of an approved master's or higher degree in areas appropriate to K-12 teaching at any time at an approved educator preparation institution.

3. Forms are available in the Student Services Office, 262 FCS. Of the nine hours required, six must be from UM-Dearborn. A minimum 2.75 GPA is required. Neither teaching experience nor the state reading requirement needs to be satisfied when seeking a renewal.

When applying for the Professional Education Certificate, the student must account for 18 semester hours of approved courses of which 12 must be UM-Dearborn courses; three years of teaching experience (or the equivalent in substitute teaching) at the appropriate certificate level; and the required semester hours in state-approved reading courses. Effective September 1, 2013

Professional Education Certificate

Holders of a provisional certificate are expected to advance to the professional education certificate. The professional education certificate is valid for up to five years, and it, too, must be renewed.

Requirements for the professional education certificate include:

Possession of a current or expired Michigan provisional certificate.

Having taught successfully for the equivalent of three years under the Michigan provisional certificate and within the subject area endorsements and grade level on the certificate (including substitute teaching).

Presenting evidence of having completed a minimum of six semester hours of reading methodology if the teacher holds an elementary certificate or three semester hours for secondary certificate holders.

Effective July 1, 2009 - EDC 560 Reading Diagnostics And ONE of the following since the issuance of the Provisional Certificate:

-6 semester hours in a planned course of study at an approved educator preparation institution

OR

- -180 State Continuing Education Clock Hours (SCECH) OR
- -150 annual District Provided Professional Development (DPPD) hours

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- -Combination of the three.
- 30 SCECH = 1 semester credit hour = 30 clock hours of DPPD Application forms are available in the Student Services Office of the College of Education, Health, and Human Services.

To be recommended for a Professional Education Certificate, a total of 18 semester hours in approved courses is required with a minimum 2.75 GPA. Effective September 1, 2013

Professional Education Certificate

Holders of a provisional certificate are expected to advance to the professional education certificate. The professional education certificate is valid for up to five years, and it, too, must be renewed.

Requirements for the professional education certificate include:

Possession of a current or expired Michigan provisional certificate.

Having taught successfully for the equivalent of three years under the Michigan provisional certificate and within the subject area endorsements and grade level on the certificate (including substitute teaching).

Presenting evidence of having completed a minimum of six semester hours of reading methodology if the teacher holds an elementary certificate or three semester hours for secondary certificate holders.

Effective July 1, 2009 - EDC 560 Reading Diagnostics And ONE of the following since the issuance of the Provisional Certificate:

-6 semester hours in a planned course of study at an approved educator preparation institution

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- -180 State Continuing Education Clock Hours (SCECH) OR
- -150 annual District Provided Professional Development (DPPD) hours

OR

-Combination of the three.

- 30 SCECH = 1 semester credit hour = 30 clock hours of DPPD
- 6. Correspondence courses may not be used in this program for either renewal or continuing certification.
- Workshops, online courses, and conferences offering graduate credit must be approved by the Professional Standards Committee prior to enrollment.
- 8. When the Professional Education Certification Program is being used to earn an additional major or minor, all required coursework for the major or minor must be completed prior to recommendation. Such coursework may require more than the minimum of 18 hours. Also, the Michigan Tests for Teacher Certification (MTTC) Subject Area Tests must be taken and acceptable scores earned prior to recommendation.

Enhancement Program (EP)

This program (EP) is for persons with a Michigan Permanent, Continuing, or Professional Education Certificate who wish to enhance their certificate with an additional major, minor, or endorsement. Individuals entering this program are required to meet all requirements leading to the desired additional endorsement on their teaching certificate. Additionally, the MTTC Subject Area Test must be taken and acceptable scores achieved before a recommendation can be made to the state. Application forms for this program are available in the College of Education, Health, and Human Services Student Services Office, (262 FCS) or online at http://www.soe.umd.umich.edu/soe post cert/.

Endorsement Programs Early Childhood (ZS) and English as a Second Language (NS)

These endorsements are available to certified teachers who wish to enhance their certificates with either an early childhood (ZS), and English as a second language (NS), endorsement. This is a planned program where the selection of courses will vary depending on evaluation of the student's prior coursework. Those interested in an endorsement can enroll in one of two post-degree

programs: Professional Education Certificate (PEC), Enhancement Program (EP), as described above, or may complete these endorsement programs under a master's degree plan (some undergraduate courses may be applied toward these endorsements, but will not apply toward a master's degree).

Graduate Degree Programs

The College of Education, Health, and Human Services also offers several master's degree programs including a MA in Early Childhood Education, a MA in Educational Technology, a MA in Education, a MA in Teaching, a MEd in Special Education, a Master of Arts in Educational Leadership, a MS in Science Education, an Education Specialist, and Doctor of Education. Interested students should consult the Graduate Catalog for details of admission requirements and programs or online at http://www.soe.umd.umich.edu/soe masters/.

Advanced Degree Programs

The College of Education, Health, and Human Services also offers the Education Specialist (EdS) and Doctor of Education (EdD) degree programs. Interested students should consult the Graduate Catalog for details of admission requirements and programs or online at http://www.soe.umd.umich.edu/soe masters/.

Education Courses For Non-**Education Students**

At UM-Dearborn, students need not be enrolled in a teacher certification program to elect certain education courses. Many courses offered by the College of Education, Health, and Human Services are open to non-education students. Degree candidates enrolled in any academic unit of the campus, as long as they have earned at least 55 semester hours of credit, generally are free to elect any course in education except for specialized methods courses (those required for directed teaching), directed teaching, and the directed teaching seminar. It is expected that when making such elections, all prerequisites and other stipulations associated with specific courses will be carefully observed and followed.

Any student planning on a career in which the student might be expected as a matter of course to instruct others or to help others learn could find some study of education to be a valuable experience. This is particularly true for those intending to pursue careers in fields involving human relations and social interaction. Certainly, there can be no better preparation for assuming some of the responsibilities of parenthood than a background in education. (See the "Children and Families" degree program that appears earlier in the *Catalog*.)

Education courses are ideally suited, in many instances, to serve as electives as well as cognate studies. Students may elect them either to augment their general college work or to enrich their own cultural growth. It is always important that the student consult with the student's own academic advisor before electing any college course. Faculty in the College of Education, Health, and Human Services, however, are available to help individuals identify education courses which might be of the most benefit to them. For further information, non-education students are invited to visit the School offices or contact the School at (313) 593-5090 or the following website: www.soe.umd.umich.edu/.

Course Offerings

Courses offered by the College of Education, Health, and Human Services are numbered following the general course numbering system. Courses numbered 300-499 are undergraduate upperdivision courses. Courses numbered 500 and above are graduate

Each education course also carries an alphabetical letter designation. This designation reflects the course's location in the subject-matter classification system used by the College of Education, Health, and Human Services.

Letter	
Designation	Subject Matter Area
A	Theoretical Foundations
В	Administration/Issues
C	Psychological Foundations
D	Curriculum and Instruction
F	Health and Physical Education
H	Adult and Continuing Education
K	Research and Independent Study
M	Multicultural/Community Education
MA	Mathematics Education
N	Special Needs
T	Education Technology
EXPS	Exploratory Studies

Library Science

In designating courses on election forms, etc., students should use the word "Education" followed by the course letters, then the number of the particular course (i.e., Education, or EDA 340.)

Professional Education

Students must have junior standing (completion of at least 55 semester hours of credit) before they may elect courses for education credit. This regulation does not pertain to the following courses: EDA 340, EDC 340, EDC 341, LIBR 465, LIBR 470, and EXPS 410.

Education (ED)

COURSE OFFERINGS

LIBR

PDED

EDA 205 Introduction to Education

3.000 Credits

Must be enrolled in one of the following Levels:

Undergraduate

May not be enrolled in one of the following Classes:

Post-baccalaureate NCFD Undergraduate NCFD

Graduate

This course is designed to introduce students to the field of education. In this course students will gain a working knowledge of teacher certification and professionalism, state standards, and high-stakes testing. Additionally, students will be introduced to basic forms of lesson planning, classroom assessment, and instructional techniques. As a part of the course, all students will begin to use the Coll of Ed, Health, &Human Ser E-Portfolio system.

EDA 340 Foundations of American Ed

2.000 TO 3.000 Credits

Must be enrolled in one of the following Colleges:

Coll of Ed, Health, & Human Ser

Must be enrolled in one of the following classes:

Undergrad Certification only Post-baccalaureate Cert only

Senior

Graduate

Junior

A general survey of education's theoretical and structural foundations. This course introduces students to the history and philosophy of education as well as to the organization and financing of schools in America. Particular attention will be given to the role of education in a democratic society and to the notion of teaching as a profession.

EDA 419 Early Literacy/Language Devel

3.000 Credits

May not be enrolled in one of the following Classes:

Graduate

Sophomore

Freshman

This course examines early language development, the factors that contribute to its growth and the role that it plays in the development of literacy. Diagnostic techniques for assessing language and literacy and teaching strategies and materials to facilitate language and literacy growth in children birth through third grade will be discussed.

EDA 450 Hist/Theory of Bilingual Educ

2.000 TO 3.000 Credits

Must be enrolled in one of the following Classes:

Junior

The course provides an extensive background on bilingual education (programs where two languages are used as media of instruction) in the United States, and the events that led to the inception of such programs on the Federal as well as the State levels. The course provides a background on the concept itself, its rationale and implementation.

EDB 421 Current Issues in Early Ed

2.000 Credits

Must be enrolled in one of the following classes:

Post-baccalaureate Cert only Undergrad Certification only

Junior

Examines the expanding field of early childhood in order to understand major issues which are shaping the development and support of early education and child care programs. Designed for present and future teachers, administrators, and other workers in the field of early childhood, and for the general public who must participate in major pending decisions relating to such questions as proposed changes in state licensing, teacher certification, and funding sources.

EDB 422 Lead, Advoc, Admin Early Ch Prg

3.000 Credits

Must be enrolled in one of the following classes:

Junior Graduate

Prerequisites: EDC 240

This course promotes role of the early childhood educator as a leader and advocator for young children and families. Designed for present and future teachers, administrators and other professionals who participate in decisions relating to public policy and legislation, state licensing, teacher certification, funding resources, parental involvement and other issues affecting young children and families.

EDC 240 Psych of Child Development

3.000 Credits

Must be enrolled in one of the following Colleges:

Coll of Ed, Health, & Human Ser

Must be enrolled in one of the following classes:

Senior

Sophomore

Freshman

Junior

Co-requisites: EDC 241

An introductory presentation of facts and theories concerning the development of the child from birth to adolescence. The practical applications of present knowledge in this field will be examined. Field observations and directed interactions with children are required. Limited to undergraduates. Not open to students with credit in C540.

EDC 241 Psych: Child Devel Practicum

1.000 Credits

Must be enrolled in one of the following Colleges:

Coll of Ed, Health, & Human Ser

Must be enrolled in one of the following classes:

Senior

Sophomore

Freshman

Junior

Co-requisites: EDC 240

A supervised field experience related to the study of child development involving a minimum of 45 clock hours of observation and work spread over a semester in an early childhood setting.

EDC 300 Educational Psychology

2.000 TO 3.000 Credits

Must be enrolled in one of the following Colleges:

Coll of Ed, Health, & Human Ser

Must be enrolled in one of the following classes:

Undergrad Certification only

Senior

Junior

Post-baccalaureate Cert only

Consideration of research findings relevant to the learner in the classroom with emphasis on factors that influence learning. Topics include: the teacher trainer's role in motivation; formulation of generalizations pertaining to the physical, mental, social, and emotional development of learners; analysis of selected aspects of the teaching- learning situation including the dynamics of interaction, classroom control, guidance, and appraisal of growth.

EDC 301 Practicum in Ed Psychology

1.000 Credits

Must be enrolled in one of the following Colleges:

Coll of Ed, Health, & Human Ser

Must be enrolled in one of the following classes:

Undergrad Certification only

Senior Junior

Post-baccalaureate Cert only

A supervised field experience related to the study of educational psychology involving a minimum of 45 clock hours of participation/observation and work spread over a semester in a school setting. TB clearance and criminal background check are required.

EDC 302 Adol Devl & Classroom Mgmt

3.000 Credits

Must be enrolled in one of the following Colleges:

Coll of Ed, Health, & Human Ser

Must be enrolled in one of the following classes:

Undergrad Certification only

Senior

Junior

Post-baccalaureate Cert only

An examination of the current theories and research findings concerning the physical, social, emotional, and cognitive development during the early and late adolescent years. Theory will be related to educational and parenting practices. Significant material will be included addressing classroom management of the middle school and high school classroom using simulation, case studies and videos of actual classrooms.

EDC 304 Pract Adol Devl&Clsrm Mgmt

1.000 Credits

Must be enrolled in one of the following Levels:

Undergraduate

May not be enrolled in one of the following Classes:

Undergrad Certification only

Undergraduate NCFD

Graduate

Co-requisites: EDC 302

This one credit practicum consists of 45 clock hours of observation over the course of the semester in a secondary classroom. Reflective journals and guided assignments will focus the observations on an understanding of developmental concepts and classroom management policies. Active participation with secondary students will ensure the application and critique of these concepts in an educational setting.

EDC 390 Observ and Particip in Ed Set

1.000 TO 3.000 Credits

Must be enrolled in one of the following classes:

Undergrad Certification only

Senior

Junior

Post-baccalaureate Cert only

An opportunity for supervised observations of, and participation with, children and adolescents in educational settings. For students who need additional laboratory experience prior to student teaching.

EDC 401 Introduction to LD

3.000 Credits

Must be enrolled in one of the following Colleges:

Coll of Ed, Health, & Human Ser

Must be enrolled in one of the following classes:

Senior

Post-baccalaureate NCFD

Junior

Post-baccalaureate Cert only

Introduction to LD is designed to provide students with an overview of the field of learning disabilities. Discussions will include physical, social, emotional, and cognitive comparisons of developmental differences and similarities between persons of all ages with and without LD, historical and theoretical perspectives, current trends and issues, assessment, and collaboration among educators.

EDC 410 Dev Peer/Social Relationships

2.000 Credits

Prerequisites: EDC 340 or EDC 240

Students will examine the processes of peer relations and socioemotional development from birth to adolescence. Topics to be covered in this course include attachment, peer popularity and intimacy. As well, students will discuss the importance of the family on social development. Classroom environment and peers as educators will also be covered.

EDC 412 Social Devl/Pos Guidnce Techn

3.000 Credits

Must be enrolled in one of the following Degrees:

*Teacher Certificate

Bachelor of Arts

Must be enrolled in one of the following Colleges:

Coll of Ed, Health, & Human Ser

Must be enrolled in one of the following Major fields of study:

Early Childhood

Elementary Certification

Must be enrolled in one of the following classes:

Post-baccalaureate Cert only

Senior

Junior

This course will examine the process of social and emotional development in childhood through adolescence. Positive strategies to promote and guide this development in the classroom will be explored using behaviorist and constructivist frameworks. Topics will include character education, discipline models, conflict resolution and family collaboration. Guiding the development of emotional regulation, perspective taking and peer relationships in children including children with special needs will be investigated.

EDC 414 Early Child Ed Special Needs

3.000 Credits

Must be enrolled in one of the following classes:

Senior

Junior

Prerequisites: EDC 540 or EDC 340 or EDC 240

Focuses on the psychological and educational needs of the young child with special needs. Discusses identification techniques and educational strategies for teaching in a regular early childhood classroom with young children having special needs. Special emphasis will be placed on behavioral, linguistic, and intellectual areas. Suitable for classroom teachers, childcare directors, and teachers in training.

EDC 417 Mgmt of Classroom Behavior

3.000 Credits

Must be enrolled in one of the following classes:

Senior Junior

Provides intervention and management techniques for teachers and teacher candidates using principles of behavior modification. Includes examination of theoretical foundations, research and field reports, participation in self-management projects, and consideration of various applications in regular and special classrooms. Field experience is optional. Course will focus on classroom management in early chidhood and elementary environments, allowing a more focused examination of topics and case studies geared to those grade levels. (OC)

EDC 420 Hum Sexuality: Psyc-Ed Concepts

2.000 Credits

Must be enrolled in one of the following Levels:

Undergraduate

Must be enrolled in one of the following classes:

Senior Junior

The course is intended to acquaint elementary and secondary teachers with the elements that comprise sexuality as it relates to their lives and those of their students. Although a basic core of information is to be covered, the content of each class will provide for the needs and interests of the teachers. Teachers will be directly involved in identifying problems and the development and collection of strategies for problem resolution.

EDC 431 Constructivist Education

3.000 Credits

Must be enrolled in one of the following classes:

Senior

Undergrad Certification only

Junior

Prerequisites: (EDC 340 or EDC 240) and (EDC 341 or

EDC 241)

An examination of constructivist theory and its application to educational practices. The nature and stages from birth through adolescence of cognitive and social development from the constructivist viewpoints of Piaget, Vygotsky, and others will be discussed. The major focus will be the application of constructivist theory to educational goals, teaching strategies and curriculum. (OC)

EDC 440 The Child: Birth to Three

3.000 Credits

Must be enrolled in one of the following Levels:

Rackham

Graduate

Must be enrolled in one of the following classes:

Graduate

An examination of current theories and findings concerning the physical, social, emotional, and intellectual development of the young child from prenatal to three years of age. Topics include fetus maturation, capabilities of the newborn, language, cognition, and environmental influences on development. Theory will be related to infant care practices in the home and in early childhood centers.

EDC 442 EC: Fam/Sch/Comm Collaboration

3.000 Credits

Must be enrolled in one of the following Colleges: Coll of Ed, Health, &Human Ser Must be enrolled in one of the following classes:

Senior

Junior

Prerequisites: (EDC 340 or EDC 240) and (EDC 341 or EDC 241)

Focuses on factors that influence the building of partnerships among early childhood professionals, families and communities. Includes understanding and working with culturally and linguistically diverse families. Various communication and problem-solving strategies that promote family involvement and community outreach are practiced through discussion and role play.

EDC 443 Family/School/Community Collab

2.000 Credits

Must be enrolled in one of the following classes:

Undergrad Certification only

Senior

Junior

Post-baccalaureate Cert only

Characteristics, roles, and functions of contemporary families are described. Various communication and training strategies designed to promote collaboration and teamwork within and between the school staff, the families, and community are described and practiced through discussion, problem-solving activities, and role playing. Family effectiveness assessment instruments and strategies are also described and practiced.

EDC 445 Develop Assess of Young Child

3.000 Credits

Must be enrolled in one of the following classes:

Undergrad Certification only

Senior

Junior

Post-baccalaureate Cert only

Prerequisites: EDC 340

Survey and demonstrations of formal and informal measures to assess young children's physical, social, intellectual, and emotional development. Instruction in some techniques appropriate for use by classroom teachers, childcare directors, health care professionals, and others who are interested in assessing the development of children aged birth to nine years. For graduate credit elect EDC 545. (AY)

EDC 446 Cog/Memory Dev in Children

3.000 Credits

Must be enrolled in one of the following Levels:

Undergraduate

Must be enrolled in one of the following classes:

Senior Junior

Prerequisites: EDC 240 or EDC 340

Examines the theories and recent research on the development of cognition and memory. Selected topics include: perception, language, representation, social cognition and problem solving. Educational implications and strategies for developing children's thinking and memory are explored.

EDC 454 Formal & Informal Testing&Eval

2.000 TO 3.000 Credits

Must be enrolled in one of the following classes:

Senior

Junior

In this course students will develop their knowledge and skills in traditional and non-traditional methods for evaluating classroom learning, performance technology and training. Students will learn how to construct evaluations, tests, analyze evaluation results, conduct program evaluation and educational assessment in relation to performance technology, training, and teaching and learning. (OC)

EDC 455 Assmt: Sec Lang Learning K-12

2.000 Credits

Must be enrolled in one of the following classes:

Senior Junior

Prerequisites: EDD 447 and EDD 448

In this course students will learn to identify, assess, and place second language learners for appropriate instruction and instructional programs. Students will review, evaluate, and implement a variety of assessments and strategies intended for use with limited English proficient students, K-12. Students will also examine the impact and issues regarding high-stakes assessments on English language learners. Official admission to and good standing in the teacher certification program are required. (W).

EDC 460 Educating the Exceptional Chld

3.000 Credits

Must be enrolled in one of the following Colleges:

Coll of Ed, Health, & Human Ser

Must be enrolled in one of the following classes:

Undergrad Certification only

Senior

Junior

Post-baccalaureate Cert only

Characteristics, identification, assessment, and instruction of students with exceptionalities are addressed. Includes students with learning disabilities, behavior disorders, emotional impairment, mild mental retardation, communicative disorders, visual and hearing impairments, orthopedic impairments, giftedness, and chronic medical conditions. Service delivery models, general assessment procedures, and curricular and instructional adaptations that help integrate students with exceptionalities into the general education classroom will also be addressed.

EDC 476 Literacy Assessmt for Instr

4.000 Credits

Must be enrolled in one of the following Colleges:

Coll of Ed, Health, & Human Ser

Must be enrolled in one of the following classes:

Undergrad Certification only

Senior

Junior

Post-baccalaureate Cert only

Prerequisites: EDD 468 and (EDD 419 or EDA 419)

Topics include various diagnostic tools for reading, writing, speaking, and listening. Students will learn to implement a variety of diagnostic techniques for assessing literacy for instructional purposes and communication with parents, other professionals, and paraprofessionals about student progress.

EDD 301 Directed Teach in Second Schls

6.000 TO 12.000 Credits

Must be enrolled in one of the following classes:

Senior

Undergrad Certification only Post-baccalaureate Cert only

Prerequisites: EDC 300 and EDC 301 and EDC 302 and

EDA 340 and EDC 460 and EDD 469

Co-requisites: EDD 304

Directed teaching consists of a teaching internship in a selected classroom for a full term under the direction of an experienced teacher. Includes a brief period of observation followed by several weeks of responsible teaching including the writing, implementing, and evaluation of lesson plans using University-approved practices. Official admission and good standing in the certification program are required. Methods courses in the major and minor and valid TB clearance required.

EDD 304 Seminar: Teach Secondary Grds

1.000 TO 2.000 Credits

Must be enrolled in one of the following classes:

Undergrad Certification only Post-baccalaureate Cert only

Co-requisites: EDD 301

Draws upon the resources found in the directed teaching environment. Considers problems and issues in four broad areas: students in the school, the teacher's professional responsibilities, curriculum understandings, and administrative/organizational problems. Open only to students enrolled in EDD 301.

EDD 305 Direct Teach in Elem School

6.000 TO 12.000 Credits

Must be enrolled in one of the following Colleges:

Coll of Ed, Health, & Human Ser

Must be enrolled in one of the following classes:

Undergrad Certification only

Senior

Graduate

Post-baccalaureate Cert only

Prerequisites: EDC 300 and EDC 301 and (EDC 340 or EDC 240) and EDC 460 and EDD 452 and EDD 467 and EDD 468 and EDD 471 and EDD 485 and EDD 495 and

EDF 450

Co-requisites: EDD 307

Directed teaching consists of a teaching internship in a selected classroom for a full term under the direction of an experienced teacher. Includes a period of brief observation followed by several weeks of responsible teaching including the writing, implementing, and evaluation of lesson plans using University-approved practices. Official admission to and good standing in certification program as well as valid TB clearance are required.

EDD 307 Seminar: Teaching Elem Grades

1.000 TO 2.000 Credits

Must be enrolled in one of the following Colleges:

Coll of Ed, Health, & Human Ser

Must be enrolled in one of the following classes:

Senior

Certification only

Post-baccalaureate Cert only

Co-requisites: EDD 305

Draws upon experience in elementary directed teaching. Considers pupils in the school, classroom environment, teaching competencies, professional responsibilities, school curriculum and policies, and administrative/organizational problems. Open only to students enrolled in EDD 305.

EDD 404 Inquiry Based Curr Prim Grades

3.000 Credits

Must be enrolled in one of the following classes:

Senior Junior

Prerequisites: EDC 340 and EDC 341 and PIII 1 and MGPA 2.75 and MIBR P and MIBM P and MIBW P and (CPAS 40 or COMP 106 or COMP 220 or COMP 280 or COMP 270)

Co-requisites: EDD 410

This course examines how teachers can apply inquiry method to all curriculum areas in the primary grades. Major focus will be designing curriculum to meet state and professional guidelines within a developmentally appropriate context.

EDD 406 Teach Strategies Early Child

3.000 Credits

Must be enrolled in one of the following classes:

Undergrad Certification only

Senior Junior

Post-baccalaureate Cert only

Prerequisites: (EDC 240 or EDC 340) and (EDC 341 or EDC 241) and PIII 1 and MGPA 2.75 and MIBM P and MIBR P and MIBW P and (CPAS 40 or COMP 106 or

COMP 220 or COMP 280 or COMP 270)

Co-requisites: EDD 410

Focuses on the developmentally appropriate educational practices for children from infancy through the primary grades. Introduces various procedures and strategies to stimulate inquiry in the early childhood classroom. Observation skills, planning, and implementing of lessons in the field will be emphasized. Class seminar designed to correlate theory with observation and field work.

EDD 407 Workshop: Global Ed Soc Stds

1.000 TO 3.000 Credits

Must be enrolled in one of the following classes:

Junior

Graduate

Prerequisites: PIII 1 and MGPA 2.75 and MIBM P and MIBR P and MIBW P and (CPAS 40 or COMP 106 or COMP 110 or COMP 280 or COMP 270)

A course designed to help elementary and secondary teachers develop strategies that will help them to teach about an interdependent and changing world. Concepts such as change, the culture, and interdependence will be introduced and examined in terms of implementation within the framework of the existing social studies curricula.

EDD 410 Practicum in Early Child Ed

1.000 Credits

Must be enrolled in one of the following classes:

Undergrad Certification only

Senior

Junior

Post-baccalaureate Cert only

Prerequisites: (PIII 1 and MGPA 2.75 and MIBM P and MIBR P and MIBW P and CPAS 40) or (COMP 106 or

COMP 220 or COMP 280 or COMP 270)

Co-requisites: EDD 406

A supervised field experience related to the study of early childhood education involving a minimum of 45 clock hours of observation and work spread over a semester in an early childhood school setting. TB clearance, FIA clearance, criminal background check, and physician's statement of good health are required. (F,W).

EDD 411 Directed Tchg: Early Childhood

3 .000 OR 4.000 Credits

Must be enrolled in one of the following classes:

Undergrad Certification only

Senior

Junior

Post-baccalaureate Cert only

Prerequisites: PIII 1 and MGPA 2.75 and MIBM P and MIBR P and MIBW P and (COMP 106 or COMP 220 or CPAS 40 or COMP 280 or COMP 270) and EDD 406 and

EDD 410

Co-requisites: EDD 412

Supervised observation and teaching in early childhood programs under the joint direction of university and school personnel. Open only to students in the Early Childhood Education program or Children and Families Program who have been approved by the program director. Must be elected concurrently with EDD 412. TB clearance, FIA clearance, criminal background check, and physician's statement of good health are required.

EDD 412 Seminar in Early Childhood Ed

2.000 Credits

Must be enrolled in one of the following classes:

Undergrad Certification only

Post-baccalaureate Cert only

Senior

Graduate

Junior

Prerequisites: PIII 1 and MGPA 2.75 and MIBM P and MIBR P and MIBW P and (CPAS 40 or COMP 106 or COMP 220 or COMP 280 or COMP 270) and EDD 406 and EDC 410

Focuses on developmentally appropriate educational practices for children in early childhood programs. With an emphasis on writing developmentally appropriate lesson plans, the Reggio Emilia Inspired Approach, assessment of young children, classroom and staff management, multiculturalism, family centered approaches, children with special needs and professional development. The seminar provides a theoretical foundation for the field placement (D411, D418 and D494). Open only to students in Early Childhood or Children and Families program who have been approved by the program director. TB clearance and physician's statement of good health required. EDD 406 and 410 are required for undergraduates.

EDD 413 LD Elem Directed Teaching

2.000 Credits

Must be enrolled in one of the following Levels:

Undergraduate

Must be enrolled in one of the following Colleges:

Coll of Ed, Health, &Human Ser

Must be enrolled in one of the following Major fields of study:

Special Education

Must be enrolled in one of the following classes:

Senior

Prerequisites: EDC 401 and EDN 401 and EDN 403 and

EDN 404 and EDN 402

Co-requisites: EDD 420 EDN 408

Field experience with elementary students with learning disabilities in general and special education classrooms. Experiences include delivery of direct instruction through observation, tutoring, small and large group instruction, curriculum development and adaptations, participation in the IEP and ITP process, collaboration and co-teaching with regular classroom teachers in various academic content areas, and other activities under the on-site supervision of a certified teacher of LD and LD certified University field supervisor. Pre-requisite: Grade of "B" or better in C401, N401, N403, N404, and N402 General Ed. Directed Teaching: EDN 408 and EDD 420.

EDD 416 Creativty/Crit Thnk Yng Childr

3.000 Credits

Must be enrolled in one of the following classes:

Junior

Senior

Graduate

Prerequisites: EDC 340 and PIII 1 and MGPA 2.75 and MIBM P and MIBR P and MIBW P and (CPAS 40 or COMP 106 or COMP 220 or COMP 280 or COMP 270)

This course intends to study the processes and products of creativity for both adults and young children. Strategies for promoting the emerging creative disposition of the young child, birth to eight years, will be explored. Areas of focus will include art, music, movement, dramatic play, improvisation, storytelling, and problem-solving. The importance of understanding and encouraging the young child's capacity for representation skills will be emphasized.

EDD 417 Wrkshp: Biling/Bicult Pupils

1.000 TO 4.000 Credits

Must be enrolled in one of the following classes:

Junior

Graduate

Prerequisites: PIII 1 and MGPA 2.75 and MIBM P and MIBR P and MIBW P and (CPAS 40 or COMP 106 or COMP 220 or COMP 280 or COMP 270)

The course will focus on developing a) an understanding of bilingual and bicultural pupils by examining their ethnic and racial backgrounds in terms of their values and institutions and how these affect their adjustment in the school and community environments, and b) effective learning strategies, techniques, and materials to use in various content areas.

EDD 418 Children and Families Intern

4.000 Credits

Must be enrolled in one of the following classes:

Undergrad Certification only

Senior

Junior

Post-baccalaureate Cert only Prerequisites: EDD 411 and EDD 412

Supervised observation and teaching in an Early Childhood classroom setting, or parent education program in a Family Service Agency under the joint direction of University and school or Agency personnel. Open only to students in the Children and Families program who have been approved for the course by the program director. Must be elected concurrently

with EDD 412. TB clearance, FIA clearance, criminal background check, and physician's statement of good health required.

EDD 419 Early Literacy/Language Develp

3.000 Credits

Must be enrolled in one of the following Programs:

AB-Early Childhood

Must be enrolled in one of the following Colleges:

Coll of Ed, Health, & Human Ser

Must be enrolled in one of the following classes:

Senior

Junior

Prerequisites: PIII 1 and MGPA 2.75 and MIBR P and MIBM P and MIBW P and (CPAS 40 or COMP 106 or COMP 220 or COMP 280 or COMP 270) and EDA 340

This course examines early language development, the factors that contribute to its growth and the role that it plays in the development of literacy. Diagnostic techniques for assessing language and literacy and teaching strategies and materials to facilitate language and literacy growth in children birth through third grade will be discussed. (YR)

EDD 420 LD Sec Directed Teaching

2.000 Credits

Must be enrolled in one of the following Colleges:

Coll of Ed, Health, & Human Ser

Must be enrolled in one of the following Major fields of study:

Special Education

Must be enrolled in one of the following classes:

Senior

Prerequisites: EDC 401 and EDN 401 and EDN 403 and

EDN 404 and EDN 402 and EDD 413 and EDD 415

Co-requisites: EDN 408 EDN 413

Field experience with elementary students with learning disabilities in general and special education classrooms. Experiences include delivery of direct instruction through observation, tutoring, small and large group instruction, curriculum development and adaptations, participation in the IEP and ITP process, collaboration and co-teaching with regular classroom teachers in various academic content areas, and other activities under the on-site supervision of a certified teacher of LD and LD certified University field supervisor. Pre-requisite: Grade of "B" or better in C401, N401, N403, N404, and N402 General Ed. Directed Teaching Co-requisite: EDN 408.

EDD 421 Directed Teach Secondary Sch

6.000 TO 1 2.000 Credits

Must be enrolled in one of the following Levels:

Undergraduate

Must be enrolled in one of the following Colleges:

Coll of Ed, Health, & Human Ser

Coll of Arts, Sciences&Letters

Must be enrolled in one of the following classes:

Senior

Undergrad Certification only

Post-baccalaureate Cert only

Prerequisites: EDC 300 and EDC 301 and (PSYC 407 or

EDC 302) and EDC 460 Co-requisites: EDD 424

Directed teaching consists of a teaching internship in a selected classroom for a full term under the direction of an experienced teacher. Includes a brief period of observation followed by several weeks of responsible teaching including the writing, implementing, and evaluation of lesson plans using University-approved practices. Official admission and good standing in the Coll of Ed, Health, &Human Ser certification program are required. Completion of methods courses in the major and minor and passing appropriate MTTC tests required. Students cannot receive credit for both EDD 421 and EDD 301.

EDD 424 Sem: Teaching Secondary Grds

1.000 Credits

Must be enrolled in one of the following Levels:

Undergraduate

Must be enrolled in one of the following Colleges:

Coll of Ed, Health, & Human Ser

Coll of Arts, Sciences&Letters

Must be enrolled in one of the following classes:

Senior

Undergrad Certification only

Post-baccalaureate Cert only

Co-requisites: EDD 421

This course draws upon the resources found in the directed teaching environment. Students will consider problems and issues in four broad areas: students in the school, the teacher's professional responsibilities, curriculum understandings, and administrative/organizational problems. Open only to students enrolled in EDD 421.

EDD 427 Workshops: Art in Elem School

2.000 Credits

Must be enrolled in one of the following classes:

Junior

Graduate

Prerequisites: PIII 1 and MGPA 2.75 and MIBM P and MIBR P and MIBW P and (CPAS 40 or COMP 106 or COMP 220 or COMP 280 or COMP 270)

A course which presents the rationale, trends, and principles of art education for elementary teachers. Teachers will have ample opportunities to experiment with various art media such as printmaking, puppetry, paints, and clay. Different strategies that focus on the creative growth of children will be developed.

EDD 429 Tch Cntrv Iss at Elem/Sec Lvl

2.000 TO 3.000 Credits

Must be enrolled in one of the following Levels:

Undergraduate

Must be enrolled in one of the following classes:

Senior

Junior

Prerequisites: PIII 1 and MGPA 2.75 and MIBM P and MIBR P and MIBW P and (CPAS 40 or COMP 106 or COMP 220 or COMP 280 or COMP 270)

This course is designed to provide the classroom teacher with the rationale, various approaches, and strategies and techniques to use in teaching controversial issues at the elementary and secondary levels.

EDD 435 Dir Teaching: Elementary Sch

6.000 TO 1 2.000 Credits

Must be enrolled in one of the following Colleges:

Coll of Ed, Health, & Human Ser

Coll of Arts, Sciences&Letters

Must be enrolled in one of the following classes:

Senior

Undergrad Certification only Post-baccalaureate Cert only

Co-requisites: EDD 437

Directed teaching consists of a teaching internship in a selected classroom for a full term under the direction of an experienced teacher. Includes a brief period of observation followed by several weeks of responsible teaching including the writing, implementing, and evaluation of lesson plans using University-approved practices. Official admission and good standing in the Coll of Ed, Health, &Human Ser certification program are required. Completion of methods courses in the major and minor and passing appropriate MTTC tests required. Student may not receive credit for both EDD 435 and EDD 305.

EDD 437 Sem: Teaching Elementary Grds

1.000 Credits

Must be enrolled in one of the following Colleges:

Coll of Ed, Health, & Human Ser

Coll of Arts, Sciences&Letters

Must be enrolled in one of the following classes:

Senior

Undergrad Certification only

Post-baccalaureate Cert only

Co-requisites: EDD 435

This course draws upon the resources found in the directed teaching environment. Students will consider problems and issues in four broad areas: students in the school, the teacher's professional responsibilities, curriculum understandings, and administrative/organizational problems. Open only to students enrolled in EDD 435.

EDD 440 Teach English in Second Grds

2.000 TO 3.000 Credits

Must be enrolled in one of the following classes:

Undergrad Certification only

Senior

Junior

Post-baccalaureate Cert only

Prerequisites: PIII 1 and MGPA 2.75 and MIBM P and MIBR P and MIBW P and (CPAS 40 or COMP 106 or

COMP 220 or COMP 280 or COMP 270)

Co-requisites: EDD 441

Investigates the general and specific goals and objectives of English education. Trends, materials, and strategies are presented. A study of outstanding problems in the teaching of English composition, literature, grammar, and language are discussed. Official admission to and good standing in teacher certification program are required. EDD 441 required concurrently for undergraduate only.

EDD 441 Practicum: English Second Grd

1.000 Credits

Must be enrolled in one of the following classes:

Undergrad Certification only

Post-baccalaureate Cert only

Senior

Graduate

Junior

Prerequisites: PIII 1 and MGPA 2.75 and MIBM P and MIBR P and MIBW P and (CPAS 40 or COMP 106 or COMP 200 GOVER 200

COMP 220 or COMP 280 or COMP 270)

Co-requisites: EDD 440

A supervised field experience related to the study of English in the secondary grades involving a minimum of 45 clock hours of observation and work spread over a semester in a school setting. Official admission to and good standing in teacher certification are required. For graduate credit elect EDD 502.

EDD 442 Differentiating Inst K-12 Clrm

2.000 TO 3.000 Credits

Must be enrolled in one of the following Levels:

Undergraduate

Must be enrolled in one of the following Colleges:

Coll of Ed, Health, & Human Ser

May not be enrolled in one of the following Classes:

Undergrad Certification only

Senior

Junior

Post-baccalaureate Cert only

Prerequisites: PIII 1 and MGPA 2.75 and MIBM P and MIBR P and MIBW P and (CPAS 40 or COMP 106 or COMP 220 or COMP 280 or COMP 270)

Individualized instruction combined with the latest information on the brain and our understanding of multiple intelligences leads us to a new method of meeting the needs of students called differentiating instruction. This course will look at the concept of differentiating instruction in-depth. (OC).

EDD 443 Tchg Writ at the Secondary Lvl

2.000 TO 3.000 Credits

Must be enrolled in one of the following Colleges:

Coll of Ed, Health, & Human Ser

Must be enrolled in one of the following classes:

Senior

Undergrad Certification only

Junior

Prerequisites: PIII 1 and MGPA 2.75 and MIBM P and MIBR P and MIBW P and (CPAS 40 or COMP 106 or COMP 220 or COMP 280 or COMP 270)

This course is designed to help the classroom teacher promote functional and creative writing among students at the secondary school level. Attention will be given to both theory and research with emphasis on the development of instructional strategies, teaching materials and practical resources. (OC)

EDD 445 New Mthds, Strat/Mat Soc Stud

2.000 Credits

Must be enrolled in one of the following Levels:

Undergraduate

Must be enrolled in one of the following classes:

Senior

Junior

Prerequisites: PIII 1 and MGPA 2.75 and MIBM P and MIBR P and MIBW P and (CPAS 40 or COMP 106 or COMP 220 or COMP 280 or COMP 270)

Examines new developments in methodology in relation to learning theory. Investigates systems for evaluating curricular materials. Explores experimental programs, new courses of study, multimedia approaches and current research in the social studies. (OC).

EDD 446 Intervention Strat EC Spec Ed

3.000 Credits

Must be enrolled in one of the following Colleges:

Coll of Ed, Health, & Human Ser

Must be enrolled in one of the following classes:

Senior

Undergrad Certification only

Post-baccalaureate Cert only

Prerequisites: EDC 414 and (EDC 340 or EDC 240) and PIII 1 and MGPA 2.75 and MIBM P and MIBR P and MIBW P and (CPAS 40 or COMP 106 or COMP 220 or COMP 280 or COMP 270)

Strategies and methods which early educators can use when planning and implementing interventions for infants, toddlers and young children with disabilities and their families. Emphasis will be on addressing family identified priorities and the goals and objectives stated on the Individual Family Service Plan (IFSP) or Individual Educational Plan (IEP) using activity-based intervention, adapting materials, modifying environments and using assistive technology. (W, YR).

EDD 447 Tchng English as Second Lang

3.000 Credits

Must be enrolled in one of the following classes:

Senior

Undergrad Certification only

Junior

Prerequisites: PIII 1 and MGPA 2.75 and MIBM P and MIBR P and MIBW P and (CPAS 40 or COMP 106 or

COMP 220 or COMP 280 or COMP 270)

Co-requisites: EDD 448

This course examines current methodologies and theories for English as a second language learning and instruction. Emphasis will be placed on a standards-based curriculum for English language learners. The use of communicative activities and strategies for developing English language skills in the elementary grades will be emphasized. Official admission to and good standing in a teacher certification program are required.

EDD 448 Pract: Tchng Engl Secnd Lang

1.000 Credits

Must be enrolled in one of the following classes:

Senior

Undergrad Certification only

Junior

Prerequisites: PIII 1 and MGPA 2.75 and MIBM P and MIBR P and MIBW P and (CPAS 40 or COMP 106 or

COMP 220 or COMP 280 or COMP 270) Co-requisites: EDD 447

This course examines current methodologies and theories for English as a second language learning and instruction. Emphasis will be placed on a standards-based curriculum for English language learners. The use of communicative activities and strategies for developing English language skills in the elementary grades will be emphasized. Official admission to and good standing in teacher certification program are required. TB clearance, physician's statement of good health, criminal background clearance, and bloodborne pathogens/infectious diseases training are required. (F).

EDD 450 Teach Math in Second Grades

3.000 Credits

Must be enrolled in one of the following classes:

Undergrad Certification only

Senior

Junior

Post-baccalaureate Cert only

Prerequisites: MATH 331 and PIII 1 and MGPA 2.75 and MIBM P and MIBR P and (CPAS 40 or COMP 106 or COMP 220 or COMP 280 or COMP 270)

Co-requisites: EDD 451

This course discusses: 1) the more important parts of recent pedagogical literature, 2) new instructional materials, methods, and curricular trends, and 3) procedures useful in the construction of new units and in the improvement of curricular units. Official admission to and good standing in a teacher certification program are required. EDD 451 required concurrently for undergraduates only. For graduate credit elect EDD 565.

EDD 451 Practicum: Math Second School

1.000 Credits

Junior

Must be enrolled in one of the following classes:

Undergrad Certification only Post-baccalaureate Cert only Senior Graduate

Prerequisites: PIII 1 and MGPA 2.75 and MIBM P and MIBR P and MIBW P and (CPAS 40 or COMP 106 or

COMP 220 or COMP 280 or COMP 270)

Co-requisites: EDD 450

A required supervised field experience related to the teaching of mathematics in grades 7-12. Involves 45 clock hours of work and observation in a classroom setting. The practicum includes the construction of classroom activities and lesson plans designed to strengthen students' skills in communication, problem solving, making connections, and in the use of technology. Official admission to and good standing in teacher certification program are required. TB clearance and physician's statement of good health required. For graduate credit, elect EDD 566.

EDD 452 Methods of Teaching Math K-8

3.000 Credits

Must be enrolled in one of the following classes:

Undergrad Certification only

Senior

Junior

Post-baccalaureate Cert only

Prerequisites: MATH 387 and PIII 1 and MGPA 2.75 and MIBM P and MIBR P and MIBW P and (CPAS 40 or COMP 106 or COMP 220 or COMP 280 or COMP 270)

The course relates to the teaching of the mathematics curriculum in the elementary and middle school. The emphasis is on the development of teaching techniques that promote problem solving, reasoning, connections, communication, and concept and algorithmic development. Cooperative groups, manipulative, technology, and alternative assessment will be explored as tools for meeting the special needs of every child in grades K-8. Required of all preservice elementary teachers. Official admission to and good standing in teacher certification program required. The course includes a field experience in an assigned school setting.

EDD 454 Wrkshp: Newspaper in Education

2.000 Credits

Must be enrolled in one of the following classes:

Senior

Junior

Prerequisites: PIII 1 and MGPA 2.75 and MIBM P and MIBR P and MIBW P and (CPAS 40 or COMP 106 or COMP 220 or COMP 280 or COMP 270)

A course designed to familiarize elementary and secondary teachers with the use of newspapers as a classroom resource. Workshop participants will use the daily newspaper and other resource materials to develop activities appropriate for meeting their own professional needs. Emphasis will be on the enhancement of academic skills, practical life skills and creative expression. (OC)

EDD 463 Tchng Giftd Stdnt Reglr Classr

2.000 Credits

Must be enrolled in one of the following Levels:

Undergraduate

Must be enrolled in one of the following classes:

Senior

Junior

Prerequisites: PIII 1 and MGPA 2.75 and MIBM P and MIBR P and MIBW P and (CPAS 40 or COMP 106 or COMP 220 or COMP 280 or COMP 270)

This course introduces classroom teachers to the education of gifted and talented students in the regular classroom. It is designed to help teachers understand the social, emotional, and intellectual needs of gifted students and to show then ways of effectively addressing these needs along with those of the other students present. It will offer specific proposals for structuring the learning environment as well as for selecting appropriate levels and types of subject matter. (OC).

EDD 466 Tchg Coll Sci: Clssrm Dynamics

3.000 Credits

Prerequisites: (NSCI 390 or EDD 390) and PIII 1 and MGPA 2.75 and MIBM P and MIBR P and MIBW P and (CPAS 40 or COMP 106 or COMP 220 or COMP 280 or COMP 270)

A seminar analyzing current methods of college science teaching. Students will be paired with a senior faculty mentor and participate in the planning and teaching of introductory courses. Recommended for advanced undergraduates planning to attend graduate school and/or those interested in teaching. Written permission of instructor required. (OC).

EDD 467 Practicum in Reading Instruct

1.000 Credits

Must be enrolled in one of the following classes:

Undergrad Certification only

Senior

Junior

Post-baccalaureate Cert only

Prerequisites: EDD 468 and PIII 1 and MGPA 2.75 and MIBM P and MIBR P and MIBW P and (CPAS 40 or COMP 106 or COMP 220 or COMP 280 or COMP 270)

A required supervised field experience related to the teaching of reading in the elementary and/or K-8. Involves a minimum of 45 clock hours of work and observation in a supervised classroom setting. Techniques learned in EDD 468 and EDD 471 will be applied to reading and language arts instruction. Official admission to and good standing in teacher certification program required. TB clearance, criminal background check, and physician's statement of good health required.

EDD 468 Teach Read/Lang Arts- Elem Grd

3.000 Credits

Must be enrolled in one of the following classes:

Undergrad Certification only

Senior

Junior

Post-baccalaureate Cert only

Prerequisites: PIII 1 and MGPA 2.75 and MIBM P and MIBR P and MIBW P and (CPAS 40 or COMP 106 or COMP 220 or COMP 280 or COMP 270)

Acquaints the student with theory, methods, materials, and research related to the teaching of reading and other communications skills in the elementary and/or K-8. Includes classroom activities designed to strengthen skills in reading comprehension, word recognition, word attack, and the related language arts. Official admission to and good standing in the Coll of Ed, Health, &Human Ser certification program are required.

EDD 469 Reading in the Content Areas

3 000 Credits

Must be enrolled in one of the following classes:

Undergrad Certification only

Senior

Junior

Post-baccalaureate Cert only

Prerequisites: PIII 1 and MGPA 2.75 and MIBM P and MIBR P and MIBW P and (CPAS 40 or COMP 106 or COMP 220 or COMP 280 or COMP 270)

Emphasis on developmental and remedial reading activities at the middle grades and the secondary level: diagnosis, testing, and materials; reading in the content subjects; study habits; independent reading activity; exemplary programs. Some attention will be given to related problems in the teaching of written composition. Official admission to and good standing in the Coll of Ed, Health, &Human Ser certification program are required. For graduate credit, elect EDD 569.

EDD 471 Reading Instar: Models and Meth

3.000 Credits

Must be enrolled in one of the following classes:

Undergrad Certification only

Senior

Junior

Post-baccalaureate Cert only

Prerequisites: EDD 468 and PIII 1 and MGPA 2.75 and MIBM P and MIBR P and MIBW P and (CPAS 40 or COMP 106 or COMP 220 or COMP 280 or COMP 270)

EDD 468

Co-requisites: EDD 467

Various approaches to reading instruction are required. The teaching of reading/study skills in content areas and an introduction to different forms of testing will be addressed. Students will be required to complete a reading tutorial in meeting the needs of an elementary student. Not open to students who have taken EDD 472, EDD 532, or EDD 570. Official admission to and good standing in SOE certification program are required.

EDD 474 Environmental Education

2.000 TO 3.000 Credits

Must be enrolled in one of the following classes:

Junior

Graduate

Prerequisites: PIII 1 and MGPA 2.75 and MIBM P and MIBR P and MIBW P and (CPAS 40 or COMP 106 or COMP 220 or COMP 280 or COMP 270)

An analysis of environmental education at both the elementary and secondary school level particularly stressing the environment as a teaching resource. Community resources as they relate to environmental education also are investigated.

EDD 480 Teach of Sci in the Second Grd

2.000 TO 3.000 Credits

Must be enrolled in one of the following classes:

Junior

Graduate

Prerequisites: PIII 1 and MGPA 2.75 and MIBM P and MIBR P and MIBW P and (CPAS 40 or COMP 106 or

COMP 220 or COMP 280 or COMP 270)

Co-requisites: EDD 481

A survey of the place of science in the secondary school curriculum, ananalysis and evaluation of objectives, and a consideration of modern practices in teaching science. Official admission to and good standing in teacher certification program are required.

EDD 481 Practicum in Science: Secnd Grd

1.000 Credits

Must be enrolled in one of the following classes:

Junior

Prerequisites: PIII 1 and MGPA 2.75 and MIBM P and MIBR P and MIBW P and (CPAS 40 or COMP 106 or

COMP 220 or COMP 270) Co-requisites: EDD 480

A supervised field experience related to the study of science in the secondary grades involving a minimum of 45 clock hours of observation and work spread over a semester in a school setting. Official admission to and good standing in teacher certification program are required.

EDD 482 Teach of Sic in Second Grd II

3.000 Credits

Must be enrolled in one of the following Levels:

Undergraduate

Must be enrolled in one of the following Colleges:

Coll of Ed, Health, &Human Ser Coll of Arts, Sciences&Letters

Must be enrolled in one of the following classes:

Undergrad Certification only

Senior

Junior

Post-baccalaureate Cert only Prerequisites: EDD 480 and EDD 481

This course builds upon the concepts and skills developed in EDD 480 as students learn to become effective, reflective science teachers. Students will learn multiple strategies for effective lesson planning, teaching, and assessment in science. Science, technology, engineering and mathematics (STEM) and integration of reading/writing strategies will be emphasized throughout the course. Students cannot receive credit for both EDD 482 and EDD 582. Students seeking graduate credit should enroll in EDD 582.

EDD 483 Wkshp:Sci Teach Elem/Midd Schl

1.000 TO 3.000 Credits

Must be enrolled in one of the following Levels: Undergraduate

Must be enrolled in one of the following classes:

Senior Junior

Deals with existing and innovative science materials. Offered at various times emphasizing one or more areas from elementary and middle level science. Centers on a laboratory approach. May be elected twice for a total of six credits. (OC).

EDD 485 Teach Science in the Elem Grd

2.000 TO 3.000 Credits

Must be enrolled in one of the following classes:

Undergrad Certification only

Senior Junior

Post-baccalaureate Cert only

Prerequisites: PIII 1 and MGPA 2.75 and MIBM P and MIBR P and MIBW P and (CPAS 40 or COMP 106 or

COMP 220 or COMP 280 or COMP 270)

Explores the objectives, methods, and instructional emphasis of elementary school science. Stresses concept development in several areas of elementary science. Provides opportunity for preparation of materials for classroom use. Official admission to and good standing in teacher certification program are required. For graduate credit, elect EDD 585.

EDD 486 Environmental Interpretation

2.000 TO 3.000 Credits

Must be enrolled in one of the following Classes:

Junior Graduate

Course deals with the interpretation of the environment, its characteristics, and its presentation to school groups as well as to the general public. Intended to acquaint students with a variety of skills and techniques necessary for interpreting the environment to others. Extensive use is made of the UM-D Environmental Study Area.

EDD 489 Practicum in Soc Stud:Sec Sch

1.000 Credits

Must be enrolled in one of the following classes:

Junior

Prerequisites: PIII 1 and MGPA 2.75 and MIBM P and MIBR P and MIBW P and (CPAS 40 or COMP 106 or

COMP 220 or COMP 280 or COMP 270)

Co-requisites: EDD 490

A supervised field experience in a selected middle or high school social studies classroom. The course requires a minimum of 45 hours of observation of an experienced teacher as well as the writing, implementation, and assessment of one or more lessons. Official admissions to and good standing in the teacher certification program in required.

EDD 490 Tch of the Soc Stud in Sec Sch

2.000 TO 3.000 Credits

Must be enrolled in one of the following classes:

Junior Graduate

Prerequisites: PIII 1 and MGPA 2.75 and MIBM P and MIBR P and MIBW P and (CPAS 40 or COMP 106 or

COMP 220 or COMP 280 or COMP 270)

Co-requisites: EDD 489

This course examines theoretical and practical approaches to teaching social studies at the secondary level. Students explore, develop, and evaluate instructional methods. In light of professional standards, they consider diverse strategies for teaching and assessing middle and high school students.

EDD 491 Soc Std Elem Grades Practicum

1.000 Credits

Must be enrolled in one of the following Colleges:

Coll of Ed, Health, &Human Ser

Must be enrolled in one of the following classes:

Post-baccalaureate NCFD

Senior

Junior

Prerequisites: EXPS 282 and EXPS 283 and PIII 1 and MGPA 2.75 and MIBM P and MIBR P and MIBW P and (COMP 106 or COMP 220 or COMP 270 or COMP 280 or

CPAS 40)

Co-requisites: EDD 495

A supervised field experience related to the methods and strategies associated with the teaching of social studies in grades K-5. This experience requires 45 clock hours of observation and participation spread over one semester.

EDD 493 Simulations and Gaming

1.000 TO 3.000 Credits

Must be enrolled in one of the following classes:

Undergrad Certification only

Senior

Junior

Post-baccalaureate Cert only

Prerequisites: PIII 1 and MGPA 2.75 and MIBM P and MIBR P and MIBW P and (CPAS 40 or COMP 106 or COMP 220 or COMP 280 or COMP 270)

This course focuses on simulation and gaming as approaches to learning which are fundamentally different from methods traditionally used in education, industry, business, and psychology. Students will have the opportunity to examine many different types of simulations and games and to participate in selected ones. They will also be able to design one for use in their own area of interest.

EDD 495 Social Studies in the Elem Grd

2.000 TO 3.000 Credits

Must be enrolled in one of the following classes:

Undergrad Certification only

Senior

Junior

Post-baccalaureate Cert only

Prerequisites: PIII 1 and MGPA 2.75 and MIBM P and MIBR P and MIBW P and (CPAS 40 or COMP 106 or COMP 220 or COMP 280 or COMP 270)

Examination and analysis of various programs and materials currently available for teaching social studies at the elementary level. Critical investigation of new developments and trends. Opportunity is provided to experiment with various techniques and to evaluate their effectiveness. Official admission to and good standing in teacher certification program are required.

EDD 496 Second Lang Tchg: Sec Level

3.000 Credits

Must be enrolled in one of the following classes:

Junior

Prerequisites: (FREN 301 or GER 301 or SPAN 301) and PIII 1 and MGPA 2.75 and MIBM P and MIBR P and MIBW P and (CPAS 40 or COMP 106 or COMP 220 or COMP 280 or COMP 220)

Co-requisites: EDD 497

An examination of current methodologies and techniques for instruction in foreign languages in grades 7-12. Emphasis will be placed on a standards-based curriculum with special attention given to the creation of learning scenarios. The use of communicative activities and the assessment of language skill areas will also be emphasized. Official admission to and good standing in teacher certification program are required.

EDD 497 Second Lang Tchg: Sec Level

1.000 Credits

Must be enrolled in one of the following classes:

Junior

Graduate

Prerequisites: (FREN 301 or GER 301 or SPAN 301) and PIII 1 and MGPA 2.75 and MIBM P and MIBR P and MIBW P and (CPAS 40 or COMP 106 or COMP 220 or

COMP 280 or COMP 270) Co-requisites: EDD 496

A required supervised field experience related to the teaching of a foreign language in grades 7-12. Involves a minimum of 45 clock hours of work and observation spread over one semester in a supervised classroom setting. Methods and techniques learned in EDD 496 will be used to increase the second language proficiency of learners in grades 7-12. Official admission to and good standing in teacher certification program are required. TB clearance, physician's statement of good health, criminal background clearance, and bloodborne pathogens/infectious diseases training are required.

EDD 498 Writing Meth: Formal&Informal

3.000 Credits

Must be enrolled in one of the following classes:

Junior

Graduate

This course is designed for those wishing to establish or improve creative writing programs in their elementary school classrooms. Theoretical models will be discussed. Strategies and materials that facilitate the writing of prose and poetry will be emphasized.

EDF 270 Physical Activity and Health

2.000 TO 3.000 Credits

Discussion of topics related to attaining a healthy lifestyle including nutrition, stress management techniques, physical training programs, cardiovascular disease, risk factors and other health-related topics.

EDF 450 Hlth, Nutr, & PE/Clsrm Tchrs

2.000 Credits

Must be enrolled in one of the following classes:

Undergrad Certification only

Sophomore

Senior

Junior

Post-baccalaureate Cert only

Instruction and participation in health, nutrition and physical education concepts and principles as they relate to elementary school curriculum. The six-dimensional model of wellness will be applied to meet legislative goals and objectives for the various grade levels. Required for elementary education majors.

EDF 455 Principles of Coaching

2.000 Credits

Must be enrolled in one of the following classes:

Undergrad Certification only

Senior

Junior

Post-baccalaureate Cert only

Instruction in the basic principles and psychology of coaching all age groups, skill levels and genders. Emphasis will be placed on many factors which relate to success in athletic/sports, the qualities and qualifications of coaches, and the administration of programs and organized practices. For graduate credit, elect EDF 555. (OC).

EDK 380 Undergraduate Reading Research

1.000 TO 2.000 Credits

Permits qualified students to pursue a program of reading under the direction of a staff member selected by the student. The faculty member must agree to serve prior to the course election. May be elected twice for total of two hours credit.

EDK 480 Independent Action Research

1.000 TO 4.000 Credits

Requires the student to initiate and pursue to completion an informal field-based research study under faculty supervision. The faculty member must agree to supervise prior to course election. May be elected twice for a total of two hours credit.

EDK 490 Education Internship

2.000 TO 10.000 Credits

This internship provides the student with opportunity for supervised, non-classroom experience in a school, college, or other educational setting. Between eight and forty clock hours of unpaid work per week, in conjunction with an arranged seminar, are required. The course may be elected twice for a total of four to ten semester credit hours.

EDM 405 ESL Strategies for the Classrm

2.000 Credits

Must be enrolled in one of the following classes: Junior

This course examines a variety of instructional approaches to teaching English as a Second Language (ESL) which are being used throughout the United States. These approaches will be discussed in light of underlying language learning theories. Instructional materials representing various approaches to teaching ESL will be examined. Students will also have the opportunity to construct instructional material for use in teaching ESL.

EDN 227 Inclusion:Multisen/Direct Inst

2.000 TO 3.000 Credits

Must be enrolled in one of the following classes:

Undergraduate NCFD

Sophomore

Senior Freshman Junior

Course addresses developing, implementing, and evaluating teaching strategies and materials that incorporate principles of direct instruction and multi-sensory activities that promote inclusion of students with special needs in general education settings, increase all students' academic achievement, and improve social interaction among students from a wide variety of social, economic, and cultural backgrounds. (F,W,S).

EDN 401 Strategies for LD

3.000 Credits

Must be enrolled in one of the following Colleges:

Coll of Ed, Health, & Human Ser

Must be enrolled in one of the following classes:

Senior

Post-baccalaureate NCFD

Junior

Post-baccalaureate Cert only

Prerequisites: EDC 401

Content includes strategies for teaching K-12 students with learning disabilities in special and regular education classes. Course addresses diagnostic-prescriptive teaching, direct instruction, and specific strategies and materials addressing each academic area. The Individualized Education Program (IEP), development of goals and objectives, linking assessment with instruction, inclusion, and generality of behavior change will also be included.

EDN 402 Socio-vocational Transitions

3.000 Credits

Must be enrolled in one of the following Colleges:

Coll of Ed, Health, & Human Ser

Must be enrolled in one of the following classes:

Senior

Post-baccalaureate NCFD

Junior

Post-baccalaureate Cert only

This course includes strategies that teach age-appropriate social skills to students with disabilities in a variety of social settings found in the school, home and community. This course will also focus on issues relevant to vocational and community transitions for students with disabilities. As opposed to rote learning of material the course intends to provide students with a conceptual understanding of issues related to social and vocational transitions.

EDN 403 Assessment of the Learner

3.000 Credits

Must be enrolled in one of the following Colleges:

Coll of Ed, Health, & Human Ser

Must be enrolled in one of the following classes:

Senior

Post-baccalaureate NCFD

Junior

Post-baccalaureate Cert only

Prerequisites: EDC 401 Co-requisites: EDN 404

Formal and informal assessment strategies used in the identification and service of students with handicaps are described. Technical and operational aspects of standardized

testing, curriculum based assessment, and informal strategies are described.

EDN 404 Assessment Practicum

1.000 Credits

Must be enrolled in one of the following Colleges:

Coll of Ed, Health, & Human Ser

Must be enrolled in one of the following classes:

Senior

Post-baccalaureate NCFD

Junior

Post-baccalaureate Cert only

Prerequisites: EDC 401 Co-requisites: EDN 403

Clinical experiences with formal and informal assessment strategies currently used by special educators to identify and program for students with handicaps. Activities include administration, scoring and interpretation of norm- and criterion-referenced tests, Curriculum Based Assessments and informal assessment strategies. Deriving goals, objectives, activities and strategies from assessment data are also included. Must be taken with EDN 403 for the LD endorsement.

EDN 406 Collaboration in the Classroom

3.000 Credits

Must be enrolled in one of the following Colleges:

Coll of Ed, Health, & Human Ser

Must be enrolled in one of the following classes:

Senior

Post-baccalaureate NCFD

Junior

Post-baccalaureate Cert only

Techniques for enhancing collaboration between special and regular classroom teachers of mainstreamed exceptional and low-achieving learners at all levels. Included are essential skills for managing and monitoring the learning process and maintaining collaborative partnerships. As opposed to rote learning of material, the course will provide students with a conceptual and practical understanding of issues relevant to collaboration.

EDN 408 LD Directed Teaching Seminar

1.000 Credits

Must be enrolled in one of the following Major fields of

Special Education

Must be enrolled in one of the following classes:

Senior

Prerequisites: EDC 401 and EDN 401 and EDN 403 and

EDN 404 and EDN 402

Co-requisites: EDD 413 EDD 415

Seminar will focus on the discussion, development, and evaluation of Individualized Educational Programs, Individualized Transition Plans, and Behavior Intervention Plans for students with learning disabilities at a variety of directed teaching sites. Topics will include academic and behavior assessment and strategies, curriculum, child study teaming, service delivery options and inclusion strategies. Co-requisite: EDD 415 and EDD 413. Pre-requisite: Grade of "B" or better in a C401, N401, N403, N404, and N402 General Ed. Directed Teaching.

EDN 410 Intro to Cognitive Impair I

3.000 Credits

Must be enrolled in one of the following Levels:

Undergraduate

Must be enrolled in one of the following Colleges:

Coll of Ed, Health, & Human Ser

Must be enrolled in one of the following classes:

Undergrad Certification only

Senior Junior

Post-baccalaureate Cert only

Prerequisites: EDC 460 Co-requisites: EDN 411

Historical perspectives, definition, terminology, and assessment of the full spectrum of cognitive impairments are addressed. Identification of the behavioral, social, intellectual, communicative, vocational, adaptive, psychological, and educational/instructional needs of individuals with mild cognitive impairments across the lifespan.

EDN 411 Cognitive Impair Pract I

1.000 Credits

Must be enrolled in one of the following Levels:

Undergraduate

Must be enrolled in one of the following Colleges:

Coll of Ed, Health, & Human Ser

Must be enrolled in one of the following classes:

Undergrad Certification only

Senior Junior

Post-baccalaureate Cert only

Prerequisites: EDC 460 Co-requisites: EDN 410

Experience in an educational setting with students with mild cognitive impairments for no less than 45 clock hours. Activities include working with the cooperating teacher on tasks such as individual instruction, data collection, informal assessment and program implementation and evaluation of IEP goals and objectives.

EDN 412 Intro to Cognitive Impair II

3.000 Credits

Must be enrolled in one of the following Levels:

Undergraduate

Must be enrolled in one of the following Colleges:

Coll of Ed, Health, & Human Ser

Must be enrolled in one of the following classes:

Undergrad Certification only

Senior Junior

Post-baccalaureate Cert only

Prerequisites: EDC 460 and EDN 401 and EDN 411

Co-requisites: EDN 413

This course is an extension of introduction to Cognitive Impairments I. Identification of the behavioral, social, intellectual, communicative, vocational, adaptive, psychological and educational/instructional needs of individuals with moderate and severe cognitive impairments across the lifespan.

EDN 413 Cognitive Impair Pract II

1.000 Credits

Must be enrolled in one of the following Levels: Undergraduate

Must be enrolled in one of the following Colleges:

Coll of Ed, Health, & Human Ser

Must be enrolled in one of the following classes:

Undergrad Certification only

Senior Junior

Post-baccalaureate Cert only

Prerequisites: EDC 460 and EDN 410 and EDN 411

Co-requisites: EDN 412

Experience in an educational setting with students with moderate and severe cognitive impairments for no less than 45 clock hours. Activities include working with the cooperating teacher on tasks such as individual instruction, data collection, informal assessment and program implementation and evaluation of IEP goals and objectives.

EDN 414 Assessment Cognitive Impair

3.000 Credits

Must be enrolled in one of the following Levels:

Undergraduate

Must be enrolled in one of the following Colleges:

Coll of Ed, Health, & Human Ser

Must be enrolled in one of the following classes:

Undergrad Certification only

Senior Junior

Post-baccalaureate Cert only

Prerequisites: EDC 460 and EDN 410 and EDN 411 or

EDN 412 and EDN 413 Co-requisites: EDN 415

Course discusses different theories of intelligence and intellectual development. Students learn to identify and describe different instruments used to assess the intellectual, adaptive behavior, academic, language/communication, vocational and social needs of students with mild, moderate and severe cognitive impairments.

EDN 415 Assessment Pract Cogn Impair

1.000 Credits

Must be enrolled in one of the following Levels:

Undergraduate

Must be enrolled in one of the following Colleges:

Coll of Ed, Health, & Human Ser

Must be enrolled in one of the following classes:

Undergrad Certification only

Senior Junior

Post-baccalaureate Cert only

Prerequisites: EDC 460 and EDN 410 and EDN 411 and

EDN 412 and EDN 413 Co-requisites: EDN 414

Clinical experience with formal and informal assessment strategies currently used by special educators to identify needs and develop programming for students with mild, moderate and severe cognitive impairments. Activities include practicing observational techniques, completing, analyzing and interpreting various formal and informal assessments, including norm referenced and criterion referenced tests, achievement tests, rating scales and checklists.

EDN 416 Strategies Cognitive Impair I

3.000 Credits

Must be enrolled in one of the following Levels: Undergraduate

Must be enrolled in one of the following Colleges:

Coll of Ed, Health, & Human Ser

Must be enrolled in one of the following classes:

Undergrad Certification only

Senior

Junior

Post-baccalaureate Cert only

Prerequisites: EDC 460 and EDN 410 and EDN 411 and

EDN 414 and EDN 415

Course content includes strategies for teaching students with mild cognitive impairments. Strategies for effective teaching and the development of instructional materials and learning environments for students with mild cognitive impairments is addressed. Functional academics, positive behavior supports, community based instructional support, self-determination, the use of instructional technology and supports, communication skills, adaptive behavior skills are covered within the context of the IEP, development of goals and objectives linking assessment with instruction, designing effective learning environments, and integrating students with mild cognitive impairments into the least restrictive environment.

EDN 417 Strategies Cognitive Impair II

3.000 Credits

Must be enrolled in one of the following Levels:

Undergraduate

Must be enrolled in one of the following Colleges:

Coll of Ed, Health, & Human Ser

Must be enrolled in one of the following classes:

Undergrad Certification only

Senior

Junior

Post-baccalaureate Cert only

Prerequisites: EDC 460 and EDN 412 and EDN 413 and

EDN 414 and EDN 415

Course content includes strategies for teaching students with moderate and severe cognitive impairments. Strategies for effective teaching and the development of instructional materials and learning environments for students with moderate and severe cognitive impairments are included. Functional academics, positive behavior supports, community based instructional support, self-determination, the use of instructional technology and supports, communication skills, adaptive behavior skills are covered within the context of the IEP, development of goals and objectives linking assessment with instruction, designing effective learning environments and integrating students with moderate and severe cognitive impairments into the least restrictive environment.

EDN 418 - Dir Teach I: Mild CI

2.000 Credits

Must be enrolled in one of the following Levels:

Undergraduate

Must be enrolled in one of the following Colleges:

Coll of Ed, Health, &Human Ser

Must be enrolled in one of the following classes:

Senior

Undergrad Certification only

Post-baccalaureate Cert only

Prerequisites: EDC 460 and EDN 410 and EDN 411 and

EDN 414 and EDN 415 and EDN 416

Field experience with students with mild cognitive impairments in classroom settings. Experiences include the delivery of direct instruction in functional academic, community based skills, functional living skills, and communication skills. Academic and behavioral assessments leading to the development and implementation of IEPs and BIPs are included. Students will also engage in observations, small and large group instruction, curriculum development, program development and implementation and participation in the EIP process. Collaboration with other classroom teachers in general and special education settings, and other activities under the on-site supervision of a certified CI teacher and university field supervisor. Directed teaching also includes weekly seminar.

EDN 419 Dir teach II: Mod/Sev CI

2.000 Credits

Must be enrolled in one of the following Levels:

Undergraduate

Must be enrolled in one of the following Colleges:

Coll of Ed, Health, &Human Ser

Must be enrolled in one of the following classes:

Senior

Undergrad Certification only

Post-baccalaureate Cert only

Prerequisites: EDC 460 and EDN 410 and EDN 411 and

EDN 414 and EDN 415 and EDN 417

Field experience with students with moderate and severe cognitive impairments in classroom settings. Experiences include the delivery of direct instruction in functional academic, community based skills, functional living skills, and communication skills. Academic and behavioral assessments leading to the development and implementation of IEPs and BIPs are included. Students will also engage in observations, small and large group instruction, curriculum development, program development and implementation and participation in the EIP process. Collaboration with other classroom teachers in general and special education settings, and other activities under the on-site supervision of a certified CI teacher and university field supervisor. Directed teaching also includes weekly seminar.

EDN 420 Intro to Emotional Impairments

3.000 Credits

Must be enrolled in one of the following Colleges:

Coll of Ed, Health, & Human Ser

Must be enrolled in one of the following classes:

Senior

Post-baccalaureate NCFD

Junior

Post-baccalaureate Cert only

Co-requisites: EDN 421

Identification of the behavioral characteristics and instructional needs of children with emotional impairments/behavior disorders. Causes of emotional impairments and environmental influences as well as strategies for identification, assessment and interpreting such instruments will be addressed. Finally, instructional strategies for students with emotional impairments will be described and practiced through classroom activities.

EDN 421 Practicum at Psych Facility

1.000 Credits

Must be enrolled in one of the following Colleges:

Coll of Ed, Health, & Human Ser

Must be enrolled in one of the following classes:

Senior

Post-baccalaureate NCFD

Junior

Post-baccalaureate Cert only Co-requisites: EDN 420

Experience in a clinical setting with emotionally impaired individuals, for no less than 45 clock hours. Activities include working with cooperating teacher on tasks such as individual tutoring, data collection, informal assessment, interpretation of psychological data, and program implementation and evaluation. Also included will be the development of individualized instructional strategies, classroom activities, the use of adaptive technology, interdisciplinary approaches and the development of relevant goals and objectives for emotionally impaired students.

EDN 423 Strat: Emotional Impairments

3.000 Credits

Must be enrolled in one of the following Colleges:

Coll of Ed, Health, & Human Ser

Must be enrolled in one of the following classes:

Senior

Post-baccalaureate NCFD

Junior

Post-baccalaureate Cert only

Prerequisites: EDN 320

Course content includes strategies for teaching students with emotional impairments, including instruction on reading and mathematics. Course also includes strategies to deal with hyperactive behavior, aggressive behavior, socially withdrawn behavior, and delinquency. Strategies for effective teaching and the development of instructional materials and learning environments for students with emotional impairments are included. The Individualized Education Program (IEP), development of goals and objectives, linking assessment with instruction, and integrating students with emotional impairments into the regular classroom will also be covered.

EDN 425 Eco-Behavioral Assessment

3.000 Credits

Must be enrolled in one of the following Colleges:

Coll of Ed, Health, & Human Ser

Must be enrolled in one of the following classes:

Senior

Post-baccalaureate NCFD

Junior

Post-baccalaureate Cert only

Prerequisites: EDN 320 Co-requisites: EDN 426

Formal and informal assessment strategies used in identifying and serving students with emotional impairments are described. Assessment strategies include eco-behavioral assessment, functional analyses, naturalistic observation techniques, norm-referenced and criterion-referenced tests, interviewing, achievement test, and curriculum based assessment. Technical aspects of assessment, interpretation of data, and diagnostic strategies are also addressed, as well as using adaptive technology and assessment instruments to facilitate more effective individualized instruction for students with emotional impairments. Finally, integrating assessment results from other disciplines will also be addressed.

EDN 426 Eco-Behav Assessment Pract

1.000 Credits

Must be enrolled in one of the following Colleges: Coll of Ed, Health, &Human Ser Must be enrolled in one of the following classes:

Senior

Post-baccalaureate NCFD

Junior

Post-baccalaureate Cert only

Prerequisites: EDN 320 Co-requisites: EDN 425

Clinical experiences with formal and informal assessment strategies currently used by special educators to identify and program for students with emotional impairments. Activities include practicing observation techniques, and completing and analyzing eco-behavioral assessments and functional analyses. Also included are administration, scoring, and interpretation of norm-referenced and criterion-referenced tests, curriculum based assessments, achievement tests, rating scales and checklists, and informal assessment strategies. Practicum activities will also focus on using assessment results in curriculum design and instructional strategies to meet the individualized instructional needs of EI students.

EDT 210 Tech in Elementary Education

3.000 Credits

Must be enrolled in one of the following Colleges:

Coll of Ed, Health, &Human Ser

Must be enrolled in one of the following classes:

Undergrad Certification only

Sophomore

Senior

Junior

Post-baccalaureate Cert only

Introduces students to the application of technology in elementary education. Students experience and become familiar with advanced learning technology tools; learn to use telecommunication tools for emailing, participating in educational listserv and online discussion groups, and accessing electronic resources on the WWW; learn to use productivity tools forward processing, drawing, painting and digital editing, spreadsheet application, database management, and multimedia presentation; learn to use educational multimedia for visual thinking, creativity, and multimedia authoring, learning to practice ethical and legal use of technology resources, and explore the use of such technology tools in the elementary classroom.

EDT 211 Tech in Secondary Education

3.000 Credits

Introduces students to the application of technology in secondary education. Students experience and become familiar with advanced learning technology tools; learn to use telecommunication tools for emailing, participating in educational listserv and online discussion groups, and accessing electronic resources on the WWW; learn to use productivity tools forward processing, drawing, painting and digital editing, spreadsheet applications, database management, and multimedia presentation; learn to use educational multimedia for visual thinking, creativity, and multimedia authoring, learning to practice ethical and legal use of technology resources; and explore the use of such technology tools in the secondary classroom.

EDT 410 Teaching with Technology

2.000 Credits

Prerequisites: EDT 210 or EDT 211

Provides student teachers/interns with improved knowledge, skills, and confidence integrating advanced technology tools into the teaching and learning process in meaningful ways. Student teachers/interns design and teach multi-week units of instruction where student learning is enhanced with advanced technology tools. Student teachers/interns create electronic portfolios to present their achievement in teaching with technology demonstrating a superior level of achievement on the Proposed Standard with Related Indicators for the Achievement of Entry-Level Skills in Information Technology for all Michigan Teachers. (F,W,S).

Exploratory Studies (EXPS) COURSE OFFERINGS

EXPS 102 Career Planning

1.000 Credits

A ten-week seminar exploring strengths, values and motivations in the context of developing career planning and decision-making skills. Career interest assessment and individualized assistance is incorporated in the course. This is especially helpful to students who are deciding on their major.

EXPS 218 Topics in Exploratory Studies

1.000 TO 3.000 Credits

An examination, at the freshman and sophomore level, in the selected areas of general study. The title as listed in the Schedule of Classes may change according to content. Course may be repeated for credit when specific topics differ.

EXPS 220 Science in the Elem School

2.000 TO 3.000 Credits

This course is designed for people intending to become elementary school teachers and who have had little or no previous experience in science. The course utilizes a laboratory approach to the study of the concepts, processes, and value of elementary and middle school science.

EXPS 250 Elem Ed Vis & Perf Arts

3.000 Credits

Must be enrolled in one of the following Levels:

Undergraduate

Must be enrolled in one of the following Colleges:

Coll of Ed, Health, & Human Ser

This course will teach the elementary education student how to incorporate the various visual and performing arts into everyday elementary education curricula. The course will cover the fundamental and formal elements, the major periods, styles and philosophies, as well as the functions and processes of the visual and performing arts, and how to effectively employ those creative processes through collaboration, communication, cooperation and interaction in the elementary classroom.

EXPS 270 Inclusion & Cultural Immersion

1.000 Credits

Must be enrolled in one of the following classes:

Senior

Sophomore

Freshman

Junior

The seminar is modeled after New Detroits Multicultural Leadership Series. The format offers a highly innovative approach to building competences to address (ethnic, racial, gender, and sexual orientation) topics relevant to the metropolitan Detroit region. Students attend off-campus sessions where they spend the day immersed in that culture. Each session offers an in-depth look at (but not limited to) the history, culture, and socioeconomic issues that are germane but also transcend regional barriers. Goals of the course: 1) Bridge communication gaps; promote better understanding and appreciation among all people. 2) Develop a greater understanding of the distinctive and subtle differences within our community. 3) Explore various tools to enhance communication and collaborations geared towards closing our regional divide.

EXPS 282 History & Civics Elem Schools

3.000 Credits

Must be enrolled in one of the following Levels:

Undergraduate

A survey of Michigan and United States history and government through Reconstruction. U.S. historical and political topics taught in grades K-8 are explored. Students also examine families, schools, and local communities.

EXPS 283 Geography & Econ Elem Schools

3 000 Credits

Must be enrolled in one of the following Levels: Undergraduate

A survey of the geography and economics taught in grades K-6. Particular attention will be paid to the geography of Michigan and the Great Lakes region. Market and other types of economics will be examined in the light of core economic principles. (F,W,S)

EXPS 360 Effective Comm with Eng Lng Lrn

1.000 Credits

Must be enrolled in one of the following Levels: Undergraduate

This course provides students with a structured experience with an international student in the University of Michigan-Dearborns English Language Proficiency (ELP) Program. Students are paired with an ELP student to meet on a weekly basis to provide opportunities to engage in conversation appropriate for academic settings. In this course students will have the opportunity to develop their understandings of the complexity of aural/oral language communication for English language learners.

EXPS 407 Inquiry-based Math and Science

3.000 Credits

Must be enrolled in one of the following Colleges:

Coll of Ed, Health, &Human Ser

Must be enrolled in one of the following Fields of Study:

Early Childhood

General Studies

Must be enrolled in one of the following classes:

Senior

Sophomore

Junior

Post-baccalaureate Cert only

Prerequisites: EXPS 220 and MATH 385

This inquiry-based laboratory course intends to support the learning of early childhood educators (birth to grade 2) in foundations of science and mathematics. The course integrates concepts and processes that arise in both disciplines, such as classification; units and measurements; shapes and structures and their properties; patterns; problem solving; representation;

cause and effect; use of evidence (three credits). Required for Early Childhood Comprehensive Major. Elective for Elementary Education Certification Students. Elective for Children and Families Students. Students cannot receive credit for both EXPS 407 and 507. The required lab fee is to cover course materials.

EXPS 410 Multicult in School and Soc

3.000 Credits

Examines ways to address the needs of diverse student populations. Issues of race, ethnicity, class, gender, and language are explored. Historic and ongoing issues of equity, particularly in school settings, are considered. The focus is on providing an education of high quality to all students.

EXPS 420 Science Capstone

3.000 Credits

Must be enrolled in one of the following Levels:

Undergraduate

Must be enrolled in one of the following Colleges:

Coll of Ed, Health, & Human Ser

Must be enrolled in one of the following classes:

Undergrad Certification only

Senior

Junior

Post-baccalaureate Cert only

Prerequisites: NSCI 231 and NSCI 232 and NSCI 233 and EDD 485 *

A capstone course for pre-service elementary teachers with a laboratory component designed to assist students in achieving deep understanding of a broad scientific concept and a discussion component designed to introduce and provide practice in classroom research. Students will use the classroom research to prove misconceptions about the scientific concept explored in the laboratory.

EXPS 443 Family/School/Community Collab

2.000 Credits

Must be enrolled in one of the following classes:

Undergrad Certification only

Senior

Junior

Post-baccalaureate Cert only

Characteristics, roles, and functions of contemporary families are described. Various communication and training strategies designed to promote collaboration and teamwork within and between the school staff, the families, and community are described and practiced through discussion, problem-solving activities, and role playing. Family effectiveness assessment instruments and strategies are also described and practiced.

EXPS 460 Capstone: Trnds & Iss Literacy

3.000 Credits

Must be enrolled in one of the following Colleges:

Coll of Ed, Health, & Human Ser

Must be enrolled in one of the following classes:

Senior

Undergrad Certification only

Post-baccalaureate Cert only

Prerequisites: EDD 468 and EDD 419 and EDD 471 and

EDD 467 and EDD 447 and EDD 448

This course is for pre-service teachers in the elementary certification program majoring in reading. In this course students will explore topical issues relevant to the teaching of literacy in preparation for becoming participating members in the professional community of literacy teachers.

EXPS 493 Simulation and Gaming

1.000 TO 3.000 Credits

Must be enrolled in one of the following classes:

Undergrad Certification only

Senior

Junior

Post-baccalaureate Cert only

This course focuses on simulation and gaming as approaches to learning which are fundamentally different from methods traditionally used in education, industry, business, and psychology. Students will have the opportunity to examine many different types of simulations and games and to participate in selected ones. They will also be able to design one to use in their own area of interest.

EXPS 498 Exploring Writing/Chld&Yng Ad

3.000 Credits

May not be enrolled in one of the following Classes:

Graduate

Sophomore

Freshman

This course provides a theoretical foundation for writing instruction of children/adolescents in grades K-8. Emphasis is placed on modeling, instructional strategies, and assessment for supporting student writers that pre-service and in-service teachers can use to facilitate students development of written language across various genres. TB clearance, criminal background check, and bloodborne pathogens/infectious diseases training required.

EXPS 499 Individ Res in Lit in Educ

1.000 TO 3.000 Credits

Must be enrolled in one of the following Levels:

Undergraduate

Must be enrolled in one of the following classes:

Senior

Undergrad Certification only

Junior

Requires the student to initiate and carry to completion a literature in education-based research project under the supervision of a faculty member. May be elected more than once for a total of not more than 3 credits as approved by advisor. Written permission of instructor. (F,W,S).

Library Science (LIBR)

COURSE OFFERINGS

LIBR 465 Literature for Children

Must be enrolled in one of the following classes:

Undergrad Certification only

Sophomore

Senior

Junior

Post-baccalaureate Cert only

The evaluation of books for children aged three to twelve. Fiction, folklore, poetry, illustration, and informational books are considered with emphasis on the development of standards for selecting materials with reference to the interests, needs, and

abilities of children and the enrichment of the school curriculum. Designed for librarians, supervisors, and teachers in the elementary school.

LIBR 470 Literature for Young People

3.000 Credits

Must be enrolled in one of the following classes:

Undergrad Certification only

Sophomore

Senior

Junior

Post-baccalaureate Cert only

Surveys and develops criteria for appropriate literature for young people in junior high school. Fiction, non-fiction, folklore, poetry and fantasy are considered with reference to the interests, needs and abilities of adolescents. Designed for librarians, supervisors, and teachers in the secondary school.

LIBR 475 Issues Lit Child/Yng People

2.000 TO 3.000 Credits

Must be enrolled in one of the following Levels:

Undergraduate

Must be enrolled in one of the following Colleges:

Coll of Ed, Health, & Human Ser

Must be enrolled in one of the following classes:

Senior

Junior

This course is designed to heighten the awareness and sensitivity of teachers to the treatment of issues in modern and traditional literature for elementary and middle school children. Among these issues will be justice, ethics, abuse, conformity, aging, death, sibling problems, alienation, friendship, prejudice, gender, and other areas of concern. Techniques and activities for fostering discourse and open inquiry in the classroom, relative to the literature, will be explored and presented. (OC).

Military Science (MILS)

COURSE OFFERINGS

MILS 101 Foundations of Officership

1.000 Credits

An overview of the United States Army and its organization, customs and traditions, ranking structure, and the roles of the officer and noncommissioned officer. Students will conduct hands-on training in land navigation, rappelling, marksmanship, drill and ceremony, and small unit tactics.

MILS 102 Basic Leadership

1.000 Credits

This course expands upon the fundamentals introduced in the previous term by focusing on communications, leadership and problem solving. It is designed to build on the experience of the first term and further broaden the introduction to the Army as well as to the leadership skills and "life skills" needed by an Army officer. Learning objectives focus on the following: introduction to communication principles of military briefings and effective writing; the Army Problem Solving Process; goal setting; and communication skills as they relate to listening, speaking and the counseling process; as well as several lessons that provide an overview of Army life.

MILS 201 MILS: Leadership & Teamwork

2.000 Credits

This course takes the unique approach of placing students in a wide variety of group exercises designed to emphasize various professional leader ship competencies and insights. These events are held both inside the classroom and in outdoor settings. The instructor acts as a facilitator, helps guide student processing, or after action reviews of the events to derive the leadership group dynamics, and problem solving lessons that the exercise offer. In addition to military skills, practical 'life skills' are emphasized. The lessons are designed to maximize student participation, inspire intellectual curiosity, stimulate self-study and encourage cadets to interact.

MILS 202 Leadership and Teamwork

2.000 Credits

This course places students in an experiential learning environment which provides participants the opportunity to 'experience' their learning, rather than simply being told what they are to learn. Students participate in a wide variety of group exercises designed to emphasize various professional leadership competencies and insights. These events, which range from physically challenging to mentally stimulating, are held both inside the classroom and in outdoor settings. The instructor acts as a facilitator, helps guide student processing through after action reviews of the events to facilitate student understanding of leadership principles, group dynamics, and problem solving methods. In addition to military skills, practical 'life skills' are emphasized. Lessons are designed to maximize student participation, inspire intellectual curiosity and introspection, as well as group interaction.

MILS 301 Leading Small Orgs 1

2.000 Credits

Must be enrolled in one of the following classes:

Senior

Junior

Leading Small Organizations is a continuation to the study of military organizational leadership focusing on leadership development and interpersonal and group dynamics. This lecture-discussion course will provide insights into methods of visualizing, planning and leading organizations to achieve set goals. Students will be given opportunities to progress through a series of projects in which you will lead small groups (10-30 people). These projects are designed to allow students to develop individual decision-making and management skills as well as give them a sensitivity to organizational life. Students receive personal assessments and encouragement in situations of increasing complexity. The vehicles used to achieve these educational objectives are a study of formal planning and decision-making models set in the framework of military organization and doctrine.

MILS 302 Leading Small Orgs 2

2.000 Credits

Must be enrolled in one of the following Classes:

Senior

Junior

MSL 302 uses increasingly intense situational applying team leadership challenges to build cadet awareness and skills in leading tactical operations at the small unit level. Cadets review

aspects of full spectrum operations. They also conduct military briefings and develop proficiency in the operation orders process. The focus is on exploring, evaluating, and developing skills in decision-making, persuading, and motivating team members in the contemporary operating environment (COE). MSL 302 cadets are evaluated on what they know and do as leaders as they prepare to attend the ROTC summer Leader Development Assessment Course (LDAC).

Professional Education (PDED)

COURSE OFFERINGS

PDED 318 Topics in Education

1.000 TO 3.000 Credits

Must be enrolled in one of the following classes:

Junior

Graduate

An examination, at the undergraduate level, of selected problems, practices or issues in education. The title as listed in the Schedule of Classes may change according to content. Course may be repeated for credit when specific topics differ.

PDED 405 Sp Ed Legisltn and Litigation

3.000 Credits

Must be enrolled in one of the following Colleges:

Coll of Ed, Health, & Human Ser

Must be enrolled in one of the following classes:

Senior

Post-baccalaureate NCFD

Junior

Post-baccalaureate Cert only

Content traces the historical development of special education through landmark legislation and litigation, parent advocacy, and national economic and social needs. The provisions of federal and state special education mandates, judicial interpretations, and Michigan state guidelines regulating the delivery of educational and vocational services to persons with handicaps will also be addressed.

PDED 415 Museum Resources for Teaching

3.000 Credits

Must be enrolled in one of the following Colleges:

Coll of Ed, Health, &Human Ser

Must be enrolled in one of the following classes:

Senior

Undergrad Certification only

Junior

Explores the use of museums as educational resources by elementary and secondary teachers. Various museums in the greater Detroit metropolitan area will be visited and studied. Students will review how to plan educational trips and how to use museum resources in meeting their own particular individual needs. (OC)

PDED 416 Internship in Museum Education

2 .000 OR 3.000 Credits

Must be enrolled in one of the following Colleges:

Coll of Ed, Health, & Human Ser

Coll of Arts, Sciences&Letters

Must be enrolled in one of the following classes:

Sophomore

Senior

Junior

The museum education internship will prepare students with the knowledge and skills they need to plan, implement, and evaluate educational and interpretive programs in the context of museums. The educational functions of museums will be explored. The students will apply their knowledge and experiences to K-12 instruction in the core content areas.

PDED 418 Topics in Education

1.000 TO 3.000 Credits

Must be enrolled in one of the following Colleges:

Coll of Ed, Health, & Human Ser

Coll of Arts. Sciences&Letters

Must be enrolled in one of the following classes:

Post-baccalaureate Cert only

Undergraduate NCFD

Senior

Undergrad Certification only

Junior

Post-baccalaureate NCFD

This course is intended to introduce students to the characteristics and assessment of persons with ASD, as well as the best practices related to educating students with Autism Spectrum Disorders (ASD). Specifically, students will learn evidence based practices for: assessing students with ASD, creating an appropriate educational environment for students with ASD, and providing academic instruction and behavioral interventions to students with ASD in special education and general education settings. Instruction will emphasize specific assessment and teaching tools and behavior management principles and practices associated with educating K-12 student with ASD.

PDED 425 Educator and the Law

1.000 TO 2.000 Credits

Must be enrolled in one of the following Colleges:

Coll of Ed, Health, & Human Ser

Must be enrolled in one of the following classes:

Senior

Undergrad Certification only

Junio

Designed to familiarize classroom teachers with school law and its implications for educators, pupils, and parents. Consideration will be given to the legal aspects of such matters as physical threats, teacher liability, codes of conduct, discipline, and student rights. (OC)



engin.umd.umich.edu



College of Engineering and Computer Science

Administration

Tony England, PhD, Interim Dean, College of Engineering and Computer Science

Keshav S. Varde, PhD, Associate Dean, College of Engineering and Computer Science

William I. Grosky, PhD, Chair, Department of Computer and Information Science

Ben Q. Li, PhD, Chair, Department of Mechanical Engineering Pankaj K. Mallick, PhD, Director, Interdisciplinary Programs

Yi Lu Murphey, PhD, Chair, Department of Electrical and Computer Engineering

Armen Zakarian, PhD, Chair, Department of Industrial and Manufacturing Systems Engineering

Laura Beer, Student Advisor

John Cristiano, Co-Director, Institute for Advanced Vehicle Systems; Director, Patton Center for Engineering Education and Practice

Anthony DeLaRosa, Internship Coordinator

M. Jeanne Girard, Director, Office of Extended Learning and Outreach

Eric Kirk, Facilities Manager

Jung Koral, Student Advisor

Ghassan Kridli, Co-Director, Institute for Advanced Vehicle Systems

Jennifer Makas. Student Advisor

Leigh McGrath, Business Manager

Lisa Remsing, Director of Academic Services

Professors Emeriti

Aswad, A. Adnan, PhD, Professor Emeritus of Industrial and Manufacturing Systems Engineering

Boffi, Luiz V., ScD, Professor Emeritus of Electrical and Computer Engineering

Bolling, Fredric, PhD, Professor Emeritus of Mechanical Engineering

Cairns, J. Robert, PhD, Professor Emeritus of Mechanical Engineering

Conlon, Howard E., MS, Associate Professor Emeritus of Mechanical Engineering

Despres, Thomas A., PhD, Professor Emeritus of Mechanical Engineering

Habib, Izzeddin S., PhD, Professor Emeritus of Mechanical Engineering

Heim, Dwight S., PhD, Professor Emeritus of Electrical Engineering

Kampfner, Roberto, PhD, Associate Professor Emeritus of Computer and Information Science

Kurajian, George M., MS, Professor Emeritus of Mechanical Engineering

Miller, Murray H., PhD, Professor Emeritus of Electrical and Computer Engineering

Mitchell, William J., MS, Assistant Professor Emeritus of Mechanical Engineering

Murtuza, Syed, PhD, Professor Emeritus of Electrical and Computer Engineering

Na, Tsung Y., PhD, Professor Emeritus of Mechanical Engineering

Sullivan, Joseph E., MS, Associate Professor Emeritus of Electrical and Computer Engineering Trojan, Paul K., PhD, Professor Emeritus of Metallurgical Engineering

Wolf, Louis W., PhD, Associate Professor Emeritus of Mechanical Engineering

Faculty

Akingbehin, Kiumi, PhD, Wayne State University, Professor of Computer and Information Science

Ammari, Habib, PhD, University of Texas-Arlington, Associate Professor of Computer and Information Science

Argento, Alan, PhD, University of Michigan, Professor of Mechanical Engineering

Awad, Selim Saad, PhD, Polytechnic Institute of Grenoble, Professor of Electrical and Computer Engineering

Chakraborty, Nilay, PhD, University of North Carolina, Assistant Professor of Bioengineering

Chang, Chia-hao, PhD, Oregon State University, Professor of Industrial and Manufacturing Systems Engineering

Chen, Yubao, PhD, University of Wisconsin-Madison, Professor of Industrial and Manufacturing Systems Engineering

Cherng, John G., PhD, University of Tennessee, Professor of Mechanical Engineering

Chow, Chi L., PhD, DSc, University of London, Professor of Mechanical Engineering

Elenbogen, Bruce, PhD, Northwestern University, Associate Professor of Computer and Information Science

El Kateeb, Ali, PhD, Concordia University, Associate Professor of Electrical and Computer Engineering

Ghosh, Gargi, PhD, University of Kentucky, Assistant Professor of Bioengineering

Grosky, William I., PhD, Yale University, Professor of Computer and Information Science

Guo, Jinhua, PhD, University of Georgia, Assistant Professor of Computer and Information Science

Huntley, Hugh, PhD, University of Michigan, Associate Professor of Mechanical Engineering

Hu, Jian, PhD, Northwestern University, Assistant Professor of Industrial and Manufacturing Systems Engineering

Jia, Bochen, PhD, Virginia Polytechnic Institute and State University, Assistant Professor of Industrial and Manufacturing Systems Engineering

Jung, Dohoy, PhD, University of Michigan, Associate Professor of Mechanical Engineering

Kachhal, Swatantra K., PhD, University of Minnesota, Professor of Industrial and Manufacturing Systems Engineering

Kang, Hong Tae, PhD, University of Alabama, Associate Professor of Mechanical Engineering

Kaufman, Herbert, PhD, University of Windsor, Lecturer of Electrical and Computer Engineering

Kessentini, Marouan, PhD, University of Montreal, Assistant Professor of Computer and Information Science

Kim, Sang-Hwan, PhD, North Carolina University, Assistant Professor of Industrial and Manufacturing Systems Engineering.

Kim, Taehung, PhD, Texas A & M, Associate Professor of Electrical and Computer Engineering

Klungle, Roger G., DSc, George Washington University, Lecturer of Industrial and Manufacturing Systems Engineering

- Knight, James W., PhD, Ohio State University, Associate Professor of Industrial and Manufacturing Systems Engineering
- Kridli, Ghassan, PhD, University of Missouri-Columbia, Associate Professor of Industrial and Manufacturing Systems Engineering
- Lakshmanan, Sridhar, PhD, University of Massachusetts, Amherst, Associate Professor of Electrical and Computer Engineering
- Lee, Cheol, PhD, Purdue University, Associate Professor of Industrial and Manufacturing Systems Engineering
- Lenox, Harry, MS, University of Michigan, Clinical Professor of Engineering
- Li, Ben Q., PhD, University of California, Berkeley, Professor of Mechanical Engineering
- Little, Robert E., PhD, University of Michigan, Professor of Mechanical Engineering
- Liu, Yung-Wen, PhD, University of Washington, Associate Professor of Industrial and Manufacturing Systems Engineering
- Lo, Joe Fu-Jiou, PhD, University of Southern California, Assistant Professor of Bioengineering
- Ma, Di, PhD, University of California-Irvine, Assistant Professor of Computer and Information Science
- Malik, Hafiz, PhD, University of Illinois At Chicago, Assistant Professor of Electrical and Computer Engineering
- Mallick, Pankaj K., PhD, Illinois Institute of Technology, Professor of Mechanical Engineering
- Maxim, Bruce, PhD, University of Michigan, Associate Professor of Computer and Information Science
- Medjahed, Brahim, PhD Virginia Tech, Assistant Professor of Computer and Information Science
- Mei, Carole, PhD, University of Auckland, Associate Professor of Mechanical Engineering
- Mi, Chunting Chris, PhD, University of Toronto, Professor of Electrical and Computer Engineering
- Miller, John, PhD, University of Toledo, Associate Professor of Electrical and Computer Engineering
- Mohanty, Pravansu, PhD, McGill University, Professor of Mechanical Engineering
- Murphey, Yi Lu, PhD, University of Michigan, Professor of Electrical and Computer Engineering
- Natarajan, Narasimhamurthi, PhD, University of California, Berkeley, Associate Professor of Electrical and Computer Engineering
- Orady, Elsayed A., PhD, McMaster University, Professor of Industrial and Manufacturing Systems Engineering
- Ostrom, Terry, PhD, University of Michigan, Lecturer of Mechanical Engineering
- Ratts, Eric, PhD, Massachusetts Institute of Technology, Associate Professor of Mechanical Engineering
- Reyes-Villanueva, German, PhD, University of Liverpool, Associate Professor of Mechanical Engineering
- Richardson, Paul C., PhD, Oakland University, Professor of Electrical and Computer Engineering
- Sengupta, Subrata, PhD, Case Western Reserve University, Professor of Mechanical Engineering
- Shaout, Adnan, PhD, Syracuse University, Professor of Electrical and Computer Engineering
- Shen, Jie, PhD, University of Saskatchewan, Assistant Professor of Computer and Information Science
- Shim, Taehyun, PhD, University of California-Davis, Professor of Mechanical Engineering
- Shridhar, Malayappan, PhD, University of Aston, Professor of Electrical and Computer Engineering
- Song, Yuqing, PhD, SUNY Buffalo, Assistant Professor of Computer and Information Science

- Soto, Ciro, PhD, Michigan State University, Lecturer of Electrical and Computer Engineering
- Steffka, Mark, MS, Indiana Wesleyan University, Lecturer of Electrical and Computer Engineering
- Su, Wencong, PhD, North Carolina State University, Assistant Professor of Electrical and Computer Engineering
- Talty, Timothy J., PhD, University of Toledo, Lecturer of Electrical and Computer Engineering
- Tolkacz, Joseph, MS, University of Michigan, Lecturer of Electrical and Computer Engineering
- Tsui, Louis, PhD, University of Michigan, Associate Professor of Computer and Information Science
- Ulgen, Onur, PhD, Texas Technological University, Professor of Industrial and Manufacturing Systems Engineering
- Varde, Keshav S., PhD, University of Rochester, Professor of Mechanical Engineering
- Wang, Shengquan, PhD, Texas A & M University, Assistant Professor of Computer and Information Science
- Watta, Paul, PhD, Wayne State University, Associate Professor of Electrical and Computer Engineering
- Xi, Zhimin, PhD, University of Maryland, Assistant Professor of Industrial and Manufacturing Systems Engineering
- Xiang, Weidong, PhD, Tsinghua University, Associate Professor of Electrical and Computer Engineering
- Xu, Zhiwei, PhD, Florida Atlantic University, Assistant Professor of Computer and Information Science
- Yi, Yasha, PhD, Massachusetts Institute of Technology, Associate Professor of Electrical and Computer Engineering
- Yoon, David, PhD, Wayne State University, Associate Professor of Computer and Information Science
- Zakarian, Armen, PhD, University of Iowa, Professor of Industrial and Manufacturing Systems Engineering
- Zeng, Kai, PhD, Worcester Polytechnic Institute, Assistant Professor of Computer and Information Science
- Zhang, Yi, PhD, University of Illinois at Chicago, Professor of Mechanical Engineering
- Zhao, Dongming, PhD, Rutgers University, Professor of Electrical and Computer Engineering
- Zhu, Qiang, PhD, University of Waterloo, Associate Professor of Computer and Information Science
- Zikanov, Oleg, PhD, Moscow State University, Professor of Mechanical Engineering

Engineering: The Profession

Engineers are the link between scientific knowledge and practical applications. Engineers combine various roles and functions in their job. What are engineers?

- Engineers are science-knowledgeable men and women who use mathematics, chemistry, and physics for an applied purpose.
- Engineers invent, design, or improve products that people want to buy or use.
- Engineers are business people who design, manufacture, or sell a technical product or service to customers, taking into consideration safety, cost, quality, reliability, societal impact, and ease of use.
- Engineers are planners and integrators who bring together skills and knowledge from many disciplines and fields for some technical purpose or application.
- Engineers are creative problem-solvers and doers: they make decisions and get things done in a combined science/technical/ business/applied profession.

- Engineers analyze problems, develop design solutions, and pay close attention to detail.
- Engineers interact with a variety of people, including clients, scientists, other engineers, technicians, managers, and government officials.
- Engineers are interested in how and why things work and like practical challenges.
- Successful engineers are known for their analytical, imaginative, and creative skills, for using common sense, for being team players, for being able to pick up new knowledge and skills quickly, and for their commitment to continue to improve and learn.

The College of Engineering and Computer Science offers undergraduate degrees in nine fields: Bioengineering, Computer Engineering, Computer and Information Science, Digital Forensics, Electrical Engineering, Industrial and Systems Engineering, Manufacturing Engineering, Mechanical Engineering, and Software Engineering.

Computer Science: The Profession

Computer and information scientists offer expertise in the effective and efficient use of computers for tackling a broad spectrum of practical challenges, usually in a team environment. Computer and information science includes the following subspecialties: operating systems, compilers, computer graphics, computer game design, computer networks and network administration, security, enterprise computing technologies, information and database systems and database administration, information retrieval, artificial intelligence and machine learning, robotics, theoretical computer science, programming languages, software engineering and web technologies. Software engineering is the area within computer science that is concerned with the theoretical and practical aspects of the detailed design, building, testing, modification, optimization, and maintenance of large, high quality, software systems for a wide range of applications across society. Software engineers analyze users' needs and work as part of a core team to design, create, and implement high quality and cost effective new software, computer applications, and utility programs. A core team may be composed of software engineering, manufacturing, design, management, and marketing people who work together until the software product is released and implemented. Digital Forensics is the area of computer science concerned with the examination and analysis of computer hard drives, storage devices, cell phones, PDAs or any electronic device that may hold evidence that could be used in a court of law. The digital forensics analyst uncovers and preserves data for later use as legal evidence, and analyzes the data in light of a particular crime or criminal or civil investigation.

The College of Engineering and Computer Science offers undergraduate degrees in three computer science fields: Computer and Information Science, Digital Forensics, and Software Engineering.

Career Choice

What can help students to decide to pursue a career in engineering or computer science? Some of the clues are an interest in and successful completion of science, mathematics, and computer science courses; a desire and ability to investigate the "why" as well as the "how" of things; and an interest in the

creative development of devices or systems that meet specific needs. Not all of these signs or interests will fit everyone, but they can be used as a guide.

The College of Engineering and Computer Science's Student Records and Advising Office has online information about careers in engineering and computer science and a number of links to very informative external web sites at: engin.umd.umich.edu/SRA/links.php

Individuals with interests in using science and mathematics to benefit others will find that engineering and computer science professions offer a wide variety of career and employment choices and opportunities.

Admissions counselors at UM-Dearborn and academic advisors of the College of Engineering and Computer Science are glad to talk with students about career choices or choosing the school that best suits their interest and abilities. Prospective students are welcome to contact the College of Engineering and Computer Science by phone or personal visit and to read the information on the College's Web page: engin.umd.umich.edu.

Educational Goals and Programs

The mission of the College of Engineering and Computer Science is to be the leader in providing quality undergraduate and graduate programs in an environment integrated with engineering practice, research, and continuing professional education, in close partnership with the industrial community.

The College of Engineering and Computer Science's (CECS) educational objective is to prepare its students to take positions of leadership commensurate with their interests and abilities in a world where science, engineering, and human relations are of basic importance.

Programs of study integrate fundamental mathematical and scientific theory with experiments, advanced analysis, and design practice to produce the coherent educational preparation required of professional engineers and computer scientists.

Both the CECS academic curriculum and co-operative placements are planned to prepare students to become practicing engineers or computer scientists, administrators, or investigators. The knowledge, skills, and discipline gained from the CECS degree programs are broad and fundamental and also constitute excellent preparation for other careers, such as law and medicine.

Undergraduate Requirements

The College of Engineering and Computer Science (CECS) offers undergraduate programs leading to the Bachelor of Science in Engineering (BSE) degree in the following fields: bioengineering, computer engineering, electrical engineering, industrial and systems engineering, manufacturing engineering, and mechanical engineering. (Students in these BSE programs may also choose to earn a concurrent second degree in engineering mathematics.) The College also offers an undergraduate degree program leading to a Bachelor of Science (BS) in the following fields: Computer and Information Science (CIS), Digital Forensics, and Software Engineering. The CIS program has two concentrations: computer science and information systems. (Students in these BS programs may also choose to earn a concurrent second degree in CIS mathematics.)

The minimum credit-hour requirement for the degree programs in engineering is 125 to 128 semester credits, depending on the

specific major. Participation in the engineering and computer science Cooperative Education Program requires an additional minimum of six hours of co-op courses. The BS in Software Engineering, Digital Forensics, or in Computer and Information Science requires a minimum of 120 to 123 semester credits of course work, depending on the specific major.

The first two years can be considered pre-professional study covering foundation subjects, and the last two years are the specialized, professional phase of the degree program.

The scholastic requirements for graduation are given under "Requirements for Graduation" section of this *Catalog*. For the detailed requirements specified by the College of Engineering and Computer Science for each of its undergraduate programs, see the sections for each program below.

Students have the option of earning a minor in addition to their major. CECS offers a minor in Computer and Information Science. The College of Arts, Sciences, and Letters and the College of Business offer various minors of interest to CECS students. See the relevant sections of this *Catalog*.

The CECS Student Records and Advising (SRA) Office, 2000 Heinz Prechter Engineering Complex (HPEC), (313) 593-5510, uginfo@engin.umd.umich.edu is the primary contact for undergraduate students for academic advising and for information about all undergraduate degree programs of the College of Engineering and Computer Science.

More information about CECS and its programs is available through the College's home page; engin.umd.umich.edu.

Admission to the College of Engineering and Computer Science

Admission requirements for entering as a freshman or a transfer student are described under the Admission Requirements, General Information section of this *Catalog*.

Admission to the College of Engineering and Computer Science (CECS) follows the traditional selective admission standards of the University of Michigan-Dearborn. Students are admitted from high schools directly to the CECS as freshmen or as transfer students from other colleges or universities.

A student admitted to the University of Michigan-Dearborn is expected to elect all courses at the UM-Dearborn. Only under exceptional circumstances is approval granted to elect a course outside the UM-Dearborn. See the On-Campus Courses rule, under Important Academic Policies.

Admission as a Transfer Student

The University of Michigan-Dearborn admits students as transfers who have completed course work at a community college or at another four-year school.

Transfer students can enter at or before the sophomore/junior level, and their preparatory work should have included foundation subjects in the areas of mathematics, science, and pre-engineering or computer science in order to begin their professional course work. Generally, the mathematics, science, or pre-engineering/pre-computer science programs of other engineering schools, of community colleges, and of liberal arts programs provide an appropriate preparation for admission to the College of Engineering and Computer Science.

Transfer guides for students interested in transferring into CECS from nearby colleges are available online: engin.umd.umich.edu/SRA/prospective.php

Advisors at UM-Dearborn are available to assist prospective students by recommending a specific program of courses at a two-year institution to be taken prior to transfer.

Transfer of Credits

An appraisal of the previous record of a student transferring to the University of Michigan-Dearborn is made at the time of admission to determine the number of credits that apply toward the degree program specified by the applicant. In general, credit will be given for courses taken at accredited institutions in which the student earned at least a C grade and provided that the courses can appropriately be applied as meeting requirements of the student's chosen degree program. Credit is not transferable for courses in which grades less than C or equivalent was earned in another institution. Irrespective of the number of credits the student has previously earned, a student must complete at least 30 credits of upper-level course work in their major at the University of Michigan-Dearborn in order to qualify for a University of Michigan-Dearborn degree.

CECS Student Records and Advising (SRA) Office

The College of Engineering and Computer Science (CECS) Student Records and Advising (SRA) Office is the primary contact for undergraduate students for academic advising and for information about all undergraduate CECS programs. The SRA Office provides the following services to CECS undergraduate students:

- academic orientation of freshmen and transfer students
- academic advising of new and continuing students
- evaluation of transfer credits, admission of cross-campus transfer applicants
- coordination of registration, drops, adds, and total withdrawals
- handling of petitions and individual requests
- degree audits of students' credits toward graduation
- placement and release of academic holds
- handling of academic (probationary) actions and petitions
- readmission of previously enrolled students
- final certification of degree completion.

The SRA Office is located in room 2000 of the Heinz Prechter Engineering Complex (HPEC) (phone: (313) 593-5510, FAX: (313) 593-9967). The *Undergraduate Student Handbook*, issued by SRA, is available on-line at the state of th

 $engin.umd.umich.edu/SRA/pdf/Student_Handbook.pdf$

Important Academic Policies

The front section of this UM-Dearborn *Undergraduate Catalog* and the campus' Registration and Records web page, umd.umich.edu/policies_umd/ provide information about university policies.

Listed below are some important policies affecting College of Engineering and Computer Science students. The CECS Undergraduate Student Handbook also has important information: engin.umd.umich.edu/SRA/pdf/Student_Handbook.pdf

The English Composition Placement Exam is required of all students upon entering UM-Dearborn.

The Mathematics Placement Exam is required of all freshmen before they register for a mathematics course. All transfer students expecting to take pre-calculus or calculus I are also required to take the mathematics placement exam.

CECS students must take and pass the mathematics course into which they place. CECS students who register for a mathematics course other than the course into which they placed will be disenrolled from that course.

The Office of Admissions and Orientation (313) 593-5100 schedules placement exams.

Prerequisite courses and co-requisite courses: A student needs to have the proper prerequisites to enroll in a course and cannot enroll in a course when one or more of its prerequisites need to be repeated because of probation. This is monitored by the College.

Grades: All courses required for CECS students must be taken for a grade. Grades count as part of a CECS student's grade point average (GPA), except for the grades in 'additive credit' courses (EDF courses, or courses numbered 001 to 099).

Pass/Fail courses: CECS students cannot take required courses on an audit or Pass/Fail basis. Any course audited or taken Pass/Fail will not count towards the degree, even as a general elective. Pass/Fail or non-credit courses may be taken only for non-degree credit.

Non-Credit Courses: Students cannot use non-credit courses towards their degree. A list of non-credit courses is found in the CECS Undergraduate Student Handbook available online: engin.umd.umich.edu/SRA/pdf/Student_Handbook.pdf.

The D- Repeat Rule: Any course in which a CECS student earns the grade of *D*- does not carry degree credit. Any course in which a CECS student receives a *D*- must be repeated and must be passed with a higher grade in order for the course to count toward a CECS degree. This rule applies to all CECS students.

The On-Probation Repeat Rule: It is a CECS *degree* requirement that if a student's overall cumulative GPA, CECS cumulative GPA, or both, drops below 2.0, any required courses with grades of *C*- or below taken during that semester must be repeated.

A student on academic probation who earns a grade of *C*- or below in a course that is a prerequisite course for another course, cannot elect the course without first repeating the prerequisite course. A student who elects a course without the proper prerequisites, or who needs to repeat the prerequisite because of probation, will be disenrolled from the course.

On-Campus Courses Rule: The CECS degree programs are designed to prepare professional engineers and computer scientists, to meet accreditation criteria, and to uphold the University's exacting educational standards. To ensure the integrity of its programs, the University has determined that once a student is admitted to UM-Dearborn, permission to take courses at another institution will very rarely be granted.

Course Registration

CHANGES IN COURSE ELECTIONS: ADD, DROP, WITHDRAWAL

Please refer to the General Information section of this *Catalog* and the CECS Undergraduate Student Handbook available at engin.umd.umich.edu/SRA/pdf/Student_Handbook.pdf for further information on changes in course elections.

CECS has a policy of required advising for undergraduate students. CECS students meet with their assigned advisor each term prior to registering for classes for the following semester. Upon completion of 44 credit hours, students are assigned a faculty member as their advisor.

ADDING COURSES

Courses that extend over the full term must be elected during the two-week period beginning on the opening day of classes for the term. For seven-week half terms, or other scheduled terms shorter than a normal full term, course elections must be made during the first week of classes.

Revising a course election from for-credit to audit (or vice versa), election of the Pass/Fail Option, or changes from Pass/Fail to graded, must occur within the time periods stated for "Adding New Courses."

DROPPING COURSES

Students may drop courses that extend over the full term without academic penalty during the nine-week period beginning on the first day of classes of the term. For seven-week terms, or other scheduled terms shorter than a normal full term, this period will be four weeks. A final grade of *E* will be recorded for an unofficially dropped course.

In the event of extraordinary circumstances realized subsequent to the stated four- or nine-week periods, a student may petition to drop a course after the regular drop deadline. Late drop petitions, like other petitions, are handled by the CECS Student Records and Advising Office (2000 HPEC). A late drop petition will be considered only for important medical or other compelling reasons and not merely because a student is doing poorly in a course.

Students must contact an SRA advisor in person to discuss a late drop petition since supporting documentation is always required. Students continue to be registered for a course, and should continue to attend it and do all the assignments, unless and until their late drop petition is approved by the CECS Student Records and Advising Office.

TOTALLY WITHDRAWING FROM THE TERM

Total Withdrawal: Students may withdraw from all their courses for a given semester up to the last day of classes (NOT the last day of exams). CECS students who are totally withdrawing (from all classes) always need the signature of a CECS SRA advisor (Room 2000 HPEC).

Incomplete Coursework (*I*) or **Absence from Final Examinations** (X)

A CECS student whose term course work (other than the final examination) is incomplete in a minor way may, upon timely completion and approval of the *I* Contract Form, be granted the privilege of completing the course work within a five-week period, beginning on the first day of classes of the immediately following term. If granted this privilege, a mark of *I* will be recorded on the transcript.

A student who is unavoidably absent from a final examination may, by approval from the course instructor, be granted the privilege of making up the examination within a five-week period, beginning on the first day of classes of the immediately following term. If granted this privilege, a mark of *X* will be recorded (on the transcript).

Failure to complete the required work, or to make up the final examination, within the specified time, or the denial of this privilege for an I or an X by the instructor, will result in a grade of E for the final grade.

The I Contract form is obtainable from the CECS Records and Advising Office, 2000 HPEC. The *I* or *X* will remain on the transcript even after the official final letter grade is assigned.

In extenuating circumstances an extension beyond the stated period may be requested by means of a petition submitted to the CECS Records and Advising Office (2000 HPEC), which must also be approved by the instructor. However, such arrangements for completing the work must be made within the above mentioned five-week period.

Failure to complete the required work or examination within the specified time will result in a mark of *I* or *X* being automatically converted to a permanent *IE* or *XE* in the transcript, which will count as an *E* in the student's grade point average.

Grading System

The following (4.0) grading system is used by the CECS:

Letter Grade	Honor Points	Letter Grade	Honor Points
A+	4.0	C	2.0
\boldsymbol{A}	4.0	C-	1.7
A-	3.7	D+	1.4
B+	3.4	D	1.0
B	3.0	D-	0.7
B-	2.7	E	0.0
C+	2.4	UE	0.0

The honor points earned in a course are calculated by multiplying the honor points assigned for the grade by the credit hours for the course; e.g., an *A* grade in a three credit hour course yields 12 honor points. The semester grade point average is calculated by dividing the total honor points earned in a semester by the credit hours elected in that semester. The overall cumulative grade point average is obtained in the same manner with all courses elected at UM-Dearborn included in the calculation.

If any courses were repeated in the Fall 2005 or subsequent semesters, the most recent grade will be used in computing the grade point average, and a maximum of two previous grades in the same course will be excluded from calculation of the grade point average. A given course may be taken a maximum of three times

Courses in which a mark of S, P, Y, F, or NC is received are not included in grade point average calculations.

A CECS student with a class rank of junior or senior and who is in good scholastic standing may, with the approval of the College, elect a non-CECS course that is not a part of the degree requirements, nor a prerequisite to any required course using the Pass/Fail Option.

Selected courses may be offered by the CECS on a grading basis of awarding *S* for satisfactory work, *E* for failing work, and *NC* for no credit. Any course assigned an *S* mark or an *NC* mark will not count towards degree requirements, nor will an *S* or an *NC* mark enter into the computation of a student's grade point average. Only CIS co-op courses with an assigned *S* mark may count toward degree requirements. A grade of *E* will be treated as a conventional *E* on all records.

Class Standing

The number of credit hours accumulated at the close of a given term determines a student's class standing.

Underclassm	ien	Upperclas	ssmen
Freshman	0 to 24	Junior	55 to 84
Sophomore	25 to 54	Senior	85 or more

Scholastic Standing

In order to attain a BSE or BS degree, a student must achieve a final overall average of 2.0 or higher for all University of Michigan – Dearborn courses taken while enrolled in the CECS. In addition, the student must obtain a grade point average of 2.0 or more for all elected CECS courses.

GOOD SCHOLASTIC STANDING

To be in good scholastic standing at the end of any term, a student must have an overall average of 2.0 or higher for all UM-Dearborn courses elected. Additionally, a student must have a 2.0 or above grade point average for all CECS courses elected.

GRADES LESS THAN C(2.0)

While a grade of C-, D+, or D is passing, it is not considered satisfactory scholastic performance. Any deficiency of grade points (below 2.0) in either the overall grade point average (GPA) or the CECS cumulative grade point average (CECS GPA) resulting from one or more C-, D+, D, or D- grades must be made up while enrolled in this College. C-, D+, D, or D- grades are used in computing the student's GPA or CECS GPA or both.

A student must repeat, as early as possible, any required courses in which a C-, D+, D, or D- grade is received in a given term if either the overall GPA or CECS GPA falls below 2.0 at the end of that term. Moreover, if a student on academic probation earns a C-, D+, D, or D- grade in a prerequisite for another course,

such a course cannot be elected without first repeating the prerequisite course. A waiver of this requirement may be obtained only by means of a petition approved by the CECS.

Any course in which a student received *D*- must be repeated, even if the course was taken when the student's overall cumulative GPA, and/or GPA in CECS courses, was above 2.0.

Neither credit nor grade points are allowed for a course in which a student received an E grade. Any deficiency of grade points (below 2.0 average) resulting from one or more E grades must be made up while enrolled in this College before the student is restored to good standing. A required course in which a grade of E has been assigned must be repeated on this campus during the student's next academic term.

CONTINUED ENROLLMENT IN THE COOPERATIVE EDUCATION PROGRAM

Although students on probation are normally allowed to continue their academic enrollment, they should consult immediately with the cooperative education program coordinator to review their status in the cooperative education phase of their program. Students will certainly jeopardize their ability to participate in this program if, during any term, their grade point average falls below 2.0. In the event that a student is placed on probation, the CECS reserves the right to require that the student spend another term in class and not participate in a work assignment for that term.

UNSATISFACTORY PERFORMANCE

The records of CECS students are reviewed at the end of each term by the Academic Standing Committee. Three degrees of scholastic deficiency are used by the Committee to identify a student's unsatisfactory performance resulting from C-, D+, D-, and E grades: warning, on probation, or required to withdraw.

In cases where the grade average for one term falls below 2.0 while the overall average remains above 2.0, the student normally will receive a warning letter from the Committee.

Probationary status (academic probation) is normally assigned to students who are not in good scholastic standing but whose records indicate a possibility for removal of deficiencies by continued enrollment. CECS students on academic probation are restricted to registering for no more than 13 credits per semester.

Students whose academic record is poor for two or three successive semesters are subject to being required to withdraw from the College. Students who have been required to withdraw may submit a formal written appeal to be readmitted at a later time, but must, in all cases, have had at least one semester of non-enrollment in CECS for their appeal to be accepted for consideration.

ACADEMIC STANDING APPEAL PROCEDURE

Students who wish to appeal a decision by the Academic Standing Committee requiring them to withdraw may do so by addressing a petition to the Executive Committee (the chief policy body) of the CECS. In all cases, the Executive Committee requires a one-term non-enrollment period, to allow students who have been required to withdraw time to reflect upon their situation, to consider alternatives, and to make plans. If a negative decision is rendered at this high level, the student may, under unusual circumstances, appeal the case to the Appeals Board of the UM-Dearborn.

Requirements for Graduation

In order to secure a degree of BSE or BS from the College of Engineering and Computer Science, UM-Dearborn, a student must meet the following requirements:

- 1. Must have been admitted to a degree program in the CECS.
- Must satisfactorily complete the specified number of elective and required courses of the specific degree program.
- 3. Must attain a grade point average of *C* (2.0) or better for all courses completed at UM-Dearborn.
- 4. Must achieve a minimum grade average of *C* (2.0) for all CECS courses completed at UM-Dearborn.
- Must have completed at least 30 credit hours of upper-level CECS course work at UM-Dearborn of the degree program in which enrolled.
- Must be enrolled for credit in the CECS during the term in which the requirements for the degree are completed.
- Must have taken the English Composition Placement Exam and passed the appropriate composition course, as indicated by the results.
- Must have repeated all courses that needed to be repeated, in accordance with the policies stated above.
- Must have submitted a diploma application online through UM-Dearborn Connect by the third week of the beginning of the term in which the student expects to graduate.

In order to obtain a BSE in an engineering major and a concurrent BSE degree in Engineering Mathematics, or a BS degree in CIS, digital forensics, or software engineering and a concurrent degree in CIS Mathematics, the student must complete the specified minimum credit hours of additional and separate courses in advanced mathematics from the choices listed in the Engineering Mathematics degree program or the CIS Mathematics degree program, respectively.

College of Engineering and Computer Science Academic Code of Conduct

The Academic Code of Conduct (ACC) of the College of Engineering and Computer Science is based on the premise that all students in the College will perform honestly and ethically in all graded tests, projects, and assignments. The Code of Conduct prohibits students from tampering with grades, submitting false grades, and changing academic records, as well as cheating, plagiarism, and other forms of academic dishonesty.

Sanctions for violation of the Academic Code of Conduct may include one or more of the following: a letter of reprimand, reduction in course grade, failure in the course(s), entry of action on the student's transcript, suspension, expulsion, and recession of a degree.

CECS students are subject to the provisions of the code in all courses. Students from other academic units are also bound by the CECS Academic Code of Conduct in any engineering or CIS courses they may elect.

Students who have questions about how the Code applies in a particular CECS course should contact the course instructor. For any general questions or concerns about Academic Code of Conduct, students should contact a member of the CECS Academic Disciplinary Committee (ADC).

Familiarization with the code is the responsibility of every student enrolled in courses offered by the CECS. The Academic Code of Conduct Booklet is available from the CECS Student Records and Advising Office, 2000 HPEC, and is also online: engin.umd.umich.edu/cur students/codeofconduct.php

PHILOSOPHY OF THE CODE

The Academic Code of Conduct is a philosophy of life based on the cardinal principle that it is dishonorable to receive credit for work that is not the result of the individual's efforts. This is a principle of the engineering and computer science professions and is a continuing tradition of the engineering students at the University of Michigan. To be trusted as a person and to have one's word of honor associated with each professional undertaking will increase self-respect. A student's diploma will then not only be a certificate of tasks accomplished, it will also stand as evidence of achievement of character.

See also under Student Rights and Responsibilities in the General Information section of this Catalog.

Distribution Requirements

BACHELOR OF SCIENCE IN ENGINEERING DEGREE PROGRAMS

Basic Requirements for Students Enrolled in the CECS

Courses required of Bachelor of Science in Engineering (BSE) students entering UM-Dearborn as of Fall 2009:

English Composition	. 6	hrs
COMP 105* and 270		

* English composition is required for all entering students. Students are exempt from COMP 105 if they place out of it by the UM-Dearborn Composition Placement Examination. Students placing out of COMP 105 will neither register for nor attend COMP 105. The Director of the Writing Program will send the names of these students to the Registrar's Office. In the case of CECS students alone, three hours of credit by placement exam for COMP 105 will be recorded on their transcripts. Such credit by placement for COMP 105 applies only to CECS students following a CECS degree. (Students who were originally in CECS and who transfer to another academic unit do not receive credit for placing out of COMP 105.)

Humanities, and Behavioral Science

Two Courses in the Same Academic Discipline, at Least One of Which Must Be at 200 Level or Higher *

Two of the courses (6 of the 12 credits) must be taken in the same academic discipline within either the humanities area or the behavioral/social sciences area above and at least one of these two courses must be at 200 level or higher..

* Non-Credit Courses: students cannot use non-credit courses towards their degree. A list of non-credit courses is found in the CECS Undergraduate Student Handbook available online: engin.umd.umich.edu/SRA/pdf/Student Handbook.pdf

Mathematics (MATH 115, 116, 205, 216, 217 [or 227])16 credits

COOPERATIVE EDUCATION

The Engineering Cooperative Education Program (also known as an internship program) is a coordinated integration of classroom work and practical experience in business, industry, and government. The student alternates terms of attendance (co-op program does provide some flexibility, if needed) in class with four-month periods of employment with a cooperating organization, at the employer's location, while supervised by representatives of both the University and the employer. The work experience is considered an integral part of the educational process, and both the College and the participating employer share responsibility for this integration.

The Computer Information Science Cooperative Education program, like that of Engineering, is an optional program for students who desire practical work experience related to a student's academic background or individual career interest. Coop students may be hired under any of three options: 1) alternating full-time, 2) parallel part-time, 3) summer only. Students are encouraged to complete a minimum of two work semesters with a participating employer.

OBJECTIVES, ADVANTAGES, AND REMUNERATION

Emphasis is placed on the educational and training value of work assignments. The student's earnings, though substantial, must be considered only as an attractive by-product of the cooperative educational processes. As a result, convenience of location or transportation and personal preferences of the student must yield to educational advantages if these advantages cannot be otherwise achieved.

Numerous firms located in Michigan and out-of-state afford a wide range of experiences in all major areas in which students may have career aspirations. Cooperative education experience in professional assignments permits a practical test of vocational interest, the application of classroom knowledge to practical problems, a first-hand exposure to labor-management relationships, the development of responsible work habits, and the prospects of full-time employment upon graduation.

Work assignments, salaries, and employee benefits provide students with the prospect of substantial self-support during their enrollment as UM-Dearborn students.

STUDENT COUNSELING AND PLACEMENT

The cooperative education coordinator of the College counsels each co-op student with respect to career interests and aptitudes, and arranges interviews with appropriate cooperating employers. These interviews furnish the opportunity for a professional work assignment that is agreeable to the student and to the employer.

EVALUATION AND RECOGNITION OF ACHIEVEMENT

Each student is formally evaluated by the employer, and also must prepare and submit a detailed, well-written work report to the director at the end of each work assignment period. At the conclusion of each work assignment period, a grade determined mainly from the employer's evaluation and the student's report will be assigned by the director and recorded on the student's transcript. The grade assigned and recorded for each work assignment period will be either *S* for satisfactory or *NC* (no credit) for unsatisfactory.

Computer Information Science students are awarded academic credit by faculty on the basis of learning achievement and requirements met. CIS students may earn a maximum of nine credits toward their degree programs by completing the equivalent of three full-time (40 hr/wk) work terms for three credits each.

The cooperative education degree option requires a minimum of two work assignments and the possibility of an optional third term of professional employment in the program during the junior and senior years. Successful participation in the required professional work assignment periods is recognized by satisfactory cooperative education performance concurrent with the baccalaureate degree (Not applicable to CIS students). Additionally, the awarding of this certificate is recorded on the student's academic transcript upon graduation. Eligibility for receiving the satisfactory cooperative education performance certificate will be determined by the engineering cooperative education director based upon the reports submitted on and by the student over the several periods of work assignments.

PARTICIPATION IN THE COOPERATIVE EDUCATION PROGRAM

Students in the cooperative education option offered by the College of Engineering and Computer Science shall participate in four-month work periods alternating with their classroom terms. Students admitted to the CIS co-op program must fulfill the study-term requirements of the alternate, parallel, or summer only plans. Details on the study-term requirements are available through the co-op office. These alternating work periods may not be waived except as follows: 1) where academic achievement in any term is so poor as to minimize the possibility of the student successfully pursuing the academic program to the end; in such cases, the student will immediately be required to repeat a regular classroom term or be caused to withdraw from the College of Engineering and Computer

Science; 2) where such illness or disability exists that, in the opinion of the employer or suitable medical counselor, industrial assignment would not be in the best interests of the employer and/or the student during a particular term.

Both the cooperating employers and the University expect that students participating in the cooperative education program will be able to demonstrate a considerable increase in academic knowledge after each term of classroom study. Therefore, participants in the CECS Cooperative Education Program must be full-time students during their alternated class terms; that is, must satisfactorily complete at least 12 credit hours of their degree program course work during each scheduled class term.

ADMISSION TO THE COOPERATIVE EDUCATION PROGRAM

The first and most important step toward admission to the CECS Cooperative Education Program is current enrollment as an undergraduate student in good academic standing in a CECS degree program. Since the first co-op work period is always scheduled within the junior academic year, sophomores enrolled in the CECS will be accepted into the CECS Cooperative Education Program for participation in career counseling and placement interviewing activities during the second term of their sophomore year. Transfer students admitted to the CECS at the junior year level may be accepted into the Cooperative Education Program after completing one semester as a full-time student (12 credits). In all but the most unusual circumstances, all students must apply for admission to the internship program not later than during the registration week of the class term preceding their intended first work assignment period or as advertised by the CECS Cooperative Education Director.

An application for acceptance into the CECS Cooperative Education Program may be submitted later than the first term of the junior year but will not be approved when the class level of the student is such that there will not be sufficient time prior to graduation to participate in the program for at least two-co-op periods alternated with the usual terms of class.

The basic entrance-level requirement of the CECS Cooperative Education Program, applying to all students, is satisfactory completion of the sophomore year, with a recommended GPA of at least 2.30. Student admitted to the CIS program must have completed 30 semester hours (sophomore status) and have a minimum cumulative GPA of 2.25. Transfer students must have completed 12 UM-Dearborn credit hours. The courses of this basic requirement include the calculus sequence, differential equations, linear algebra, college chemistry, the engineering physics sequence, and introductory courses in engineering that include computer-aided tools for design and analysis.

In addition to the basic entrance-level requirement there also are specific courses that must be satisfactorily completed before beginning the first co-op work period. These specific courses, which differ according to the degree programs, are all courses normally scheduled in the sophomore year under CECS's basic freshman-sophomore curriculum (the equivalent course at another college may be acceptable for a transfer student).

For the mechanical engineering co-op student, the specific required courses that must be satisfactorily completed are computer methods in mechanical engineering and thermodynamics or applied mechanics.

The specific courses required for the industrial and manufacturing systems engineering co-op student are computer programming for engineers and manufacturing processes. Thermodynamics and applied mechanics are optional courses.

For the electrical engineering co-op student, the specific required courses for those enrolled at UM-Dearborn during their sophomore year are digital systems in electrical engineering and the first courses in circuits.

The purpose of these course requirements is to prepare the co-op student academically for professional work assignments where there will be continual association with practicing engineers in their daily work. Through fulfillment of these requirements the co-op student will have sufficient competence to function as a member of an engineering group.

REGISTRATION IN THE COOPERATIVE EDUCATION PROGRAM

Each co-op work assignment extends for one term (four months) and occupies the student full time. From a group of co-op courses available, the co-op student elects a two or three-credit hour course whose content is appropriate to the particular field of engineering and to the level of practice being undertaken that term. Three such registrations are recommended (two are required) for a total of seven credit hours, for satisfactory completion of the Cooperative Education Program. All credit hours earned via co-op courses are added to the academic (classroom) credit hours required in the undergraduate program of studies pursued by the student. Since the co-op work assignment occupies the student full-time, registration in courses other than the co-op course is strongly discouraged. A student on a co-op assignment cannot elect more than one other course besides the co-op course (two courses maximum including the co-op course) during the semester. CIS students can earn up to seven co-op credits toward graduation. CIS students register from a group of co-op courses (CIS 299, 399, 499). The student elects a three-credit hour course whose content is appropriate to the level of practice being undertaken that term. Three such registrations are recommended for satisfactory completion of the Cooperative Education Program.

In some instances students may be involved in a cooperative-type educational program prior to their eligibility for and/or acceptance into the Engineering Cooperative Education Program. Such cooperative-type programming might occur either while enrolled at UM-Dearborn or at another educational institution. However, no regular employment completed prior to formal enrollment in the CECS Cooperative Education Program will be considered as satisfying the requirements of the CECS Cooperative Education Program.

International Study

Student Exchange Programs with the Jönköping School of Engineering in Jönköping, Sweden and the Ulm University of Applied Sciences in Ulm, Germany

The College of Engineering and Computer Science has a formal student exchange program with the Jönköping School of Engineering in Jönköping, Sweden. CECS undergraduates in good standing in any major are eligible to apply. A formal exchange program also exists with Ulm University of Applied Sciences in Germany for Mechanical Engineering coursework.

Students choose the classes they will take during the student exchange semester in consultation with the CECS International Advisor and with their faculty advisor. They register for their exchange classes at UM-Dearborn and pay regular UM-Dearborn tuition. The student exchange classes are listed as UM-Dearborn classes on the UM-Dearborn transcript. Students

register for a full load during their student exchange semester, consisting of three technical courses in engineering or computer science taught in English and a fourth language course.

Prechter International Travel Fellowship

CECS students may be eligible for a travel fellowship to help defray some of the cost of travel associated with approved international studies. The travel fellowships are made possible by a gift from Ms. Waltraud Prechter to the CECS' Institute for Advanced Vehicle Systems.

CECS students should make an appointment with the CECS International Advisor (2000 HPEC) for information about the Jönköping and Ulm programs and the travel fellowship.

Undergraduate Programs

Computer and Information Science

[SEE CIS, UNDER THE COLLEGE OF ENGINEERING AND COMPUTER SCIENCE, ON THE UNIVERSITY HOME PAGE ON THE INTERNET FOR ANY CHANGES AND UPDATES – engin.umd.umich.edu]

Computing professionals offer expertise in the effective and efficient use of computers for solving human problems, whether that be as a member of a project development team, as a builder of powerful and easy-to-use tools, as an individual researcher, or as an educator.

Required courses in the CIS major stress theory and application, as well as the role of other fields such as mathematics, statistics, electrical and computer engineering, business, and software engineering, among others. The curriculum is modeled on the recommendations of the two main professional computing societies, the Association of Computing Machinery (ACM) and the Institute for Electrical and Electronic Engineering (IEEE). Written and oral communications skills are emphasized throughout the program. The use of teamwork on projects is practiced in many courses. Professionalism and ethics are also stressed for future computing professionals. The CIS courses include software engineering, algorithm analysis, networking, security, programming languages, game design, computer architecture, data structures, operating systems, artificial intelligence, database management systems, graphics, information systems, robotics, web development and capstone design courses.

The CIS curricula prepare students to begin careers as computing professionals or to pursue graduate study in the field. The BS in Computer and Information Science program is accredited by the Computing Accreditation Commission of ABET (the Accreditation Board in Engineering and Technology), 111 Market Place, Suite 1050, Baltimore, MD 21202-4012 – telephone (410) 347-7700. A candidate for the degree of BS in CIS is required to select one of two concentrations: Computer Science or Information Systems. A BS in Software Engineering is also offered. Both programs encourage innovation on the part of students, prepare students for graduate education, train students to communicate effectively, and provide students with the tools needed to become leaders in their profession.

The Computer Science concentration emphasizes understanding how computer systems work, as well as their uses as critical components in other disciplines, and prepares its graduates for positions in systems programming, scientific programming, networks, game programming, web technology, graphics and visualization, and enterprise computing among others.

The Information Systems concentration is oriented toward the design and development of computer information systems. It includes more business-related courses than the computer science concentration, and prepares graduates for positions in applications programming, database management, information systems design, and information engineering, among others.

The Software Engineering degree program stresses the range of technical, systematic and managerial aspects of the software development process, but places primary emphasis on the technical facets of designing, building, and modifying large and complex software systems. The BS in Software Engineering program is accredited by the Engineering Accreditation Commission of ABET (the Accreditation Board for Engineering and Technology), 111 Market Place, Suite 1050, Baltimore, MD 21202-4012 – telephone: (410) 347-7700.

The BS in Software Engineering (SE) prepares students to demonstrate expertise in the effective and efficient use of computers to solve problems relating to the disciplined development, instrumentation and maintenance of quality software, whether as members or leaders of product development teams. Software engineers work as project managers, game designers, applications programmers, quality assurance specialists, test engineers, and user interface designers.

CAREER OPPORTUNITIES

A wide variety of employment opportunities is available to computer and information science graduates, as mentioned above. The University's Career Services Office assists students and graduates in planning careers in computer and information science and offers many job listings in the computer industry.

COOPERATIVE EDUCATION/INTERNSHIP PROGRAM

Work experience opportunities are available for qualified computer and information science students through the CECS Cooperative Education Office. These programs allow students to earn a salary and up to nine credit hours which can be applied toward graduation while working full-time during alternate semesters or part-time during regular semester for participating firms or governmental agencies (Acromag, APPLE, Chrysler, DENSO, DTE Energy, Ford, General Electric, Harmon Becker, NASA, Nokia, TACOM, U.S. Steel, Xilinx, etc..).

CIS STUDENT ADVISORY BOARD (CISSAB)

The Department has in place a mechanism for ensuring continuous high-quality input from students at all levels, through a faculty-nominated board of students and alumni.

CIS PROFESSIONAL ADVISORY BOARD (CISPAB)

The Department continually seeks outside interactions with business, industries, and government through its Professional Advisory Board. The PAB is composed of senior computing technologists who provide input on curriculum, potential employment for students, research opportunities for faculty, and a perspective on future challenges requiring collaboration.

COMPUTING FACILITIES

Student software development is done in various campus computing laboratories, having IBM-compatible PC's, UNIX machines, a CRAY supercomputer, and Macintosh computers as well as specialized department computing laboratories. The software available includes state-of-the-art tools for database, video conferencing, software engineering, expert systems, a large number of operating systems (e.g., LINUX, Windows, Macintosh, etc.), programming languages and solid modeling tools. These labs are all staffed by student assistants under the direction of a laboratory manager.

UPSILON PI EPSILON (UPE)

UPE is the national computer science honor society. Membership is available to upper-division students maintaining a 3.0 GPA for all course work. UPE sponsors a variety of educational and social events on campus.

ASSOCIATION FOR COMPUTING MACHINERY (ACM)

The student chapter of the Association for Computing Machinery (ACM) sponsors "chalk talks" to help familiarize students with new computing technologies, guest speakers on computer-related topics, and a variety of social events.

BS in Computer and Information Science (CIS)

The BS degree in Computer and Information Science is accredited by the Computing Accreditation Commission of ABET (the Accreditation Board in Engineering and Technology), 111 Market Place, Suite 1050, Baltimore, MD 21202-4012 – telephone (410) 347-7700.

Program Objectives

- 1. Our graduates will be successfully employed in computer science–related fields or other career paths, including industrial, academic, governmental, and non-governmental organizations, or will be successful graduate students in a program preparing them for such employment.
- Our graduates will lead and participate in culturally diverse teams, becoming global collaborators.
- Our graduates will continue their professional development by obtaining continuing education credits, professional registration or certifications, or post-graduate study credits or degrees.

Computer Science Program Outcomes

- a. An ability to apply knowledge of computing and mathematics appropriate to the discipline;
- An ability to analyze a problem, and identify and define the computing requirements appropriate to its solution;
- An ability to design, implement, and evaluate a computer-based system, process, component, or program to meet desired needs;
- d. An ability to function effectively on teams to accomplish a common goal;
- e. An understanding of professional, ethical, legal, security, and social issues and responsibilities;
- f. An ability to communicate effectively with a range of audiences;
- g. An ability to analyze the local and global impact of computing on individuals, organizations, and society;

- A recognition of the need for, and an ability to engage in, continuing professional development;
- An ability to use current techniques, skills, and tools necessary for computing practices;
- An ability to apply mathematical foundations, algorithmic principles, and computer science theory in the modeling and design of computer-based systems in a way that demonstrates comprehension of the tradeoffs involved in design choices;
- An ability to apply design and development principles in the construction of software systems of varying complexity.

General Requirements

Selections must be from courses numbered 100-200 unless otherwise stated. Campus distribution requirements are included within these general requirements.

Composition 6 hrs COMP 105 and COMP 270
Economics 3 hrs ECON 201 Principles of Macroeconomics
Humanities
Behavioral or Social Sciences

Two 100- to 400-level courses from AAAS (106, 275, 316, 320, 322, 325, 345, 349, 368, 369, 371, 386, 387, 403, 404). ANTH, ECON (202, 300-level only), GEOG (201 or 205: 300-level only), HIST, POL, PSYC, SOC, STS (300, 305, 308, 309, 321, 325, 326, 340, 345, 349, 365, 374, 383, 386, 409, 421, 430, 441, 442, 464), WGST (303, 325, 326, 338, 362, 370, 405, 406, 407, 420, 455, 3955)

One 200-level or higher course, in same discipline as a course already taken in Humanities or Behavioral/Social Sciences.

MATH 115, 116 MATH 217 (Not to be taken by Information Systems Concentrators) or MATH 227 CIS 275, IMSE 317 or MATH 425

BIOL 130 and BIOL 140 OR CHEM 134 and CHEM 136 OR CHEM 144 and CHEM 146 OR GEOL 118 and GEOL 218 OR PHYS 125 and PHYS 126 OR PHYS 150 and PHYS 151

CONCENTRATION REQUIREMENTS **for Computer Science Concentrators**

Four additional science credits from ASTR 130/131, BIOL 130, BIOL 140, CHEM 134, CHEM 136, CHEM 144, CHEM 146, CHEM 225, CHEM 226, CHEM 227, GEOL 118, GEOL 218, PHYS 125, PHYS 126, PHYS 150, PHYS 151

Game Design Track MUST TAKE PHYS 125 or PHYS 150 as

4 of the 12 cre	edits of required lab science, OR as the 3 rd science
Mathematics CIS 306	
	rse
CIS Core	
	er and information science courses are required of
Seven comput	
Seven comput	er and information science courses are required of
Seven comput Computer Scient	er and information science courses are required of ence concentrators:
Seven computer Science CIS 150	er and information science courses are required of ence concentrators: Computer Science I
Seven computer Science CIS 150 CIS 200	er and information science courses are required of ence concentrators: Computer Science I Computer Science II

C13 310	Computer Organization and
	Assembly Language
CIS 350	Data Structures and Algorithm Analysis
CIS 375	Introduction to Software Engineering
CIS 427	Computer Networking and
	Distributed Processing
CIS 450	Operating Systems
CISC required .	

CIS 4951 Design Seminar I CIS 4952 Design Seminar II

CHOOSE ONE TRACK

The track courses, CISC Electives, and General Electives must add up to 28 credits. See further on for specific requirements:

- A) ENGINEERING SYSTEMS
- B) GAME DESIGN
- C) NETWORKING
- D) SYSTEMS FOUNDATIONS
- E) INDIVIDUALIZED COMPUTER SCIENCE

Technical CISC Electives

Technical CIS	C Electives
Zero to 12 cred	lits (depending upon Specialization chosen) from:
CIS 285	Software Engineering Tools 3 hrs
	e following 3 courses may be used:
CIS 294 (3),	CIS 296 (3), or CIS 297 (3)
CIS 376	Software Engineering
CIS 381	Robotics
CIS 387	Digital Forensics I4 hrs
CIS 400	Programming Languages
CIS 405	Algorithm Analysis and Design 3 hrs
CIS 421	Database Management Systems 4 hrs
CIS 423	Decision Support & Expert Systems 3 hrs
CIS 425	Information Systems
CIS 435	Web Technology
CIS 437	Advanced Networking
CIS 447	Computer and Network Security 3 hrs
CIS 451	Computer Graphics
CIS 452	Computer Animation
CIS 467	Digital Forensics II4 hrs
CIS 474	Compiler Design
CIS 476	Software Architecture and
	Design Patterns
CIS 479	Artificial Intelligence
CIS 487	Computer Game Design and
	Implementation I
CIS 488	Computer Game Design and
	Implementation II
CCM 404	Dynamical Systems
CCM 472	Numerical Analysis
CCM 473	Math Modeling
ECE 372	Introduction to Microprocessors 3 hrs
ECE 473	Embedded Systems

General Electives 7-10 hrs

Any for-credit courses; that is, courses not on the No Credit list, which is found at the end of the CECS Student Handbook, engin.umd.umich.edu/Publications/student_handbook.php, and is also posted outside 2000 HPEC. No Credit courses do not count toward the degree. No Credit courses include ECON 305, PSYC 381, SOC 383, and many other courses.

Note: At least six of the 12 credits must be taken outside computer science, mathematics, natural science and engineering courses.

REQUIREMENTS FOR THE CISC TRACKS

CHOOSE ONLY ONE TRACK (The track courses and appropriate electives must add up to 28 credits)

- A) Engineering Systems, B) Game Design, C) Networking,
- D) Systems Foundations, E) Individualized (Computer Science)

A) CISC-ENGINEERING SYSTEMS (Engineering Applications) Track (28 credits)

One of the following three courses:

CIS 294 (3) Visual Basic, OR CIS 296 (3) Java Programming, OR CIS 297 (3) *C#* Programming

CIS 381 (3) Industrial Robotics

CIS 400 (4) Programming Languages

CIS 435 (3) Web Technology

ECE 472 (4) Microprocessors

ECE 473 (4) Embedded Systems

Seven (7) credits of General Electives [At least 6 credits must be outside CIS, mathematics, natural science, and engineering]**

B) CISC - GAME DESIGN Track (28 credits)

CIS 297 (3) C# Programming

CIS 451 (3) Computer Graphics

CIS 452 (3) Computer Animation

CIS 479 (3) Artificial Intelligence

CIS 487 (3) Computer Game Design and Implementation I

CIS 488 (3) Computer Game Design and Implementation II

Ten (10) credits of General Electives [At least 6 credits must be <u>outside</u> CIS, mathematics, natural science, and engineering]**

Note that as part of the 24 credits of required distribution, Game Design students must take the following 15 credits:

Three courses (9 credits) from: JASS 240, 248, 315, 345, 350, 370, 403, 410

Two courses (6 credits) in the Behavioral or Social Sciences, from the choices listed on the previous page

Note that as part of the 12 credits of required science courses, Game Design students must take the following 4 credits:

Either PHYS 125 (4) OR PHYS 150 (4), as part of the 2-course lab science sequence or as the 3rd laboratory science course

C) CISC - NETWORKING Track (28 credits)

One of the following three courses:

CIS 294 (3) Visual Basic, OR CIS 296 (3) Java Programming, OR CIS 297 (3) C# Programming

CIS 400 (3) Programming Languages

CIS 421 (4) Database Systems

CIS 435 (3) Web Technology

CIS 437 (3) Advanced Networking

CIS 447 (3) Computer and Network Security

Eight (8) credits of General Electives [At least 6 credits must be

outside CIS, mathematics, natural science, and
engineering]**

D) CISC-SYSTEMS FOUNDATIONS (Computer Science Foundations) Track (28 credits)

One of the following three courses:

CIS 294 (3) Visual Basic, OR CIS 296 (3) Java Programming, OR CIS 297 (3) *C#* Programming

CIS 400 (4) Programming Languages

CIS 405 (3) Algorithm Analysis and Design

CIS 421 (4) Database Systems

CIS 474 (3) Compiler Design

CIS 479 (3) Artificial Intelligence

Eight (8) credits of General Electives [At least 6 credits must be outside CIS, mathematics, natural science, and engineering]**

E) CISC - INDIVIDUALIZED (Computer Science) Track (28 credits)

One of the following three courses:

CIS 294 (3) Visual Basic, OR CIS 296 (3) Java Programming, OR CIS 297 (3) C# Programming

CIS 400 (4) Programming Languages

Twelve (12) credits of CISC Electives from courses listed under CISC Electives on the previous page

Nine (9) credits of General Electives [At least 6 credits must be outside CIS, mathematics, natural science, and engineering]**

CONCENTRATION REQUIREMENTS

for Information Systems Concentrators

ADDITIONAL PROGRAM REQUIREMENTS

Business and Operations Research 13 hrs
The following four courses

ACC 298 Financial Accounting
OB 354 Behavior in Organization

IMSE 3005 Introduction to Operations Research ENGR 400 Applied Business Techniques for Engineers

Seven computer and information science courses are required of Information Science concentrators:

CIS 150	Computer Science I
CIS 200	Computer Science II
CIS 310	Computer Organization
	and Assembly Language
CIS 350	Data Structures and Algorithm Analysis
CIS 375	Introduction to Software Engineering
CIS 427	Computer Networks and Distributed Process
CIS 450	Operating Systems

CIS Information Systems Required 18 hrs

Six computer and information science courses are required of Information Systems Concentrators

imoimanon sy	stems Concentrators
CIS 294	Visual Basic
OR	
CIS 296	Java Programming
CIS 421	Database Systems
CIS 425	Information Systems
CIS 476	Software Architecture and Design Patterns
CIS 4951	Design Seminar I
CIS 4952	Design Seminar II
Technical CIS	Information Systems Electives 7 hrs
CIS 285	Software Engineering Tools 3 hrs
CIS 297	C# Programming

CIS 306

CIS 376	Software Engineering II	4	hrs
CIS 381	Robotics		
CIS 387	Digital Forensics I	4	hrs
CIS 400	Programming Languages		
CIS 405	Algorithm Analysis and Design	3	hrs
CIS 423	Decision Support & Expert Systems	3	hrs
CIS 435	Web Technology	3	hrs
CIS 437	Advanced Networking	3	hrs
CIS 447	Computer and Network Security		
CIS 451	Computer Graphics		
CIS 452	Computer Animation	3	hrs
CIS 467	Digital Forensics II	4	hrs
CIS 474	Compiler Design		
CIS 479	Artificial Intelligence		
CIS 487	Computer Game Design and		
	Implementation I	3	hrs
CIS 488	Computer Game Design and Implementa	tio	n II
		3	hrs
CCM 404	Dynamical Systems	3	hrs
CCM 472	Numerical Analysis	3	hrs
CCM 473	Math Modeling	3	hrs
ECE 372	Introduction to Microprocessors	3	hrs
ECE 473	Embedded Systems	4	hrs

MINOR IN COMPUTER AND INFORMATION SCIENCE

The minor in CIS requires a minimum of 24 credit hours, which must include CIS 150, CIS 200, CIS 275, CIS 350 and eight additional credit hours at the 300 or 400 level approved by the student's faculty advisor in CIS. An introduction to calculus (MATH 115) is required and does not count toward the 24 hours. Completion of MATH 116 is strongly recommended.

BS in Software Engineering

Software Engineering is the computer discipline that is concerned with the theoretical and practical aspects of building high quality software systems, on time, and within budget. Software engineers are tasked with the detailed analysis, design, implementation, testing, maintenance and management of software product development projects for a broad range of computing applications across society.

The increasing pressure to deliver high-quality, reliable software products in less time is rapidly fueling the demand for computer professionals with specific preparation in software engineering and experience in working on teams. These pressures stem from such widespread development as

- The use of software for demanding and safety-critical applications that make it imperative to avoid the serious, indeed sometimes fatal, consequences of poorly understood design.
- The need to create consumer and entertainment applications like computer games, in the face of a highly competitive global market place.
- The increasing need to develop useful, easy-to-use software tools that reliably meet customer needs and whose features and documentation can be used and

- understood by their intended user with a high degree of consistency and confidence.
- The need to re-engineer or replace aging legacy software systems to take advantage of modern computer hardware capabilities.

Recent advances in the practice and technology of software engineering have made it possible to offer undergraduate and graduate degree programs in software engineering itself. Notable among these advances are:

- The availability of proven computer tools (such as CASE tools) and processes (such as the Personal Software Process) to standardize and automate software development.
- The increasing importance of formal methods and software quality measurement techniques to ensure more thorough testing of software.
- The success of the agile and object-oriented software engineering methods, as well as the move toward technical and managerial practices that cover the full software development cycle.

Software engineers must know the subset of computer science that is relevant to software development. They must also have knowledge of the principles of effective and reliable design, of mathematics and other sciences that are traditionally known by engineers, and of the skills and applications of project management.

Software engineering includes:

- Software design and development; that is, building commercial, industrial-strength software by the application of validated knowledge and experience that have been codified into formal methods of best practices.
- Software process and quality assurance; that is, the systematic discipline of consciously improving the quality, cost and timeliness of the process itself by which large software systems are designed and developed.
- Software development project management; that is, how to manage large software design projects and bring development to a timely and efficient completion.

The software engineering degree program offered by the Department of Computer and Information Science stresses the range of technical, systematic, and managerial aspects of the software engineering process but places primary emphasis on the technical facets of designing, building, and modifying large and complex software systems. This program concentrates on all software development lifecycle phases, including: program management, requirements engineering, software architecture design, software implementation, software configuration management, software quality assurance, and software process maturity measurements and improvements. It balances both theoretical and practical aspects by covering fundamentals in the classroom and evaluating student knowledge by implementing team-based work projects. Students complete a minimum of 120 credits and receive a BS degree in Software Engineering. The degree prepares graduates for immediate employment in the software engineering field and for graduate study.

The BS degree in Software Engineering is accredited by the Engineering Accreditation Commission of ABET (the Accreditation Board for Engineering and Technology), 111 Market Place, Suite 1050, Baltimore, MD 21202-4012 – telephone: (410) 347-7700.

Program Objectives

- Our graduates will be successfully employed in software engineering-related fields or other career paths, including industrial, academic, governmental, and non-governmental organizations, or will be successful graduate students in a program preparing them for such employment.
- 2. Our graduates will lead and participate in culturally diverse teams, becoming global collaborators.
- Our graduates will continue professional development by obtaining continuing education credits, professional registration or certifications, or post-graduate study credits or degrees.

Program Outcomes

- a. An ability to apply knowledge of mathematics, science, and engineering;
- An ability to design and conduct experiments, as well as to analyze and interpret data;
- c. An ability to design a system, component, or process to meet desired needs within realistic constraints, such as economic, environmental, social, political, ethical, health and safety, manufacturability, and sustainability;
- d. An ability to function on multidisciplinary teams;
- e. An ability to identify, formulate, and solve engineering problems;
- f. An understanding of professional and ethical responsibility;
- g. An ability to communicate effectively;
- h. The broad education necessary to understand the impact of engineering solutions in a global, economic, environmental, and societal context;
- A recognition of the need for, and an ability to engage in, life-long learning;
- j. A knowledge of contemporary issues;
- k. An ability to use the techniques, skills, and modern engineering tools necessary for engineering practice.

CO 1

1. An ability to program.

CONCENTRATION REQUIREMENTS

General Requirements	60 hrs
English Composition	
•	acroeconomics
Two 100- to 400-level courses 385, 389, 469, 470). ARTH, C Foreign Language, MHIS, PH	6 hrs from AAAS (239 or 275; 333, COML, COMM, ENGL, JASS, IIL, STS (300, 307, 312, 403, 385, 386, 387, 416, 425, 445,
320, 322, 325, 345, 349, 368, ANTH, ECON (202; 300-level 300-level only), HIST, POL, 308, 309, 321, 325, 326, 340,	s from AAAS (106, 275, 316, 369, 371, 386, 387, 403, 404), el only), GEOG (201 or 205; PSYC, SOC, STS (300, 305, 345, 349, 365, 374, 383, 386,), WGST (303, 325, 326, 338,
Business courses	ss Techniques for Engineers

Mathematics	
MATH 115	Calculus I
MATH 116	Calculus II
CIS 275	Discrete Structures I
CIS 306	Discrete Structures II
MATH 217 OR	Matrix Algebra
MATH 227	Linear Algebra
IMSE 317 OR	Probability and Statistics 3 hrs
MATH 425	Mathematical Statistics II
	nce Sequence
CHEM 134 at OR	nd CHEM 136
CHEM 144 aı OR	nd CHEM 146
GEOL 118 an	d GEOL 218
PHYS 125 an	d PHYS 126
OR PHYS 150 an	d PHYS 151
Natural Science Four credits fi	e
	31, BIOL 130, BIOL 140, CHEM 134, CHEM
	144, CHEM 146, CHEM 225, CHEM 226,
,	,
CHEM 227, 0	GEOL 118, GEOL 218, PHYS 125, PHYS 126,
CHEM 227, 0 PHYS 150, PI	GEOL 118, GEOL 218, PHYS 125, PHYS 126, HYS 151
PHYS 150, P	HYS 151
PHYS 150, Pl	
PHYS 150, Pl	HYS 151
PHYS 150, Pl CIS Core Seven computer Computer Science CIS 150	HYS 151
PHYS 150, Pl CIS Core Seven computer Computer Scienc CIS 150 CIS 200	HYS 151 28 hrs and information science courses are required of ce concentrators Computer Science I
PHYS 150, Pl CIS Core Seven computer Computer Science CIS 150	HYS 151
PHYS 150, Pl CIS Core Seven computer Computer Scienc CIS 150 CIS 200 CIS 310	HYS 151 28 hrs and information science courses are required of ce concentrators Computer Science I
PHYS 150, Pl CIS Core Seven computer Computer Scienc CIS 150 CIS 200	MYS 151
PHYS 150, Pl CIS Core Seven computer Computer Scienc CIS 150 CIS 200 CIS 310 CIS 3501	MYS 151 28 hrs and information science courses are required of ce concentrators Computer Science I
PHYS 150, Pl CIS Core Seven computer Computer Scienc CIS 150 CIS 200 CIS 310	HYS 151
PHYS 150, Pl CIS Core Seven computer Computer Scienc CIS 150 CIS 200 CIS 310 CIS 3501 CIS 375	HYS 151
PHYS 150, Pl CIS Core Seven computer Computer Scienc CIS 150 CIS 200 CIS 310 CIS 3501 CIS 375	HYS 151
PHYS 150, Pl CIS Core Seven computer Computer Science CIS 150 CIS 200 CIS 310 CIS 3501 CIS 375 CIS 427	
PHYS 150, Pl CIS Core Seven computer Computer Science CIS 150 CIS 200 CIS 310 CIS 3501 CIS 375 CIS 427	HYS 151
PHYS 150, Pl CIS Core Seven computer Computer Science CIS 150 CIS 200 CIS 310 CIS 3501 CIS 375 CIS 427 CIS 450 Software Engin CIS 285 CIS 376	
PHYS 150, Pl CIS Core Seven computer Computer Scient CIS 150 CIS 200 CIS 310 CIS 3501 CIS 375 CIS 427 CIS 450 Software Engin CIS 285 CIS 376 CIS 421	28 hrs and information science courses are required of ce concentrators Computer Science I 4 hrs Computer Science II 4 hrs Computer Organization and Assembly Language 4 hrs Data Structures and Algorithm Analysis for Software Engineers 4 hrs Computer Networks and Distributed Process 4 hrs Operating Systems 4 hrs Software Engineering I 4 hrs Software Engineering Tools 2 or 3 hrs Software Engineering II 4 hrs Database Systems 4 hrs
PHYS 150, Pl CIS Core Seven computer Computer Science CIS 150 CIS 200 CIS 310 CIS 3501 CIS 375 CIS 427 CIS 450 Software Engin CIS 285 CIS 376	28 hrs and information science courses are required of ce concentrators Computer Science I
PHYS 150, Pl CIS Core Seven computer Computer Science CIS 150 CIS 200 CIS 310 CIS 3501 CIS 375 CIS 427 CIS 450 Software Engin CIS 285 CIS 376 CIS 421 CIS 476	28 hrs and information science courses are required of ce concentrators Computer Science I 4 hrs Computer Organization and Assembly Language 4 hrs Data Structures and Algorithm Analysis for Software Engineers 4 hrs Computer Networks and Distributed Process 4 hrs Operating Systems 4 hrs Software Engineering I 4 hrs Software Engineering I 4 hrs Operating Systems 4 hrs Software Engineering I 4 hrs Software Engineering I 4 hrs Software Engineering Tools 2 or 3 hrs Software Engineering I 4 hrs Database Systems 4 hrs Software Architecture and Design Patterns 3 hrs
PHYS 150, Pl CIS Core Seven computer Computer Scient CIS 150 CIS 200 CIS 310 CIS 3501 CIS 375 CIS 427 CIS 450 Software Engin CIS 285 CIS 376 CIS 421	28 hrs and information science courses are required of ce concentrators Computer Science I
PHYS 150, Pl CIS Core Seven computer Computer Scient CIS 150 CIS 200 CIS 310 CIS 3501 CIS 375 CIS 427 CIS 450 Software Engin CIS 285 CIS 376 CIS 421 CIS 476 CIS 4961	
PHYS 150, Pl CIS Core Seven computer Computer Science CIS 150 CIS 200 CIS 310 CIS 3501 CIS 375 CIS 427 CIS 450 Software Engin CIS 285 CIS 376 CIS 421 CIS 476	28 hrs and information science courses are required of ce concentrators Computer Science I
PHYS 150, Pl CIS Core Seven computer Computer Science CIS 150 CIS 200 CIS 310 CIS 3501 CIS 375 CIS 427 CIS 450 Software Engin CIS 285 CIS 376 CIS 421 CIS 476 CIS 4961 CIS 4962	
PHYS 150, Pi CIS Core Seven computer Computer Science CIS 150 CIS 200 CIS 310 CIS 3501 CIS 375 CIS 427 CIS 450 Software Engin CIS 285 CIS 376 CIS 421 CIS 476 CIS 4961 CIS 4962 One Application	28 hrs and information science courses are required of ce concentrators Computer Science I
PHYS 150, Place Phys 150, Place Phys 150, Place Physics Physic	
PHYS 150, Place Phys 150, Place Phys 150, Place Physics Physic	28 hrs and information science courses are required of ce concentrators Computer Science I
PHYS 150, Pl CIS Core Seven computer Computer Scient CIS 150 CIS 200 CIS 310 CIS 3501 CIS 375 CIS 427 CIS 450 Software Engin CIS 285 CIS 376 CIS 421 CIS 476 CIS 4961 CIS 4962 One Application (The Application	28 hrs and information science courses are required of ce concentrators Computer Science I

Computer Gam	e Design Sequence	
CIS 297	Introduction to C#	
CIS 487	Computer Game Design and	
	Implementation I	
CIS 488	Computer Game Design and	
	Implementation II	
Wah Engineeri	•	
Web Engineerin	Database Systems	
CIS 421 CIS 435	Web Technology 3 hrs	
C13 433	web reciniology	
	ives 5-7 hrs	
(The Application	Area and Technical Electives must total 14 hrs)	
Five to seven additional credits from the following:		
Only one of the	following 3 courses may be used towards the	
120 credits of the	e degree:	
CIS 294 (3), (CIS 296 (3), or CIS 297 (3)	
CIS 381	Industrial Robots	
CIS 387	Digital Forensics I4 hrs	
CIS 400	Programming Languages4 hrs	
CIS 405	Algorithm Analysis and Design 3 hrs	
CIS 421	Database Systems4 hrs	
CIS 423	Decision Support & Expert Systems 3 hrs	
CIS 425	Information Systems	
CIS 435	Web Technology	
CIS 437	Advanced Networking	
CIS 447	Computer and Network Security 3 hrs	
CIS 451	Computer Graphics	
CIS 452	Computer Animation	
CIS 467	Digital Forensics II4 hrs	
CIS 474	Compiler Design	
CIS 479	Artificial Intelligence	
CIS 487	Computer Game Design and	
	Implementation I	
CIS 488	Computer Game Design II	
ECE 372	Introduction to Microprocessors	
ECE 473	Embedded System Design	
Note: Application Area Sequence + Technical Electives must total 14 hrs.		
General Electives		
	must be taken outside computer science,	

These credits must be taken outside computer science, mathematics, natural science and engineering courses.

Any for-credit courses; that is, courses not on the No Credit list, which is found at the end of the CECS Student Handbook, engin.umd.umich.edu/Publications/student handbook.php, and is also posted outside 2000 HPEC. No Credit courses do not count toward the degree. No Credit courses include PSYC 381, SOC 383 and many other courses.

BS in Digital Forensics

Digital Forensics is the area of computer science concerned with the examination and analysis of computer hard drives, storage devices, cell phones, PDA's, or any electronic device that may hold evidence which could be used in a court of law. The device could be as simple as a cell phone or as complex as a main server for a large corporation. The digital forensics analyst uncovers and preserves data for later use as legal evidence, and analyzes the data in light of a particular crime or criminal or civil investigation. This may involve determining how hackers or unauthorized persons gained access to information or computer systems as well as where and how they navigated within the system.

Digital forensics specialists recover files and emails or other electronic correspondence that have been deleted or erased. They also recover data after hardware or software failure, and develop means to harden computer, cyber, and data security against loss, corruption, sabotage, or external attack.

The College of Engineering and Computer Science Digital Forensics degree program covers a wide range of knowledge, including forensic accounting and the criminal justice aspects of forensics, but puts primary emphasis on deep knowledge of computer science subjects, such as data structures, algorithms, software engineering, database management, computer networks, web technology, operating systems, and security.

The tasks of a digital forensics specialist include:

- Conduct computer forensic investigations and electronic discovery requests for various clients
- On-site collection of data at client facilities
- Verify, analyze, and transfer secure data sets from field investigators
- Use off-the-shelf and proprietary data collection, analysis, and reporting tools
- Develop security tools and methodologies to incorporate into current business practices and processes.

Students complete a minimum of 123 credits and earn a Bachelor of Science (B.S.) degree in Digital Forensics.

Students in the College of Engineering and Computer Science Digital Forensics program are advantaged by graduating from one of the few such computer science-heavy programs in the country.

Program Objectives

- Our graduates will be successfully employed in digital forensics-related fields or other career paths, including industrial, academic, governmental, and non-governmental organizations, or will be successful graduate students in a program preparing them for such employment;
- Our graduates will lead and participate in culturally diverse teams, becoming global collaborators;
- Our graduates will continue professional development by obtaining continuing education credits, professional registration or certifications, or post-graduate study credits or degrees.

Program Outcomes

- An ability to apply knowledge of computing and mathematics appropriate to the discipline;
- An ability to analyze a problem, and identify and define the computing requirements appropriate to its solution;
- An ability to communicate effectively with a range of audiences;
- An ability to use current techniques, skills, and tools necessary for computing practices;
- An ability to apply design and development principles in the construction of software systems of varying complexity.

CONCENTRATION REQUIREMENTS

General Requirements 67 hrs English Composition 6 hrs	
COMP 270	Technical Writing for Engineers

One 100- to 4 385, 389, 469 Foreign Lang	3 hrs 400-level course from AAAS (239 or 275; 333, 0, 470). ARTH, COML, COMM, ENGL, JASS, guage, MHIS, PHIL, STS (300, 307, 312, 403, 8), WGST (303, 385, 386, 387, 416, 425, 445,
Rehavioral/Soc	ial Science21 hrs
POL 101	Introduction to American Government
SOC 200	Introduction to Sociology
CRJ 363	Criminal Justice Policy & Administration
CRJ 465	Developmental Behavior & Social
	Disorganization
CRJ 468	Criminology
CRJ 474	Cybercrimes
CRJ 475	Digital Evidence
D	121
	es
ACC 298 ACC 304	Financial Accounting
ENGR 400	Auditing and Forensic Examinations Applied Business Techniques for Engineers
OB 354	Behavior in Organization
02 33 1	Denavior in Organization
Mathematics	17 hrs
MATH 115	Calculus I
MATH 116	Calculus II
CIS 275	Discrete Structures I
MATH 217	Matrix Algebra
OR	7: 41.1
MATH 227	Linear Algebra
IMSE 317	Probability and Statistics
Two courses, 8 of BIOL 130 and OR CHEM 134 at OR CHEM 144 at OR GEOL 118 at OR PHYS 125 an OR	nd CHEM 136 nd CHEM 146 nd GEOL 218 d PHYS 126
PHYS 150 an	d PHYS 151
Digital Forensi	es Core35 hrs
Eight computer	and information science courses are required of
Digital Forensic	s concentrators
CIS 150	Computer Science I4 hrs
CIS 200	Computer Science II4 hrs
CIS 310	Computer Organization and Assembly
	Language4 hrs
CIS 350	Data Structures and Algorithm4 hrs
CIS 375	Software Engineering I
CIS 421	Database Management Systems4 hrs
CIS 427	Computer Networks and
GTG 40.5	Distributed Process
CIS 435	Web Technology
CIS 450/ECE	478 Operating Systems4 hrs
Computer Scien	nce Senior Design Seminars 4 hrs
	Design Seminar I
	Design Seminar II

Digital Forensics Courses		
CIS 447	Introduction to Computer and	
	Network Security	3 hrs
CIS/ECE 387	Digital Forensics I	4 hrs
CIS/ECE 467	Digital Forensics II	4 hrs
ECE 426	Multimedia Forensics	3 hrs
ECE 427	Digital Content Protection	3 hrs

Computer Engineering

Computers and digital technology have dramatically altered many of life including entertainment, manufacturing, transportation, public safety and power production. Computer Engineers have many career opportunities in these areas that will only become more important and prevalent in the future. Most of the modern electronic devices and appliances available today contain advanced computer technology. Video game consoles, for example, utilize very powerful special-purpose computers that receive user input (from the joystick or controller), perform computations to control the game and display high-resolution graphics and sound in real time. Such devices require specialized digital circuits that can process massive amounts of data very efficiently. Computer engineers use their specialized knowledge to design a variety of systems that integrate how the hardware (electronic circuits and processors) interacts with the software such as C++ or Java to control the system and process inputs from the user. This type of close interaction between hardware and software is essential for many important applications, such as automotive systems, web and GPS-enabled devices, wireless communication, military applications, and medical imaging.

The Computer Engineering program at UM-Dearborn was developed to meet the increasing demand for engineers with knowledge of both hardware design and software development. The program offers a 125-hour curriculum consisting of core courses and technical electives. In addition to in-depth courses in engineering fundamentals, theory, and design principles, students get hands-on experience with the latest hardware and software, such as microprocessor and DSP-based development boards, system-on-a-chip technology, computer networks, and reconfigurable computing. In the junior year, students learn how to design and implement an instruction set and logic functions for a computer. In the senior year, students work on projects in which they design a complete real-world system, from initial specifications to final design, testing, and documentation. Students with an interest in pursuing graduate studies or wish to pursue a research and development career are encouraged to undertake directed research projects under the supervision of faculty advisors for more advanced design experiences.

A unique feature of the Computer Engineering program is the opportunity for students to work concurrently to earn a second degree in Electrical Engineering by taking an additional 16 credit hours of courses. In this case, a student can earn two Bachelor's Degrees in just 141 credit hours. Since some job listings require a computer engineering background while others require specialization in electrical engineering, a student who pursues the dual degree option is qualified for a much wider variety of engineering positions.

The Computer Engineering Program at the University of Michigan-Dearborn is accredited by the Engineering Accreditation Commission of ABET (the Accreditation Board for Engineering and Technology), 111 Market Place, Suite 1050, Baltimore, MD 21202-4012 – telephone: (410) 347-7700.

Program Educational Objectives

The objectives of the BSE CE degree programs are to:

- Graduate engineers, who have design skills, including the ability to formulate problems, design experiments, collect, analyze and interpret data; evaluate material, computational and personnel resources needed to solve typical problems, work in multidisciplinary teams, and communicate effectively.
- Graduate engineers with the ability to pursue higher education as well as a research career in industry and/or academic institutions.
- 3. Graduate engineers who have interpersonal skills and an awareness of professional responsibility, ethics and the ability to engage in self-learning and life-long learning.
- 4. Graduate engineers who have the ability to meet the needs of the region, including automotive, information technologies, electronics, life sciences, power and defense related industries, consistent with the institution's mission.

Program Outcomes

The Computer Engineering program is designed to demonstrate that graduates of the program have:

- a. an ability to apply knowledge of mathematics, science, and engineering
- b. an ability to design and conduct experiments, as well as to analyze and interpret data
- c. an ability to design a system, component, or process to meet desired needs
- d. an ability to work cooperatively on multi-disciplinary projects
- e. an ability to identify, formulate, and solve engineering problems
- f. an understanding of professional and ethical responsibility
- g. proficiency in oral and written communications
- h. the broad education necessary to understand the impact of engineering solutions in a global, economic, environmental, and societal context
- a clear understanding that lifelong learning is essential for sustained professional development
- j. a knowledge of contemporary issues and its impact on the engineering profession
- k. an ability to use the techniques, skills and modern engineering tools necessary for engineering practice

CONCENTRATION REQUIREMENTS for Computer Engineering Programs

COMPUTER ENGINEERING PROGRAM FOR STUDENTS ADMITTED AS FRESHMEN (125 HOURS MINIMUM)

Humanities and Behavioral Sciences		
Basic Preparati	on for Engineering	37 hrs
Chemistry I		4 hrs
Calculus I, II,	III	11 hrs
Differential E	quations	3 hrs
Linear Algebr	a	2 hrs
	ematics	
General Physi	cs I, II	8 hrs
ENGR 100	Introduction to Engineering	
	and Computers	2 hrs
IMSE 317	Engineering Probability and Sta	tistics 3 hrs

Applied busines	s course	3 hrs
ENGR 400	Applied Bus Techniques for Engr/CIS	3 hrs
Core Courses		48 hrs
ECE 210	Circuits	
ECE 270	Computer Methods in ECE	
ECE 273	Digital Systems	
ECE 311	Electronics Circuits I	4 hrs
ECE 370	Adv. Software Tech in CE	
ECE 372	Introduction to Microprocessors	
ECE 375	Computer Architecture	
ECE 471	Computer Networks	
ECE 473	Embedded System Design	
ECE 475	Computer Hardware Org and Design	
ECE 478	Operating Systems	
ECE 4982	Computer Engr Design I	
ECE 4984	Computer Engr Design II	
D 0 1 151		6.01
	ectives	. 6~8 hrs
	ses from the following list	
ECE 3171	Analog & Discrete Sig & Sys	
ECE 387	Digital Forensics I	
ECE 413	Introduction to VLSI Design	
ECE 428	Cloud Computing	
ECE 433	Intro to Multimedia Technologies	4 hrs
ECE 434	Machine Learning in Engineering	4 hrs
ECE 435	Intro to Mobil/Smart Dev & Tech	4 hrs
ECE 438	Web Engr: Prin & Tech	4 hrs
ECE 467	Digital Forensics II	4 hrs
ECE 4881	Intro to Robot Vision	
Approved Profe	essional/Science Electives	. 5~7 hrs

Please contact the ECE Department for more information on approved electives.

Electrical Engineering

Electrical Engineering is the field that deals with the study and application of electricity, electronics and electromagnetism. An early application of the technology was energy conversion using motors and generators to convert one form of energy to another. As the technology advanced, devices that could amplify and process signals were developed which provided the foundation for modern electronics. Modern electronic devices can perform highspeed computations and process information in a wide variety of formats. Electronic devices have radically changed many aspects of daily life including high-definition television, video game consoles, digital cameras, satellite transmissions, GPS navigation. automotive entertainment systems, surround sound, mp3 players and advanced medical imaging systems. These technological advancements require high-speed electronic circuits that can receive, transmit and process electrical signals using circuits and devices developed by electrical engineers. They have the specialized knowledge required to design circuits and systems to perform a variety of functions, such as store electrical energy (batteries and power electronics), control of electric vehicles, transmit signals and information through wires (cable TV) or free space (TV, AM and FM radio, satellite, dish networks), provide automatic control of mechanical systems (cruise control, braking, target tracking and factory automation), enable communication between devices (internet, web, cell phones), process digital signals (microprocessors, digital signal processing algorithms and hardware), and ensure safety and performance of complex systems (electromagnetic compatibility).

A unique feature of the Electrical Engineering program is the opportunity for students to work concurrently to earn a second degree in Computer Engineering by taking an additional 16 credit hours of courses. In this case, a student can earn two Bachelor's Degrees in just 141 credit hours. Some employment listings require a computer engineering background while others call for specialization in electrical engineering. A student who pursues the dual degree option is qualified for both types of positions and therefore has a distinct advantage in securing employment.

The Electrical Engineering Program at the University of Michigan-Dearborn is accredited by the Engineering Accreditation Commission of ABET (the Accreditation Board for Engineering and Technology), 111 Market Place, Suite 1050, Baltimore, MD 21202-4012 – telephone: (410) 347-7700.

Program Educational Objectives

The objective of the BSE EE degree programs are to:

- Graduate engineers, who have design skills, including the ability to formulate problems, design experiments, collect, analyze and interpret data; evaluate material, computational and personnel resources needed to solve typical problems, work in multidisciplinary teams, and communicate effectively.
- Graduate engineers with the ability to pursue higher education as well as a research career in industry and/or academic institutions.
- 3. Graduate engineers who have interpersonal skills and an awareness of professional responsibility, ethics and the ability to engage in self-learning and life-long learning.
- 4. Graduate engineers who have the ability to meet the needs of the region, including automotive, information technologies, electronics, life sciences, power and defense related industries, consistent with the institution's mission.

Program Outcomes

The Electrical Engineering program is designed to demonstrate that graduates of the program have:

- a. an ability to apply knowledge of mathematics, science, and engineering
- b. an ability to design and conduct experiments, as well as to analyze and interpret data
- c. an ability to design a system, component, or process to meet desired needs
- d. an ability to work cooperatively on multi-disciplinary projects e. an ability to identify, formulate, and solve engineering problems
- f. an understanding of professional and ethical responsibility
- g. proficiency in oral and written communications
- h. the broad education necessary to understand the impact of engineering solutions in a global, economic, environmental, and societal context
- i. a clear understanding that lifelong learning is essential for sustained professional development
- j. a knowledge of contemporary issues and its impact on the engineering profession
- k. an ability to use the techniques, skills and modern engineering tools necessary for engineering practice

CONCENTRATION REQUIREMENTS for Electrical Engineering Programs

ELECTRICAL ENGINEERING PROGRAM FOR STUDENTS ADMITTED AS FRESHMEN (125 HOURS MINIMUM)

Humanities and	d Behavioral Sciences
Basic Preparat	ion for Engineering
Chemistry I	4 hrs
Calculus I, II.	, III
Differential E	Equations
	ra
General Phys	ics I, II
	hysics
ENGR 100	Introduction to Engineering
	and Computers
IMSE 317	Engineering Probability and Statistics 3 hrs
Applied busine	ss course
ENGR 400	Applied Bus Techniques for Engr/CIS 3 hrs
Core Courses	
ECE 210	Circuits
ECE 270	Computer Methods in ECE 4 hrs
ECE 273	Digital Systems
ECE 311	Electronics Circuits I
ECE 3171	Analog & Discrete Sig & Sys 4 hrs
ECE 372	Introduction to Microprocessors 4 hrs
ECE 385	Electrical Materials and Devices 3hrs
ECE 450	Analog and Digital
	Communication Systems 4 hrs
ECE 460	Automatic Control Systems 4 hrs
ECE 480	Introduction to Digital
	Signal Processing
ECE 4951	System Design with Microcontrollers 3 hrs
ECE 4981	Electrical Engineering Design I
ECE 4983	Electrical Engineering Design II
	ectives
choose two cour	rses from the following list
ECE 319	Electromagnetic Compatibility: An Intro . 4hrs
ECE 413	Introduction to VLSI Design 3hrs
ECE 414	Electronic Systems Design
ECE 415	Power Electronics 4hrs
ECE 435	Intro to Mobil/Smart Dev & Tech 4 hrs
ECE 4361	Electric Machines and Drive 4 hrs
ECE 443	Intro to Electrical Power Engineering 4hrs
Or	<i>E E</i>
ECE 4432	Renewable Elec Power Sys
ECE 4881	Intro to Robot Vision

Please contact the ECE Department for more information on approved electives.

Dual Degree in EE or CE

Students must take 16 hours beyond the 125 hours needed for the EE/CE degree for a total of 141 hours. For a second degree in EE, CE students should take ECE 3171, 385, 450, 460, 480, and one of the following: ECE 414 or ECE 415. For a second degree in CE, EE students should take ECE 276, 375, 471, 473, 475, ECE 478. These required courses can be taken by choosing an appropriate set of elective and the 16 credit hours required by the dual degree program.

Industrial and Systems Engineering

Industrial and systems engineering is concerned with the study and design of integrated systems of people, materials, equipment and their interaction with the surrounding environment. Historically, this field developed in the manufacturing industries where industrial engineers applied their engineering knowledge and management techniques to design and efficiently operate industrial and business systems. But the advent of the modern information technology enabled industrial engineers to apply their quantitative methods and organizational skills to a multitude of large-scale systems in addition to industrial systems. Today, industrial and systems engineers are being called upon, with increasing frequency, to design and improve the performance of systems in a wide spectrum of fields such as the service, energy, transportation, finance, and health care. Thus, their scope is not limited to tackling industrial problems alone, but extends to finding solutions for the endless variety of problems of modern industrial society.

The field of study bridges engineering knowledge, management principles, physical and social sciences, and the life sciences. Simply put, it stresses the scientific and technological approach to the design, development, and the optimal operation of both large-scale and small-scale systems. The industrial and systems engineer is a versatile expert whose talents are vigorously sought, and will be for a long time to come, by various sectors of society.

Undergraduate Degree Program

The undergraduate program in industrial and systems engineering provides first a strong basis in the foundations of engineering: natural and physical sciences, mathematics, socioeconomic-cultural background, the behavioral sciences and the basic engineering sciences which begin the emphasis on problem solving. Then, the program develops the intermediate bases on which industrial systems and other systems engineering work is founded. This includes studies in production and operations management, lean concepts, quality engineering methods system modeling, simulation and optimization, organization and decision theory, and human factors engineering. Contemporary operations research methods are progressively developed and applied through systems-design case studies ending with a capstone design experience.

The undergraduate degree program in Industrial and Systems Engineering is accredited by the Engineering Accreditation Commission of ABET (the Accreditation Board for Engineering and Technology), 111 Market Place, Suite 1050, Baltimore, MD 21202-4012 – telephone: (410) 347-7700.

An unusual opportunity is available to obtain considerable practical expertise in the student's specialty for those who elect the internship option.

Students who do well in their undergraduate program are encouraged to consider graduate work and may take some of their electives in preparation for graduate study. Information and assistance regarding fellowships and assistantships for graduate study may be obtained from the Dean, College of Engineering and Computer Science, or from the department chairperson.

Educational Objectives of the BSE (Industrial and Systems Engineering) Program

Consistent with providing a strong academic foundation in the field of Industrial and Systems Engineering, the program educational objectives for our graduates are:

- To remain gainfully employed in Industrial and Systems Engineering related fields,
- To continue develop professionally, and
- To serve in leadership roles.

Program Outcomes

To achieve the educational objectives, the graduates of the program will have:

- an ability to apply knowledge of mathematics, sciences and engineering
- b. an ability to design and conduct experiments, as well as to analyze and interpret data
- an ability to design a system, component or process to meet desired needs
- d. an ability to function on multidisciplinary teams
- e. an ability to identify, formulate and solve engineering problems
- f. an understanding of professional and ethical responsibility
- g. an ability to communicate effectively
- the broad education necessary to understand the impact of engineering solutions in a global and society context
- a recognition of the need for, and an ability to, engage in lifelong learning and graduate studies
- j. a knowledge of contemporary issues
- an ability to use the techniques, skills and modern engineering tools necessary for engineering practice

CONCENTRATION REQUIREMENTS

A candidate for the degree Bachelor of Science in Engineering (Industrial and Systems Engineering) is required to pursue scholastic quality and to complete satisfactorily the following program of study:

Industrial and Systems Engineering Program for Students Admitted as Freshmen (128 hours minimum)*

*Information for students planning to transfer to UM-Dearborn from community colleges or from four-year colleges and universities is given under Admission Information in the General Information section and under Undergraduate Requirements in the Engineering section of this Catalog.

Humanities and Behavioral and Social Sciences

Basic Requirem	ients	36 hrs
ENGR 100	Introduction to Engineering	
	and Computers	2 hrs
ENGR 126	Engineering Computer Graphics	2hrs
MATH 115	Calculus I	4 hrs
MATH 116	Calculus II	4 hrs
MATH 205	Calculus III for Engineers	3 hrs
MATH 216	Differential Equations	3 hrs

MATH 217 CHEM 144	Matrix Algebra
CHEM 146 OR	General Chemistry IIB4 hrs
BIOL 103	Anatomy and Physiology I4 hrs
PHYS 150 PHYS 151	General Physics I
Programming a	and Core Engineering
IMSE 255	Computer Programming for Engineers 3 hrs
ENGR 250	Principles of Engineering of Materials 3hrs
ECE 305	Introduction to Electrical Engineering 4 hrs
ME 265	Applied Mechanics
OR	
ME260	Design Stress Analysis4 hrs
Professional Re	equirements41 hrs
IMSE 3005	Introduction to Operations Research 4 hrs
IMSE 317	Engineering Probability and Statistics 3 hrs
IMSE 382	Manufacturing Processes4 hrs
IMSE 421	Engineering Economy and
	Decision Analysis
IMSE 4425	Human Factors and Ergonomics4 hrs
IMSE 4545	Information Systems Design 4 hrs
IMSE 4585	Simulation in Systems Design
IMSE 4675	Six Sigma and Statistical Process
	Improvement 4 hrs
IMSE 4795	Production, Inventory Control,
DAGE 4051	and Lean Mfg
IMSE 4951	Design Project I
IMSE 4952 ENGR 400	Design Project II
ENGK 400	Applied Business Techniques for Engineers and Computer Scientists 3 hrs
	10.101
	ourses from the following
IMSE 351 IMSE 381	Data Structures and File Processing 3 hrs Industrial Robots 3 hrs
IMSE 381 IMSE 453	Data Communications/Distributed Processing
INISE 433	4 hrs
IMSE 456	Introduction to Data Base Systems 4 hrs
IMSE 4745	Facilities Design
IMSE 4745	Manufacturing Processes II
IMSE 4825	Control, Instrumentation, and Metrology 4 hrs
IMSE 4835	Computer-Aided Process Design and Mfg 4 hrs
IMSE 486	Design for Manufacturing and Assembly 3 hrs
OB 354	Behavior in Organization
ACC 297	Financial Accounting Concepts 3 hrs
ACC 298	Financial Accounting
ACC 299	Managerial Accounting
OB 401	Managerial Skills Development 3 hrs
OB 402	Organizational Change and Development. 3 hrs
LE 452	The Legal Environment for Business 3 hrs
ENT 400	Introduction to Entrepreneurship 3 hrs
HRM 405	Human Resource Policy/Administration 3 hrs

Dual Degree in Manufacturing Engineering

Students must take at least 15 credits beyond the 128 credits needed for the Manufacturing Engineering degree, including ME 230, IMSE 4815, IMSE 4825, and IMSE 4835 from the courses listed in the Manufacturing Engineering curriculum.

Free Electives 1-3 hrs

Manufacturing Engineering

Manufacturing Engineering is concerned with designing, building, planning, operating, and managing economical production systems for discrete manufacturing. Manufacturing engineers need to have a thorough knowledge of materials and manufacturing processes. They should also be able to design, operate and manage integrated systems that include people, materials, machine tools, material handling equipment, robots, quality measuring equipment, controls and computers.

Traditionally, there has been a strong division between manufacturing engineering and design engineering. Today, however, the boundary between these two functions is narrowing. Both groups work together in teams to assure soundness of design and manufacturability of the product. Manufacturing engineers must understand engineering materials and design besides having expertise in manufacturing tooling and processes, systems and technology. They design and evaluate the capabilities of manufacturing tools and processes, and interact with design engineers during the development of product specifications and tolerances.

Today's manufacturing equipment is becoming increasingly computer-based. Manufacturing engineers must have a working knowledge of programmable equipment, as well as its interfaces with control hardware. They must understand the multi-layered control architecture of the integrated factory, and the computer-based technologies that enable it.

UNDERGRADUATE DEGREE PROGRAM

The undergraduate program in manufacturing engineering provides first a strong foundation in all of the basic ingredients of engineering: the natural and physical sciences, mathematics, socioeconomic-cultural background, the behavioral sciences and finally the basic engineering sciences that begin the development of problem-solving skills. Then, the program develops intermediate bases on which manufacturing engineering and systems are founded. This includes studies in engineering materials, manufacturing processes, probability and statistics, electronics, computers, human factors/ergonomics and operations research. The program then provides for the detailed study of several advanced topics related to process, assembly, and product engineering; manufacturing productivity and quality; and manufacturing integration methods and system design. Excellent laboratory facilities are available for students to conduct experiments and measure process variables.

Finally, students are required to complete a project dealing with the design of a production system to manufacture a product. The student has to address issues related to technological cost, aesthetics, feasibility, reliability, safety and ethics wherever applicable.

The degree program is accredited by the Engineering Accreditation Commission of ABET (the Accreditation Board for Engineering and Technology), 111 Market Place, Suite 1050, Baltimore, MD 21202-4012 – telephone: (410) 347-7700.

An unusual opportunity is available to obtain considerable practical experience in manufacturing industries for those who elect the internship option.

Students who do well in their undergraduate program are encouraged to consider graduate work. Information and assistance regarding fellowships and assistantships for graduate studies may be obtained from the Dean, College of Engineering and Computer Science, or from the department chairperson.

Educational Objectives of the BSE (Manufacturing Engineering) Program

Consistent with providing a strong academic foundation in the field of Manufacturing Engineering, the program educational objectives for our graduates are:

- To remain gainfully employed in Manufacturing Engineering related fields,
- To continue develop professionally, and
- To serve in leadership roles.

PROGRAM OUTCOMES

To achieve the educational objectives, the graduates of the program will have:

- an ability to apply knowledge of mathematics, sciences and engineering
- an ability to design and conduct experiments, as well as to analyze and interpret data
- an ability to design a system, component, or process to meet desired needs
- d. an ability to function on multidisciplinary teams
- e. an ability to identify, formulate and solve engineering problems
- f. an understanding of professional and ethical responsibility
- g. an ability to communicate effectively
- h. the broad education necessary to understand the impact of engineering solutions in a global and society context
- a recognition of the need for, and an ability to, engage in lifelong learning and graduate studies
- j. a knowledge of contemporary issues
- k. an ability to use the techniques, skills and modern engineering tools necessary for engineering practice

CONCENTRATION REQUIREMENTS

A candidate for the degree Bachelor of Science in Engineering (Manufacturing Engineering) is required to pursue scholastic quality and to complete satisfactorily the following program of study:

Manufacturing Engineering Program for Students Admitted as Freshmen (128 hours minimum)*

*Information for students planning to transfer to UM-Dearborn from community colleges or from four-year colleges and universities is given under Admission Information in the General Information section and under Undergraduate Requirements in the Engineering section of this Catalog.

Humanities and Behavioral and Social Sciences

Courses that satisfy the UM-Dearborn Campus Distribution Requirement and ABET requirements for engineering students, additional electives in the humanities, behavioral sciences, and social sciences, including composition courses 24 hrs

Basic Requiren	nents for Engineering	36 hrs
ENGR 100	Introduction to Engineering &	
	Computers	2 hrs
ENGR 126	Engineering Computer Graphics	2 hrs
MATH 115	Calculus I	4 hrs
MATH 116	Calculus II	4 hrs
MATH 205	Calculus III for Engineers	3 hrs
MATH 216	Differential Equations	3 hrs
MATH 217	Matrix Algebra	2 hrs
CHEM 144	General Chemistry I	4 hrs

CHEM 146	General Chemistry IIB4	hrs
PHYS 150	General Physics I	hrs
PHYS 151	General Physics II	
Programming	and Core Engineering 18	hrs
IMSE 255	Computer Programming for Engineers 3	hrs
ENGR 250	Principles of Engineering Materials 3	
ME 230	Thermodynamics 4	hrs
ME 260	Design Stress Analysis 4	hrs
OR	ç ,	
ME 265	Applied Mechanics 4	hrs
ECE 305	Introduction to Electrical Engineering 4	
Professional R	equirements45	hrs
IMSE 3005	Introduction to Operations Research 4	hrs
IMSE 317	Engineering Probability and Statistics 3	hrs
IMSE 382	Manufacturing Processes 4	hrs
IMSE 421	Engineering Economy and	
	Decision Analysis	hrs
IMSE 4425	Human Factors and Ergonomics 4	hrs
IMSE 4675	Six Sigma and Statistical Process	
	Improvement4	hrs
IMSE 4795	Production, Inventory Control,	
D 407 4015	and Lean Mfg	hrs
IMSE 4815	Manufacturing Processes II	hrs
IMSE 4825	Control, Instrumentation,	
DAGE 4025	and Metrology 4	hrs
IMSE 4835	Computer-Aided Process	
D 40E 4051	Design and Mfg	
IMSE 4951	Design Project I	
IMSE 4952	Design Project II	hrs
ENGR 400	Business Methods for Engineers 3	hrs
Technical Elec	tives from the following	hrs
IMSE 351	Data Structures and File Processing 3	hrs
IMSE 381	Industrial Robots	hrs
IMSE 4545	Information Systems Design 4	hrs
IMSE 4585	Simulation in System Design	hrs
IMSE 4745	Facilities Design	hrs
IMSE 486	Design for Assembly and	
	Manufacturing	
IMSE 488	Metal Forming Processes	hrs
ME 484	Manufacturing Polymeric Composite	
	Materials3	hrs

Dual Degree in Industrial and Systems Engineering

Students must take at least 15 hours beyond the 128 hours needed for the Manufacturing Engineering degree including IMSE 4545 and IMSE 4585 from the courses listed in the I&SE curriculum.

General Electives 1-2 hrs

Mechanical Engineering

The mechanical engineering field is one of the oldest of the several engineering fields. It is also one of the broadest in scope, for it is not identified with nor restricted to any particular technology (like nuclear engineering), nor to any particular vehicle (like land-based automobiles), nor to any particular device or particular system. It is, in fact, concerned with so many areas of modern technology that the tasks and challenges of the mechanical engineer are most interesting and varied.

The field is logically associated with mechanical things, but this can lead to a restrictive image. For example, one often associates

mechanical engineers with automobiles and, thus, with engines. To the non-engineer this is an acceptable association that implies a knowledge of pistons and carburetors. As engineers know, this picture is very shallow; the breadth of understanding implied when one thinks of designing an engine challenges the imagination. Automobile engines are just one of many devices that convert energy into useful work. To understand this conversion process is also to understand the basic principles of energy conversion applicable to solar engines, jet engines, gas turbines, fuel cells, ship-propulsion systems, rocket engines, hydro-electric power plants, and new kinds of converters not yet developed. The mechanical engineer possesses this universally applicable background in thermodynamics, heat transfer, fluid mechanics, aerodynamics, and combustion theory that is basic to all such systems. The mechanical engineer also has a similar understanding of materials from steels to textiles to biological materials to the latest plastics and the most exotic high temperature composites. The point is that everything that is built is achieved by applying these same principles and using these same materials.

To understand the dynamic nature of most mechanical devices and systems requires a thorough mastery of forces and stresses, of vibrations and acoustics, of shock and impact, of deformation and fracture. Yet, these are basic to virtually every product devised by people or found in nature. Automobiles are just one small example of where they are important.

Thus, the mechanical engineer is a designer who creates physical things of all sorts because the mechanical engineer's breadth of background is everywhere applicable. The mechanical engineer produces machines to build other machines, and thus is in the forefront of new manufacturing technology. In this role the engineer is faced with the task of building new things created by all kinds of engineers. This exposes the engineer to other technologies, and the mechanical engineer must be able to grasp their essence easily. For example, as the builder of energy devices to tap the oceans' resources, the mechanical engineer is simultaneously one of the oceanographers, one of the chemists, and one of the environmentalists, as well as the master designer.

The mechanical engineer is comfortable working with people as well as with machines. For example, the role in vehicle design is that of making technical advances in performance, efficiency, and cost while simultaneously meeting the life and comfort requirements of operators and passengers. Logically, then, the mechanical engineer is active in the new fields of biomechanics, biomaterials, biomedical fluid mechanics and heat transfer, air and water pollution, water desalinization, sensory aids, and prostheses.

UNDERGRADUATE DEGREE PROGRAM

The undergraduate program in mechanical engineering provides first a strong foundation in all of the basic ingredients of engineering: the natural and physical sciences, mathematics, a comprehensive socio-economic-cultural background, the behavioral sciences, and finally the basic engineering sciences that begin the development of problem-solving skills.

The program provides for the detailed study of several advanced topics, including fluid machinery, heat transfer, manufacturing processes, vibration theory, stress analysis, metallurgy, electrical science, and control systems.

The greatest strength of the undergraduate program is the project-oriented design work that requires the student to

organize thinking of the multitude of factors on which every design is based - performance, efficiency, esthetics, cost, reliability, safety, reparability, etc. - and to reach sound conclusions that the student must be prepared to defend and implement. This is the art of engineering, and its study permeates the courses and laboratories of the upper-level instruction in this field.

For those who choose the cooperative education option, it is possible to develop a more thorough understanding of how design factors are considered and how decisions are implemented in industrial organizations.

The undergraduate degree program in Mechanical Engineering is accredited by the Engineering Accreditation Commission of ABET (the Accreditation Board for Engineering and Technology), 111 Market Place, Suite 1050, Baltimore, MD 21202-4012 – telephone: (410) 347-7700.

Students who do well in their undergraduate program are encouraged to consider graduate work and may take some of their electives in preparation for graduate study. Information and assistance regarding fellowships and assistantships for graduate study may be obtained from the Dean, College of Engineering and Computer Science, or from the department chairperson.

PROGRAM EDUCATIONAL OBJECTIVES

The Program Educational Objectives for the Bachelor of Science in Engineering in Bioengineering are:

- 1. Our graduates will be successfully employed in engineering or other related industries and will advance in their professional fields.
- Our graduates will possess adequate technical skills and knowledge for identifying, formulating and developing innovative solutions to mechanical engineering problems using modern engineering techniques and tools.
- Our graduates will engage in life-long learning through graduate studies and/or professional development activities.
- 4. Our graduates will effectively communicate technical information and apply mechanical engineering solutions with strong social and ethical responsibility.

To achieve the educational objectives, the graduates of the program will have:

- a. an ability to apply knowledge of mathematics, sciences and engineering.
- b. an ability to design and conduct experiments, as well as to analyze and interpret data.
- an ability to specify, model, and design a system, component or process to meet desired needs.
- d. an ability to function on multidisciplinary teams.
- e. an ability to identify, formulate and solve engineering problems.
- f. an understanding of professional and ethical responsibility.
- g. an ability to communicate effectively.
- h. the broad education necessary to understand the impact of engineering solutions in a global and societal context, including environmental and economical impacts.
- a recognition of the need for, and an ability to, engage in life-long learning.
- j. a knowledge of contemporary issues.

 an ability to use the techniques, skills and modern engineering tools, such as information technology, which are necessary for engineering practice.

CONCENTRATION REQUIREMENTS

A candidate for the degree Bachelor of Science in Engineering (Mechanical Engineering) is required to pursue scholastic quality and to complete satisfactorily the following program of study:

Mechanical Engineering Program for Students Admitted as Freshmen (128 hours)*

*Information for students planning to transfer to UM-Dearborn from community colleges or from four-year colleges and universities is given under Admission Information in the General Information section and under Undergraduate Requirements in the Engineering section of this Catalog.

A candidate for the degree BSE degree in Mechanical Engineering is required to pursue scholastic quality and to complete satisfactorily the following program of study.

Humanities and Behavioral and Social Sciences

Racic Propagation for Engineering

*Specific information can be obtained from the program advisor.

10 hrs

Dasie I reparati	on for Engineering	17 1113
Chemistry 14	4, 146	8 hrs
Calculus I, II,	III	11 hrs
Differential E	quations	3 hrs
Linear Algebr	a & Matrices	2 hrs
General Physi	ics I, II	
ENGR 100	Introduction to Engineering	2 hrs
ENGR 126	Engineering Computer Graphics	2 hrs
ENGR 216	Computer Methods for Engineers	2 hrs
ENGR 250	Principles of Engineering Material	3 hrs
ME 230	Thermodynamics	
ME 260	Design Stress Analysis	4 hrs
Professional Su	bjects and Program Electives	37 hrs
ME 325	Thermal Fluid Sciences I	4 hrs
ME 345	Engineering Dynamics	4 hrs
ME 349	Instrumentation Measurement Systems	3 hrs
ME 3601	Design and Analysis of Machine Eleme	ents4 hrs
ME 364	Probability, Statistics and	
	Reliability in Machine Design	
ME 375	Thermal Fluid Sciences II	4 hrs
ME 379	Thermal Fluid Laboratory	3 hrs
ME 381	Manufacturing Processes I	4 hrs
ME 442	Control Systems Analysis and Design .	4 hrs
ECE 305	Introduction Electrical Engineering	4 hrs
Senior Design F	Project	8 hrs
ME 4671	Senior Design Project	4 hrs
ME Design E	lectives	4 hrs
Upper-Level Te	ech Electives	6 hrs
Canaral Flactiv	rec	4 hrs

Total 128 hrs

Bioengineering

Bioengineering is an emerging branch of engineering that primarily deals with problems of medicine, healthcare, and—in genera—quality of human life. It is a multidisciplinary field that combines scientific principles of biology, chemistry, physics, and mathematics with the best engineering techniques developed in traditional areas (for example, mechanical, electrical, chemical, and computer engineering) and new breakthrough methods developed in recent years.

Activities of bioengineers are widely spread. They use their knowledge to design and build medical instruments, artificial organs, prosthetic limbs, therapeutic devices, and medical imaging equipment. They help doctors to design new medical procedures, including new rehabilitation techniques. They also assist pharmaceutical and biotechnology industries in developing new, more efficient bioprocessing technologies. Finally, they find solutions for medical and biology-related problems of consumer technology in the areas of safety, ergonomics, and comfort.

Bioengineering is a rapidly growing profession with expanding career opportunities. By virtue of their vigorous cross-training, bioengineers are well-poised for careers in healthcare, medical device production, pharmaceutical industries, and consulting in health-related fields, as well as other positions in industry, education, and government.

UNDERGRADUATE DEGREE PROGRAM

The undergraduate program in bioengineering provides first a strong foundation in all of the basic ingredients of engineering: the natural and physical sciences, mathematics, a comprehensive socio-economic-cultural background, the behavioral sciences, and finally the basic engineering sciences that begin the development of problem-solving skills.

The program integrates natural sciences with engineering analysis and design concepts to advance the fundamental understanding of biological systems and to develop biologybased technologies with applications across a wide spectrum of societal needs. The bioengineering curriculum is designed to cater to students looking to enter the professional world immediately after earning their undergraduate degree, as well as those who are interested in pursuing graduate studies and research. Various fundamental, design, and application oriented courses (e.g. Biomaterials, Biomechanics, Bioinstrumentation, Biotransport, and Bioprocesses) fulfill industrial needs and help students to perform well in biotech, pharmaceutical, and healthcare industries as engineering professionals. At the same time, the exposure to advanced courses and cross-cutting, stateof-the-art research experiences provide a solid foundation to continue graduate studies and emerge as leaders in science and engineering.

PROGRAM EDUCATIONAL OBJECTIVES

The Program Educational Objectives for the Bachelor of Science in Engineering in Bioengineering are:

- Our graduates will be successfully employed in engineering or other related industries and will advance in their professional fields.
- Our graduates will possess adequate technical skills and knowledge for identifying, formulating and developing

- innovative solutions to bioengineering problems using modern engineering techniques and tools.
- Our graduates will engage in life-long learning through graduate studies and/or professional development
- Our graduates will effectively communicate technical information and apply bioengineering solutions with strong social and ethical responsibility.

To achieve the educational objectives, the graduates of the program will have:

- an ability to apply knowledge of mathematics, sciences and engineering.
- b. an ability to design and conduct experiments, as well as to analyze and interpret data.
- c. an ability to specify, model, and design a system, component or process to meet desired needs.
- d. an ability to function on multidisciplinary teams.
- e. an ability to identify, formulate and solve engineering problems.
- understanding of professional and an ethical responsibility.
- g. an ability to communicate effectively.
- h. the broad education necessary to understand the impact of engineering solutions in a global and societal context, including environmental and economical impacts.
- i. a recognition of the need for, and an ability to, engage in life-long learning.
- a knowledge of contemporary issues.
- k. an ability to use the techniques, skills and modern engineering tools, such as information technology, which are necessary for engineering practice.

CONCENTRATION REQUIREMENTS

A candidate for the degree Bachelor of Science in Engineering (Bioengineering) is required to pursue scholastic quality and to complete satisfactorily the following program of study:

Bioengineering Program for Students Admitted as Freshmen (128 hours)*

*Information for students planning to transfer to UM-Dearborn from community colleges or from four-year colleges and universities is given under Admission Information in the General Information section and under Undergraduate Requirements in the Engineering section of this Catalog.

A candidate for the degree BSE degree in Bioengineering is required to pursue scholastic quality and to complete satisfactorily the following program of study.

Humanities and Behavioral and Social Sciences

Courses that satisfy the UM-Dearborn Campus Distribution and ABET requirements for Engineering students, additional electives in the humanities, behavioral sciences, and social

*Specific information can be obtained from the program advisor.

Basic Preparation for Engineering	61 hrs
Chemistry 134, 136	8 hrs
Calculus I, II, III	11 hrs
Differential Equations	3 hrs
Linear Algebra & Matrices	

Colleg	E OF ENGINEERING AND COMPUTER SCIENCE 359
BIO 103	Anatomy and Physiology 4 hrs
BIO 140	Molecular and Cellular Biology
	ics I, II
ENGR 100	Introduction to Engineering
ENGR 126	Engineering Computer Graphics 2 hrs
ENGR 216	Computer Methods for Engineers 2 hrs
ENGR 250	Principles of Engineering Material 3 hrs
ME 230	Thermodynamics
ME 265	Engineering Mechanics 4 hrs
ECE 305	Introduction Electrical Engineering 4 hrs
Professional Su	ubjects and Program Electives 46 hrs
BENG 325	Thermal Fluid Sciences for
	Bioengineering 4 hrs
BENG 351	Bio-Sensors and Instrumentation 4 hrs
BENG 370	Biomechanics I
BENG 364	Probability& Statistics in Bioengineering. 3 hrs
BENG 375	Biomaterials and Tissue Engineering 3 hrs
BENG 381	Bioprocessing
BENG 4671	Senior Design Project
Choose One Tr	rack: Bioengineering or Pre-Medical 21 hrs
	Track (21 credits)
	esign or Upper-Level Tech Elective courses from
	At least one course must be a Design Course (3
or 4 credits)	
ONE DESIGN	COURSE (3 or 4) – from list
BENG 410	(3) Bioinformatics
BENG 425	(3) Transport in Biosystems
BENG 470	(3) Biomechanics II
ENGR 450	(3) Nanosystems & MEMS in Medicine
IMSE 4675	(4) Six Sigma & Statistical Process
D (CE 1105	Improvement
IMSE 4425 ME 3601	(4) Human Factors Ergonomics(4) Design & Analysis of Machine Elements
	L TECH ELECTIVES
BENG 420	(3) Medical Imaging
BENG 449	(3) Controls & Microprocessors
BENG 464	(3) Biostat and Exp. Design
CHEM 490E	(3) Nano-biotechnology
CHEM 395	(3) Molecular Nanotechnology
ENGR 350 ME 410	(4) Nanotechnology(3) Finite Element Method
ME 442	(4) Control Systems Analysis
IMSE 421	(3) Engin Econ/Decision Analysis
IMSE 381	(3) Industrial Robotics
	L TRACK(21 credits)
	N COURSE (3 or 4) -list above
	VEL TECH ELECTIVES (6-7)
	r Technical courses from lists above
_	COURSES (11 credits)
The follow	ing four courses (11 credits):
CHEM 225	5 (3) Organic Chemistry I
CHEM 226	· · · · · · · · · · · · · · · · · · ·
CHEM 22	
DCHM 27	

BCHM 370 (3) Principles of Biochemistry

ADMISSION - CONSULT THE PRE-MED ADVISOR

ADDITIONAL COURSES ARE RECOMMENDED FOR PRE-MEDICAL STUDENTS PREPARING FOR MEDICAL SCHOOL

Engineering Mathematics

(Concurrent Degree)

The program in engineering mathematics at UM-Dearborn provides the student with an opportunity to extend his/her knowledge of the language of the scientist and to become more proficient in the application of mathematical reasoning to the formulation and solution of scientific problems in engineering. This program recognizes the ever-increasing demand that the changing physical and economic world imposes on the engineering profession. This program seeks to make available to the students the knowledge with which they will be better able to understand and to create the complex mathematical models that represent the world.

A current CECS undergraduate student majoring in Computer Engineering, Electrical Engineering, Industrial and Systems Engineering, Manufacturing Engineering, or Mechanical Engineering may pursue a concurrent Bachelor of Science in Engineering (BSE) degree in Engineering Mathematics. This makes it possible for an engineering student to earn two degrees at the same time: a BSE degree in Engineering Mathematics and a BSE degree in their principal engineering major. Both degrees must be earned at the same time.

The Engineering Mathematics degree requires a minimum of 14 credit hours of course work in advanced mathematics beyond the 16 credits of mathematics already required in the degree program of the student's principal engineering major. Approved courses for the BSE in Engineering Mathematics concurrent degree include:

MATH 404	Dynamical Systems	3 hrs
MATH 405	Integral Equations	3 hrs
MATH 412	First Course in Modern Algebra	3 hrs
MATH 413	Linear Algebra*	3 hrs
MATH 420	Stochastic Processes**	
MATH 425	Mathematical Statistics II	3 hrs
MATH 451	Advanced Calculus I	3 hrs
MATH 452	Advanced Calculus II	3 hrs
MATH 454	Fourier Series and Boundary Value	
	Problems	3 hrs
MATH 462	Mathematical Modeling	3 hrs
MATH 472	Introduction to Numerical Analysis	3 hrs
MATH 473	Matrix Computation	3 hrs
3.5.4 EETT 5.4.0	Matrix Computation	5 1113
MATH 513	Linear Algebra with Applications	
MATH 513 MATH 555	-	
	Linear Algebra with Applications	3 hrs

^{*}Note: Credit for only one from MATH 413 and MATH 513. ** Note: Credit for only one from MATH 420 and IMSE 506.

The following CECS graduate courses may also be used towards the Engineering Mathematics degree: ECE 555, 560, 567, 580; IMSE 505, 506, 510, 511; ME 518, 519, provided that,

- 1. a minimum of 9 hours is taken from the Mathematics department (MATH) courses listed above, and
- m. permission to take a graduate course is granted.

CIS Mathematics

(Concurrent Degree)

Current CECS undergraduate students majoring in Computer and Information Science (CIS), Digital Forensics, or Software Engineering (SE) may pursue a concurrent Bachelor of Science (BS) degree in CIS Mathematics. This makes it possible for CECS students to earn two degrees at the same time: a principal

BS degree in CIS, DF, or in SE and a separate concurrent BS degree in CIS Mathematics. Both degrees must be earned at the same time. The courses for the concurrent BS degree in CIS cannot be used as elective credits for the principal degree, but must be taken in addition to the 120-123 credits required for the BS degree in CIS, the BS degree in DF, or the BS degree in SE.

The BS in CIS Mathematics degree requires a minimum of thirty credits in mathematics courses, as follows:

Fourteen credits of mathematics courses required for the BS degree in CIS, DF or in SE*:

- Biv iii cis, i	
	Calculus I
MATH 116	Calculus II
MATH 217	Introduction to Matrix Algebra 2 hrs
OR	
MATH 227	Introduction to Linear Algebra 3 hrs
AND	
CIS 275	Discrete Structures

*Note: Students may elect MATH 227 instead of MATH 217 but only 14 credits from the courses above will count toward the degree.

Six credits from the following two courses*:

MATH 205	Calculus III for Engineering Students 3 hrs
OR	
MATH 215	Calculus III**
MATH 216	Differential Equations

*Note: Students may elect MATH 215 instead of MATH 205 but only 6 credits from the courses above will count toward the degree.

**Note: Calculus III is required for the SE degree and for the CIS-CS option degree; it must also be taken by CIS-IS option students as part of the requirements for the concurrent BS degree in CIS Mathematics.

A minimum of ten credits from the following courses:

i iiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiii	en creates from the following courses.	
MATH 315	Applied Combinatorics	3 hrs
MATH 372	Computing with Mathematica	3 hrs
MATH 390	Topics in Mathematics*	1-3 hrs
MATH 395	Elementary Number Theory	3 hrs
MATH 404	Dynamical Systems	3 hrs
MATH 405	Integral Equations	3 hrs
MATH 412	First Course in Modern Algebra	3 hrs
MATH 413	Linear Algebra**	3 hrs
MATH 420	Stochastic Processes***	3 hrs
MATH 425	Mathematical Statistics II	3 hrs
MATH 451	Advanced Calculus I	3 hrs
MATH 452	Advanced Calculus II	3 hrs
MATH 454	Fourier Series and Boundary	
	Value Problems	3 hrs
MATH 455	Functions of a Complex Variable with	
	Applications****	3 hrs
MATH 462	Mathematical Modeling	3 hrs
MATH 472	Introduction to Numerical Analysis	3 hrs
MATH 473	Matrix Computation.	3 hrs

^{*}Prior approval needed

The following CECS graduate courses may also be used towards the CIS Mathematics degree: CIS 451, 532, 551, 552; ECE 555, 560, 567, 580; IMSE 505, 506, 510, 511; ME 518, 519, provided that:

^{**}Credit for only one course from MATH 413, MATH 513, MATH 523

^{***}Credit for only one course from MATH 420, IMSE 506.

^{****}Credit for only one course from MATH 455, MATH 555.

- a minimum of nine hours is taken from the Mathematics department (MATH) courses in list C above, and
- b. permission to take a graduate course is granted.

Other Programs

Graduate Programs

A Master of Science in Engineering (MSE) degree is offered in automotive systems, computer engineering, electrical engineering, energy systems, industrial and systems, manufacturing systems, and mechanical engineering. A Master of Science (MS) degree is offered in computer and information science, engineering management, information systems and technology, program and project management, and software engineering. Also, a MSE/MBA offered jointly with Industrial and Manufacturing Systems and the College of Business. See the UM-Dearborn Graduate Catalog for admission requirements and complete program and course descriptions.

Changes in Policies and Rules

The College of Engineering and Computer Science reserves the right to effect changes in curricula, policies, and rules. Students should consult with the CECS Records and Advising Office (2000 Heinz Prechter Engineering Complex) for the applicable rules at the time of admission.

Course Offerings

A brief description of each course offered by the College of Engineering and Computer Science may be found in the following list. Other courses are described in the College of Arts, Sciences, and Letters and College of Business sections of this Catalog.

Bioengineering (BENG)

COURSE OFFERINGS

BENG 325 Thermofluid for Bioengineering

4.000 Credits

Must be enrolled in one of the following Colleges:

Coll of Engineering & Comp Sci

Must be enrolled in one of the following Classes:

Sophomore

Senior

Junior

Prerequisites: ENGR 216 and ME 230 and (ME 265 or 345)

This course is an introduction into mass and heat transport phenomena in biomedical systems. Basic mechanisms of fluid flow, heat transfer, and diffusion are presented and applied to biological objects (cells, tissues, organisms) and biomedical devices. Topics include mass, momentum, and energy conservation laws, physical properties of common and biological fluids, elements of fluid statics, control volume analysis, basics of fluid mechanics, conduction and convection heat transfer, diffusion, applications to hyper- and hypothermia, thermal ablation, and cryopreservation, basics of mass and heat transfer in the body.

BENG 351 Bio-Sensors & Instrumentation

4 000 Credits

Must be enrolled in one of the following Colleges: Coll of Engineering & Comp Sci Coll of Arts, Sciences&Letters Must be enrolled in one of the following Classes:

Senior

Junior

Prerequisites: ECE 305 and (ENGR 216 or ECE 270) and MATH 216 and BIOL 103 and BIOL 140

The course covers measurements in biological materials using a variety of sensor technologies along with electronic instrumentation design and use. Safety and FDA requirements are also presented.

BENG 364 Prob&Stat in Bioengineering

3.000 Credits

Must be enrolled in one of the following Colleges:

Coll of Engineering & Comp Sci

Must be enrolled in one of the following Classes:

Sophomore Senior Junior

Prerequisites: MATH 116 or MATH 114 or MPLS 215

Set theory, combinatorial analysis, probability and axioms, random variables, continuous and discrete distribution functions, expectations, Chebychevs inequity, weak law of large numbers, central limit theorem, sampling statistics and distributions, point and interval estimation, and linear regression.

BENG 370 Biomechanics I

4.000 Credits

Must be enrolled in one of the following Colleges:

Coll of Engineering & Comp Sci

Coll of Arts, Sciences&Letters

Must be enrolled in one of the following Classes:

Sophomore

Senior

Junior

Prerequisites: (ME 265 or ME 345) and MATH 216

The course provides a basic understanding of how the human body functions as a mechanical system. Review of mechanics. Musculoskeletal anatomy, statics and kinematics, muscle force redundancy, joint mechanics. Bone and soft tissue mechanics, muscle active force generation. Implant stress shielding and impact safety. Laboratory experiments directed at rehabilitation engineering, biological bone and tissue property measurement, bone and implant structural analysis, and impact safety.

BENG 375 Biomaterial Tissue Engrg

3.000 Credits

Must be enrolled in one of the following Levels:

Undergraduate

Must be enrolled in one of the following Classes:

Sophomore

Senior

Junior

Prerequisites: ENGR 250 and BIOL 140

The course provides a basic understanding of the structure, properties and therapeutic applications of biomaterials, as well as the opportunities and scientific and technological challenges of tissue engineering. It also provides an integrated and multidisciplinary biological-engineering approach and probes mechanisms and methods of evaluation of tissue/biomaterials and patient/device interactions. Further the course assesses current outcomes, current challenges and cutting edge technological solutions to medical problems, Laboratory topics include key biological concepts, clinical safety, tissue culture, biological cells/bioactive materials interaction, and scaffold testing.

BENG 425 Transport in Biosystems

3.000 Credits

Must be enrolled in one of the following Colleges:

Coll of Engineering & Comp Sci

Coll of Arts, Sciences&Letters

Must be enrolled in one of the following Classes:

Senior Junior

Prerequisites: ME 375 or BENG 325

The course introduces transport phenomena in biological and medical systems to students already familiar with basic thermal-fluid sciences. Topics include properties of body fluids and cell membranes, blood flow and solute and oxygen transport in biological systems, basic principles of pharmacokinetic analysis, transport phenomena in medical devices and artificial organs.

BENG 470 Biomechanics II

3.000 Credits

Must be enrolled in one of the following Colleges:

Coll of Engineering & Comp Sci

Coll of Arts, Sciences&Letters

Must be enrolled in one of the following Classes:

Senior Junior

Prerequisites: BENG 370

The course covers intermediate level subject matter on structural biomechanics. Topics include bone structure modeling, implant and fixation materials, analysis and design, ocular biomechanics, and head impact and injury.

Computer and Information Science (CIS)

COURSE OFFERINGS

CIS 112 Computer Literacy/Info Mgmt

3.000 Credits

This is a microcomputer literacy course with primary emphasis on the application tools of the word processor, spreadsheets, and database. Additional topics of computer terms, systems, and use in society are included. The course is intended for undergraduates in the College of Arts, Sciences, and Letters. No previous experience with computers is expected. (YR).

CIS 125 Survey of Computer Science

3.000 Credits

A survey of computer science topics, including history of computing, office productivity software, the internet, HTML, JavaScript, web design, algorithms, assemblers and compilers, gates and logic design, models of computation, artificial intelligence and expert systems, computing ethics, privacy issues, intellectual property. No credit for CIS majors. (F,W,S).

CIS 150 Computer Science I

4.000 Credits

Prerequisites: MATH 115 * or MATH 113 * or MPLS 116

Co-requisites: CIS 150L

This course provides a foundation for further studies in computer and information science. It emphasizes a structured approach to problem solving and algorithm development. Topics include principles of program design, coding, debugging, testing and documentation. Students are introduced to the Unified

Modeling Language for requirements analysis using use-cases and activity diagrams, an object-oriented programming language (C++), and the fundamentals of computer hardware, system software and components. The course will consist of three lecture hours and one two-hour laboratory. (F,W,S)

CIS 200 Computer Science II

4.000 Credits

Prerequisites: (MATH 115 or MPLS 116) and (CIS 150 or

IMSE 150 or CCM 150) and CIS 275* Co-requisites: CIS 200L CIS 275

This course presents techniques for the design, writing, testing and debugging of medium-sized programs, and an introduction to data structures (stacks, queues, linked lists) using the C++ programming language. C++ topics covered include pointers, templates and inheritance. The principles of UML modeling are also introduced. This course will consist of three lecture hours and one two-hour laboratory. (F,W,S)

CIS 205 C Programming

3.000 Credits

Prerequisites: ENGR 100 or (MATH 105 or MPLS 113)

A study of the C programming language. Students write several programs illustrating the use of C in science, engineering, and business. No credit for CIS Majors.

CIS 275 Discrete Structures I

4.000 Credits

Prerequisites: (MATH 115 or MPLS 11) and MATH 115

Co-requisites: CIS 200

This course introduces students to various topics in discrete mathematics, such as set theory, mathematical logic, trees, and graph theory. Applications to relational databases, modeling reactive systems and program verification are also discussed. (F, W,S)

CIS 285 Software Engineering Tools

3.000 Credits

Prerequisites: CIS 200 and CIS 275

This course will cover various CASE tools, such as UML modeling and code generation tools, configuration management tools, defect management tools, an integrated development environment for coding and debugging, unit and testing tools, and build tools. Students will learn these tools in a laboratory environment. This course will be comprised of one lecture hour and one two-hour laboratory. (F,W)

CIS 290 Topic in Programming Languages

2.000 Credits

Prerequisites: CIS 200

One significant programming language is covered in depth. The particular language changes from term to term. The language chosen might be Ada, C, MODULA 2, USP, PROLOG, or SMALLTALK.

CIS 294 Programming with Visual Basic

3.000 Credits

Prerequisites: CIS 200 or IMSE 200

An introduction to create professional-looking applications using the graphical user interface of Windows. Students learn how to create graphical objects and controls, write event driven code that responds to clicking on buttons, work with multiple forms and executable files. (F,S).

CIS 296 Java Programming

3.000 Credits

Prerequisites: CIS 200 or IMSE 200

Course covers Java Programming language, focusing on GUI development, distributed computing and network applications.

CIS 297 Intro to C Sharp

Prerequisites: CIS 200

This course provides an introduction to the C# programming language and the .NET Framework for the development of Windows game applications. Some discussion of DirectX programming and Xbox game development is also included. (W)

CIS 299 Internship

1.000 TO 3.000 Credits

Student works with an industrial sponsor in the area of CIS. Approval of Internship Coordinator required. (F,W,S).

CIS 306 Discrete Structures II

4.000 Credits

Prerequisites: CIS 275

This course introduces students to further topics in discrete mathematics, including theory of computation, more complexity theory, coding theory, and game theory.

CIS 310 Computer Org and Assembly Lang

4.000 Credits

Prerequisites: (MATH 115 or MPLS 116) and (CIS 200 or IMSE 200) and CIS 275

The architecture of computer systems and associated software. Topics include digital logic circuits, computer interfacing, interrupt systems, input/output systems, memory systems, assemblers and assembly language programming, and computer networks. (F,W,S).

CIS 350 Data Struc and Algorithm Anlys

4.000 Credits

Prerequisites: (MATH 115 or MPLS 116) and (CIS 200 or IMSE 200) and CIS 275 $\,$

This course focuses on data design and algorithm design. Data design topics include object-oriented discussions of hashing, advanced tree structures, graphs, and sets. Algorithm design topics include the greedy, divide-and-conquer, dynamic programming, backtracking and branch-and-bound techniques. A significant discussion of algorithm complexity theory, including time and space trade-offs and elementary computability theory, is included. (F,W,S)

CIS 3501 Data Struc & Alg Anlys for SE

4.000 Credits

Prerequisites: (CIS 200 or IMSE 200) and CIS 275 and CIS 285 * and MATH 115

This course focuses on data design and algorithm design for software engineers. Data design topics include object-oriented discussions of hashing, advanced tree structures, graphs and sets. Algorithm design topics include the greedy, divide-and-conquer, dynamic programming, backtracking and branch-and-bound techniques. A significant discussion of algorithm complexity theory, including time and space trade-offs and elementary computability theory, is included. (F,W,S)

CIS 375 Software Engineering I

4.000 Credits

Prerequisites: (CIS 350 or CIS 3501 or IMSE 350) or (ECE 370 and MATH 276) or (ECE 370 and ECE 276) and (COMP 270 or COMP 106 or COMP 220 or CPAS 40)

This course presents an in-depth treatment of the following software engineering topics: software engineering paradigms, requirements, specification, functional design, object-oriented design, user interface design, software verification and validation, and the maintenance and management of software engineering artifacts, as well as an introductory discussion of software reliability. Various phases of the software engineering process will be modeled using UML. (F,W)

CIS 376 Software Engineering II

4.000 Credits

Prerequisites: CIS 375

This course continues the formal development of the software engineering material begun in CIS 375. Topics covered include personal software process, team software process, formal methods, security, software architecture, software quality assurance, software fault tolerance, the evaluation of the effectiveness of human computer interaction and software reliability. (W,S)

CIS 381 Industrial Robots

3.000 Credits

Must be enrolled in one of the following classes:

Junior

Prerequisites: MATH 115

The course introduces students in engineering, management and computer science to modern robot technology and the application of this technology to improve productivity in manufacturing and assembly operations. The emphasis will be on applications of robot technology to production problems rather than on the extensive theory of robotics. (F,W,S).

CIS 387 Digital Forensics I

4.000 Credits

Must be enrolled in one of the following Levels:

Undergraduate

May not be enrolled in one of the following Colleges:

Coll of Ed, Health, & Human Ser

May not be enrolled in one of the following Classes:

Freshman

Prerequisites: (CIS 200 or ECE 270) and (CIS 310 * or

ECE 370 * or ECE 372 *)

This course takes a detailed, hands-on approach to study the procedures and techniques used to identify, extract, validate, document and preserve electronic evidence. Students completing this course will be familiar with the core computer science theory and practical skills necessary to perform basic computer forensic investigations, understand the role of technology in investigating computer-based crime, and be prepared to deal with investigative bodies at a basic level.

CIS 390 Topics in Computer Science

1.000 TO 3.000 Credits

Prerequisites: CIS 350 or CIS 3501 or IMSE 350 or (ECE 370 and ECE 276) or (ECE 370 and MATH 276)

A course designed to offer selected topics in an area of computer science. The specific topics will be announced (together with special prerequisites) each time offered. Students must elect different topics to take both CIS 390 and CIS 391. (OC).

CIS 391 Topics in Computer Science II

1.000 TO 3.000 Credits

Prerequisites: CIS 350 or CIS 3501 or IMSE 350 or (ECE 370 and ECE 276) or (ECE 370 and MATH 276)

A course designed to offer selected topics in an area of computer science. The specific topics will be announced (together with special prerequisites) each time offered. Students must elect different topics to take both CIS 390 and CIS 391. (OC).

CIS 399 Internship

1.000 TO 3.000 Credits

Student works with industrial sponsor in the area of CIS. Permission of Internship Coordinator required. (F,W,S).

CIS 400 Programming Languages

4.000 Credits

Prerequisites: (CIS 350 or IMSE 350 or CIS 3501) or (ECE 370 and MATH 276) or (ECE 370 and ECE 276)

Systematic study of programming languages with regard to their implementation, structures, and use. Languages are compared with regard to their various data types, data structures, operations, control structures, programming environments, and ease of use in solving various programming problems. (F,W).

CIS 405 Algorithm Analysis & Design 3.000 Credits

Prerequisites: CIS 350

This course investigates how to design efficient algorithms. Topics include asymptotic analysis, amortized analysis, divideand-conquer, dynamic programming, greedy algorithms, branch and bound, backtracking, lower bounds, NP-completeness and approximation algorithms.

CIS 421 Database Mgmt Systems

4.000 Credits

Prerequisites: CIS 350 or CIS 3501 or IMSE 351 or (ECE 370 and MATH 276)

An introduction to database systems, concepts, and techniques. Topics covered include: database environments, ER modeling, relational data model, object-oriented databases, database design theory and methodology, database languages, query processing and optimization, concurrency control, database recovery, and database security.

CIS 423 Dec Support and Exp Systems

3.000 Credits

Prerequisites: CIS 421

The application of artificial intelligence to building decision support and expert systems for management and other applications. Topics include fundamentals of artificial intelligence, knowledge representation and knowledge processing, tools for building expert systems (logic programming, expert shells), decision support system design (modeling and simulation), expert system design (knowledge engineering, learning). (F).

CIS 425 Information Systems

4.000 Credits

May not be enrolled in one of the following Classes:

Sophomore Freshman

Prerequisites: CIS 375 and CIS 421 *

This course is an introduction to the principles of information systems analysis and design and their role in business organizations. Topics include Systems Development Life Cycle (SDLC), using CASE (Computer Aided Software Engineering) tools for systems design and analysis, prototyping, Rapid Application Development (RAD), extreme programming, quality assurance through software engineering, and object-oriented systems design and analysis using UML (Unified Modeling Language). Participation in a major design project is a requirement for this course.

CIS 4261 Inf Sys Analysis & Design I

4.000 Credits

Prerequisites: CIS 375 and CIS 421 *

An introduction to the principles of information systems analysis and design and their role in business organizations. Topics include information systems strategy and planning, ethical issues in information systems, system modeling, clean-room system engineering, domain ontologies, UML, Enterprise Unified Process, e-business, and supply-chain management, deployment and support. Participation in a major design project is a requirement for this course. (F).

CIS 4262 Inf Sys Analysis & Design II

4.000 Credits

Prerequisites: CIS 4261

This course is a continuation of CIS 4261 and provides students with breadth and depth in the information systems area. Topics include web-based information systems, e-commerce, computer-supported collaborative work, workflow systems, data mining, and data warehousing. Participation in a major design project is a requirement of this course. (W).

CIS 427 Comp Networks and Dis Process

4.000 Credits

Prerequisites: (CIS 350 or CIS 3501 or IMSE 351) or (ECE 370 and MATH 276) or (ECE 370 and ECE 276) and IMSE 317

Study of the management aspects of computing networks and distributed systems. Topics include network architectures (ISO/OSI, TCP/IP, ATM), communication hardware (transmission media, network adaptors, switches), encoding, framing, error detection and correction, reliable transmission, data link control and LAN technology, internetworking, routing/congestion control, network design/management.

CIS 428 High Speed Network Admin

3.000 Credits

Prerequisites: CIS 427

The course requires students to setup and manage their own computer network in the lab. Topics include: overview of file servers, LAN configurations and protocols, server hardware (CPU, hard drives, memory), server clients, server installation, domains, user accounts, groups, rights, directories, permissions, applications, printers, other OS, monitoring, maintenance, high speed switching, ATM, video, routers, fire walls. (YR).

CIS 435 Web Technology

3.000 Credits

Must be enrolled in one of the following Levels:

Undergraduate

Must be enrolled in one of the following classes:

Senior Junior

Prerequisites: CIS 375 * or CIS 553 * or CIS 553

This course deals with the study of technologies used to design and implement multimedia web sites. Topics include web servers, HTML, CGI, scripting languages, Java applets, back-end database connectivity, web security, multimedia, XML. (F,W).

CIS 437 Advanced Networking

3.000 Credits

Must be enrolled in one of the following Colleges:

College of Business Prerequisites: CIS 427

Topics include an overview of the internet, congestion control, quality of service, internet multicasting, multimedia networking, mobile and wireless networks, vehicular networks, overlay networks, peer-to-peer networks, internet management (SNMP), and internet applications (web-HTTP and email-SMTP).

CIS 447 Intro Computr & Ntwrk Security

3.000 Credits

Must be enrolled in one of the following Colleges:

College of Business Prerequisites: CIS 450 *

This course will provide a broad-spectrum introduction to the fundamental principles of computer and network security. Topic will include security policies, models and mechanisms for confidentiality, integrity and availability, access control, authorization, cryptography and applications, threats and vulnerabilities in computer networks, key management, firewalls and security services in computer networks.

CIS 450 Operating Systems

3 .000 OR 4.000 Credits

Prerequisites: CIS 310 and (CIS 350 or CIS 3501 or IMSE 350) or (ECE 370 and MATH 276) or (ECE 370 and ECE 276) and IMSE 317 *

Introduction to computer operating systems. Process control, threads, concurrency, memory management, virtual memory, uniprocessor, multiprocessor, and real-time scheduling, I/O management, disk scheduling, file management, distributed processing, client/server, clusters, distributed process management security. (F,W).

CIS 451 Computer Graphics

3.000 Credits

Prerequisites: (MATH 217 or MATH 227) and CIS 350 or CIS 3501 or IMSE 350 or (ECE 370 and MATH 276) or (ECE 370 and ECE 276)

Basic geometrical concepts: graphics output primatives, twodimensional transformations, windowing and clipping, threedimensional viewing, visible surface detection methods, and graphical user interfaces. (F).

CIS 452 Inf Vis & Multimedia Gaming

3.000 Credits

Must be enrolled in one of the following Colleges:

College of Business

Must be enrolled in one of the following classes:

Senior

Prerequisites: CIS 451

This course introduces basic techniques for digital animation, computer and video games, and web multimedia. Topics include the process of creating animated video clips from start to finish, including story creation, storyboarding, modeling, animation, and post-production; several key techniques for video editing

and motion generation, including keyframe, motion capture editing, collision detection, particle systems, physical simulation, and real-time rendering; techniques for web animation and multimedia; and internet gaming.

CIS 456 Windows Programming

3.000 Credits

Prerequisites: CIS 350

This course covers the core tenets of the Microsoft Foundation Class (MFC) or similar package and Windows programming. The emphasis will be on the relationship between Windows Operating System and MFC. Windows OS has three major components: user, graphics device interface (GDI), and kernel. User is a module that controls input devices, GDI is a module that services output devices, and kernel controls internal resources. These three components are called the API and communicate with MFC. Projects will be assigned to simulate the major components of API using MFC. (YR)

CIS 467 Digital Forensics II

4.000 Credits

May not be enrolled in one of the following Colleges:

Coll of Ed, Health, & Human Ser

College of Business

May not be enrolled in one of the following Classes:

Freshman

Prerequisites: (CIS 427 * or ECE 471 *) and (CIS 387 or

ECE 387)

This course is a continuation of Digital Forensics I and will focus on Internet Forensics. Students will examine in-depth concepts in Internet evidence collection and preservation, as well as applications of contemporary commercial forensic investigative software.

CIS 474 Compiler Design

3.000 Credits

Prerequisites: CIS 350 or CIS 3501 or IMSE 350 or (ECE 370 and MATH 276)

Principles of language compilation. Introduction to formal languages. Lexical analysis, top-down and bottom-up parsing, code generation and optimization. Error handling and symbol table management. Run-time storage management. Programming language design. Introduction to compiler-writing tools such as LEX and YACC. (F,W).

CIS 475 Software Engineering Seminar

3.000 Credits

Prerequisites: CIS 376

The focus of this course is on management issues related to modern software engineering practice. Students read and discuss papers written by master software engineering professionals. Seminar topics discussed include: management of software engineering processes, software measurement, software engineering ethics, and legal issues related to professional practice. (W, S).

CIS 476 Soft Arch & Design Patterns

3.000 Credits

Must be enrolled in one of the following Colleges:

Coll of Engineering & Comp Sci

Prerequisites: CIS 375

This course focuses on design patterns in object-oriented programming. This course begins with an overview of UML and

a review of object-oriented programming and then moves on to various structural, behavioral and creational patterns, including: facades, adaptors, bridges, factories and the template method. Analysis of case studies will also be discussed. Using various modern software tools, students will apply various design patterns to real-world software design problems to gain complete practical understanding. (F,W)

CIS 479 Artificial Intelligence

3.000 Credits

Prerequisites: CIS 350 or CIS 3501 or IMSE 350 or (ECE 370 and MATH 276) or (ECE 370 and ECE 276)

This course introduces students to basic concepts and methods of artificial intelligence from a computer science perspective. Emphasis of the course will be on the selection of data representations and algorithms useful in the design and implementation of intelligent systems. The course will contain an overview of one AI language and some discussion of important applications of artificial intelligence methodology. (S).

CIS 487 Computer Game Design & Impel

3.000 Credits

Must be enrolled in one of the following Levels:

Undergraduate

Must be enrolled in one of the following Colleges:

Coll of Engineering & Comp Sci

Must be enrolled in one of the following classes:

Senior Junior

Prerequisites: CIS 375 *

This course deals with the study of the technology, science and art in the creation of computer games. The focus of the course will be hands-on development of computer games. Students will study a variety of software technologies relevant to computer game design, including programming languages, scripting languages, operating systems, files systems, networks, simulation engines and multi-media design systems. Lecture topics will be taken from several areas of computer science: simulation and modeling, computer graphics, artificial intelligence, real-time processing, game theory, software engineering, human computer interaction, graphic design and game aesthetics. (F).

CIS 488 Computer Game Design II

3.000 Credits

Must be enrolled in one of the following Colleges:

Coll of Engineering & Comp Sci

Must be enrolled in one of the following classes:

Senior Junior

Prerequisites: CIS 487

This course is a continuation of the material studied in CIS 487. The focus of the course will be hands-on development of computer game development tools (e.g. game engines). Students will study a variety of software technologies relevant to computer game design, including: 3D graphics, computer animation, data-driven game design, multiplayer game programming, and game AI. Lecture topics will be taken from several areas of computer science: simulation and modeling, computer graphics, artificial intelligence, game theory, software engineering, human computer interaction and game content development. (W)

CIS 490 Advanced Topics

1.000 TO 3.000 Credits

Prerequisites: CIS 350 or CIS 3501 or IMSE 350 or (ECE 270 and ECE 276) or (ECE 370 and MATH 276)

This course is intended for seniors and graduate-level students in CIS. For specific topic, consult current semester's Schedule of Classes. (OC).

CIS 491 Research Project I

1.000 TO 4.000 Credits

Must be enrolled in one of the following Major fields of study:

CIS/Information Systems

Must be enrolled in one of the following classes:

Senior

Provides the advanced student with the opportunity to undertake a research project under the supervision of a faculty member. At least two weeks prior to registration in the semester when such a course is to be elected, an interested student must submit to the CIS chair and one CIS faculty member a written request for permission to elect a research course on the appropriate form available in the CIS Office. The request will include a description of the proposed research project. The CIS chair will review the proposal with faculty members to ascertain availability of relevant faculty supervision and to establish appropriate credit. Grades will be granted on a Pass/Fail (S/E) basis exclusively. (F,W,S).

CIS 492 Research Project II

1.000 TO 4.000 Credits

Must be enrolled in one of the following Major fields of study:

CIS/Information Systems

Must be enrolled in one of the following classes:

Senio

This course is a second registration for a research project in CIS. (F,W,S).

CIS 493 Independent Study I

1.000 TO 4.000 Credits

Readings or analytical assignments in accordance with the needs and interests of those enrolled and agreed upon by the student and an instructor, which shall not duplicate a formal course offering. Permission of instructor required. (F,W,S).

CIS 494 Independent Study II

1.000 TO 4.000 Credits

This course is a second registration for an independent study in CIS. Permission of instructor required. (F,W,S).

CIS 495 Design Seminar

4.000 Credits

Must be enrolled in one of the following Colleges:

College of Business

Must be enrolled in one of the following classes:

Senior

Prerequisites: CIS 375

Students participate in the design and implementation of a major software project. Seminar topics discussed include: computing ethics and professional practice in computer science. (F,W,S).

CIS 4951 Design Seminar I

2.000 Credits

Must be enrolled in one of the following Colleges:

Coll of Engineering & Comp Sci

Prerequisites: CIS 375

Students participate in the design and implementation of a major software project. Seminar topics discussed include: computing ethics and professional practice. (F,W,S)

CIS 4952 Design Seminar II

2.000 Credits

Must be enrolled in one of the following Colleges:

Coll of Engineering & Comp Sci

Prerequisites: CIS 4951

Students continue to participate in the design and implementation of a major software project. Seminar topics discussed include: computing ethics and professional practice. (F,W,S)

CIS 496 Design Seminar for SE

4.000 Credits

Prerequisites: CIS 376 and CIS 476

Software engineering students participate in the design and implementation of a major software project. Seminar topics discussed include: computing ethics and professional practice in software engineering.

CIS 4961 Design Seminar for SE I

2.000 Credits

Must be enrolled in one of the following Colleges:

Coll of Engineering & Comp Sci

Prerequisites: CIS 376

Software engineering students participate in the design and implementation of a major software project. Seminar topics discussed include: computing ethics and professional practice in software engineering. (F,W,S)

CIS 4962 Design Seminar for SE II

2.000 Credits

Must be enrolled in one of the following Colleges:

Coll of Engineering & Comp Sci

Prerequisites: CIS 4961 and CIS 476 *

Software engineering students continue to participate in the design and implementation of a major software project. Seminar topics discussed include: computing ethics and professional practice in software engineering.

CIS 499 Internship

1.000 TO 3.000 Credits

Student works with industrial sponsor in area of CIS. Approval of Internship Coordinator required. (F,W,S).

Engineering (ENGR)

COURSE OFFERINGS

ENGR 100 Intro to Eng and Computers

2.000 Credits

Must be enrolled in one of the following Colleges:

Coll of Engineering & Comp Sci

Co-requisites: ENGR 100L

This course gives students a general introduction to the engineering profession and covers some of the elementary skills that students need in order to be successful in their engineering studies. The course covers topics and problems pertaining to mechanical, industrial/manufacturing, and electrical/computer

engineering. Aspects of engineering analysis and design are highlighted. Computer skills and communication skills (both oral and written) are emphasized throughout the semester. Two-hour lecture/two-hour laboratory.

ENGR 126 Engineering Computer Graphics

2.000 Credits

Must be enrolled in one of the following Colleges:

Coll of Engineering & Comp Sci

May not be enrolled in one of the following Classes:

Graduate

Co-requisites: ENGR 126L

Principles of solid modeling and the representation of solid models using both conventional drawing and computer graphics. Orthographic representation of points, lines, planes and solids. Reference planes. Auxiliary views. Sections, conventions, dimensioning. Fundamentals of computer-assisted graphics in engineering disciplines. Three-dimensional modeling using computer graphics software. Two-hour lectures and two-hour laboratory.

ENGR 216 Computer Meth for Engineers

2.000 Credits

Must be enrolled in one of the following Levels:

Undergraduate

Must be enrolled in one of the following Colleges:

Coll of Engineering & Comp Sci

Must be enrolled in one of the following classes:

Senior

Sophomore

Freshman

Junior

Prerequisites: ENGR 100 and ENGR 126* and MATH 216 * and (MATH 217 * or MATH 227 *)

Computer programming in C (or one of its derivatives) and application to basic numerical techniques. Numerical integration, solution of systems of linear equations, root finding, curve fitting, error properties, numerical precision. (F,W,S).

ENGR 250 Principles of Eng Materials

3.000 Credits

Must be enrolled in one of the following Colleges:

Coll of Engineering & Comp Sci

May not be enrolled in one of the following Classes:

Senior

Prerequisites: (CHEM 144 or CHEM 134) and (CHEM 146

* or CHEM 136 *) and MATH 115 *

Co-requisites: ENGR 250R

An introductory course in engineering materials. Particular emphasis is given to the correlation of material properties and internal structures; structure of materials; stress- strain curves; temperature effects; phase diagrams; ferrous and non-ferrous alloys; ceramics; polymers; composites; electrical, magnetic, and optical properties; corrosion and failure. Two-hour lectures and two one-hour recitations.

ENGR 290 Study Abroad Technical Subj

1.000 TO 4.000 Credits

Must be enrolled in one of the following Colleges:

Coll of Engineering & Comp Sci

Must be enrolled in one of the following classes:

Senior

Sophomore

Freshman

Junior

200-level study abroad course in technical subjects.

ENGR 300 Creative Problem Solving

1.000 Credits

Principles of creative thinking, innovation, and group dynamics will be examined. The steps of creative problem solving will be presented and used in a practice problem: 1) problem definition, 2) verbal brainstorming and other idea-generating methods, 3) creative idea evaluation, 4) idea judgment and decision making, and 5) implementation. Finally, the two phases of the Pugh method (creative design evaluation) will be studied in a practical application.

ENGR 332 Speech for Professionals

3.000 Credits

Professionals must effectively communicate in the technical and business environment of a company organization. The course pays particular attention to verbal communications within and between organizations, focusing on multiple audiences and their varying needs for information. Stressing audience awareness, organization, clarity and efficiency in speaking, it will improve speaking skills necessary for confident verbal presentations such as professional briefings and conferences.

ENGR 350 Nanoscience and Nanotechnology

4.000 Credits

Must be enrolled in one of the following Levels:

Undergraduate

Must be enrolled in one of the following Colleges:

Coll of Engineering & Comp Sci

Coll of Arts, Sciences & Letters

Must be enrolled in one of the following Major fields of study:

Biochemistry

Biological Sciences

CIS/Computer Science

CIS/Information Systems

Chemistry (ACS Certified)

Chemistry (Instructional)

Computer Engineering

Electrical Engineering

Engineering

Environmental Science

Environmental Studies

Industrial & Systems Engin

Manufacturing Engineering

Mechanical Engineering

Microbiology

Physics

Software Engineering

Must be enrolled in one of the following Classes:

Senior Junior

Prerequisites: PHYS 151 and CHEM 124

The terms "nanoscience" and "nanotechnology" have come to mean many different scientific and technical disciplines. The course will introduce students to the fundamentals of nanoscience and nanotechnology. Interesting phenomena about individual nanometer scale objects will be discussed. The difference in properties of objects of nanometer scale, containing hundreds or thousands of atoms and those exhibited by individual atoms or molecules or the properties of materials at the macroscale with which we are most familiar will be covered. The analytical techniques that are used to characterize these objects will be discussed. The manufacturing techniques used to make these objects along with their applications will be covered. Cost benefit analysis of nanotechnology and its future will be discussed. (YR)

ENGR 390 Study Abroad Technical Subj

1.000 TO 4.000 Credits

Must be enrolled in one of the following Colleges:

Coll of Engineering & Comp Sci

Must be enrolled in one of the following Classes:

Senior

Sophomore

Freshman

Junior

300-Level study abroad topics in technical subjects.

ENGR 400 Appl Business Tech for Engr

3.000 Credits

Must be enrolled in one of the following Levels:

Undergraduate

Professional Development

Must be enrolled in one of the following Classes:

Senior

Post-baccalaureate NCFD

This course will introduce the students those business skills/tools that will be needed in their jobs soon after graduation and will make them better and well-rounded engineers. They will be able to function better within today's global business environment. The major topics of the course are management finance including cost accounting, organizational behavior, program and project management and business related system thinking. Three hours of lecture per week.

ENGR 490 Study Abroad Technical Subj

1.000 TO 4.000 Credits

Must be enrolled in one of the following Colleges:

Coll of Engineering & Comp Sci

Must be enrolled in one of the following Classes:

Senior

Sophomore

Freshman

Junior

400-level study abroad course in technical subjects.

Electrical and Computer Engineering (ECE)

COURSE OFFERINGS

ECE 210 Circuits

4.000 Credits

Prerequisites: (MATH 116 or MPLS 215) and PHYS 151 *

Co-requisites: ECE 210L

Fundamental laws, electrical elements and sources, energy and power. DC analysis of linear circuits. Node and mesh analysis. Operational amplifiers and op-amp circuits, Thevenin and Norton theorems. Sinusoidal steady-state response and the phasor concept. Introductory concepts on complex frequency, average power in AC circuits. Transient responses. Three lecture hours per week and one three-hour laboratory per week.

ECE 270 Computer Methods in ECE I

4.000 Credits

Prerequisites: ENGR 100

Covers structured and object-oriented computer programming concepts in the context of the C/C++ programming language and engineering applications. Four lecture hours per week with programming assignments.

ECE 273 Digital Systems

4.000 Credits

Prerequisites: ENGR 100 Co-requisites: ECE 273L

Introduction to digital logic. Topics include numbers and coding systems; Boolean algebra with applications to logic systems; Karnaugh and Quine-McCluskey minimization; combinatorial logic design; flip-flops; sequential network design; and design of digital logic circuits. Three lecture hours per week and one three-hour laboratory per week.

ECE 276 Discrete Math in Computer Engr

4.000 Credits

Prerequisites: (MATH 116 or MPLS 215) and ECE 273 *

An introduction to fundamental concepts of discrete mathematics for computer engineering. Topics will be chosen from set theory, partially ordered sets, lattices, Boolean algebra, semi-groups, rings, graphical representation of algebraic systems, graphs, and directed graphs. Applications in various areas of computer engineering will be discussed. (YR).

ECE 299 Internship

3.000 Credits

Must be enrolled in one of the following Classes:

Senior

Junior

This is a Cooperative Education course. Students wishing to experience a work experience before graduation may elect to participate in the Cooperative Education Program (minimum of two terms). (F,W,S).

ECE 300 Signals and Systems

4.000 Credits

Prerequisites: ECE 210 and (MATH 217* or MATH 227 *) and MATH 216

Signals and systems representation and classification. Impulse response and convolution integral. Fourier analysis of continuous time signals and systems. Laplace transforms with applications to linear system analysis. Introduction to computer software for solving problems involving signals and systems. Three lecture hours and three recitation hours per week.

ECE 305 Intro to Electrical Eng

4.000 Credits

May not be enrolled in one of the following Major fields of study:

Electrical Engineering

Prerequisites: PHYS 151 and MATH 205 and (MATH 217

* or MATH 227 *) Co-requisites: ECE 305L

Introduction to electrical and electronic circuits, machinery, and instrumentation. Topics include Kirchoff's Laws, Thevenin and Norton theorems, sinusoidal and transient circuit analysis, numerical methods, solid state electronics, motors and generators, measuring instruments. Three lecture hours and one three-hour laboratory analysis. Not open to ECE students.

ECE 311 Electronic Circuits I

4.000 Credits

Prerequisites: ECE 210 and CHEM 144 and (COMP 270 * or COMP 106 * or COMP 220 * or COMP 280 * or CPAS 40)

Co-requisites: ECE 311L

Terminal characteristics and biasing of semiconductor diodes, bipolar and field-effect transistors, operational amplifiers. Rectifiers, amplifiers, and logic. Design projects. Three lecture hours and one three hour laboratory per week.

ECE 314 Filter Design

3.000 Credits

Prerequisites: ECE 311 and ECE 317

Review of filter descriptions, transfer functions, and frequency response characteristics; first and second order passive and active filters; biquad circuits; filter transformations. Butterworth, Chebyshev, and Elliptic filters; OPAMP realization of active filters; sensitivity analysis of active circuits. Three lecture hours per week.

ECE 316 Computer Electronics

.000 TO 3.000 Credits

Prerequisites: ECE 210 and ECE 273 and (COMP 270 * or COMP 106 * or CPAS 40 or COMP 220 *)

Design of selected electronic circuits such as signal conditioning amplifiers. Switching and digital logic circuits, using FET and BJT devices, A/D and D/A converters. Two-hour lecture and one three-hour lab per week. (YR).

ECE 317 Electronic Signals and Systems

4.000 Credits

Must be enrolled in one of the following Levels:

Undergraduate

Must be enrolled in one of the following Classes:

Senior

Junior

Prerequisites: MATH 216 and (MATH 217 * or MATH 227 *) and ECE 311 *

Signals and systems representation and classification. Impulse response and convolution integral. Laplace transforms with applications to linear electronic systems analysis. Fourier series analysis for analyzing harmonic distortion. Frequency response and filter design. Four lecture hours per week.

ECE 3171 Analog & Discrete Sig & Sys

4.000 Credits

Must be enrolled in one of the following Colleges:

Coll of Engineering & Comp Sci

Must be enrolled in one of the following Classes:

Senior

Junior

Prerequisites: MATH 216 and ECE 311 * and (MATH 217 * or MATH 227 *)

Signals and systems representation and classification. Impulse response and convolution integral. Laplace and Z transforms with applications to linear system analysis. Fourier series Fourier Transform and Discrete Fourier Transform, Frequency response, Filter design. Four lecture hours per week.

ECE 319 Electromagnetic Compatibility

4.000 Credits

Prerequisites: ECE 311

Introduction, cabling, grounding, balancing and filtering, passive components, shielding, digital circuit noise and PCB layout, radiation, ESD, regulations, demos, experiments, lab projects and guest lectures. Three Lecture hours and one three-hour laboratory per week.

ECE 321 Electromagnetic Fields/Waves

3.000 Credits

Prerequisites: ECE 311 *

Vector analysis; static electric field; steady electric currents; static magnetic fields; time-varying fields and Maxwell's equations; plane electromagnetic waves. Three lecture hours per week.

ECE 329 Intro to Computer Music

4.000 Credits

Must be enrolled in one of the following Classes:

Senior Junior

Prerequisites: MATH 105

This course will introduce students to methods and technologies of computer music. The basics of digital audio will be covered, including sampling, quantization, and compression standards. Various analysis tools will be covered, including the Fourier transform and windowing techniques. Mathematical models of physical instruments will be introduced. Various sound synthesis strategies will be introduced: wave tables, additive synthesis, subtractive synthesis, frequency modulation, and granular synthesis.

ECE 351 Bio-Sensors & Instrumentation

4.000 Credits

Must be enrolled in one of the following Colleges:

Coll of Engineering & Comp Sci Coll of Arts, Sciences&Letters

Must be enrolled in one of the following Classes:

Senior Junior

Prerequisites: ECE 305 and (ENGR 216 or ECE 270) and MATH 216 and BIOL 103 and BIOL 140

The course covers measurements in biological materials using a variety of sensor technologies along with electronic instrumentation design and use. Safety and FDA requirements are also presented.

ECE 365 Control Syst Analysis & Design

4.000 Credits

May not be enrolled in one of the following Major fields of study:

Electrical Engineering

Prerequisites: ECE 305 or ME 345

Co-requisites: ECE 365L

System and signal representation, elementary modeling of physical systems. Laplace transform, transfer functions and block diagrams representation. State variable representation. Concept of feedback, and transient and frequency response methods. System stability criteria. Control system design. Three lecture hours and one three-hour laboratory per week. (Not open to ECE students.)

ECE 370 Adv Soft Techn in Comp Engr

4.000 Credits

Prerequisites: ECE 270 and ECE 273 *

Advanced concepts and techniques of modular object oriented and structured programming; representative real-world computer engineering applications including data structures, search and sorting. A term project is required. Four lecture hours per week. (F,W,S).

ECE 371 Information Structures

3.000 Credits

Prerequisites: ECE 370 or ECE 274

Fundamentals of computer data structures. Introduction to abstract data types. Characteristics and implementation of structured data types including arrays, stacks, queues, linked lists, generalized lists, trees, and graphs. Algorithms and applications of data structures in sorting and searching. Considerations of algorithm efficiency and complexity. Engineering applications and design. Three lecture hours per week.

ECE 372 Intro to Microprocessors

.000 OR 4.000 Credits

Prerequisites: (ECE 270 and ECE 273) or CIS 310) and (COMP 270 or COMP 106 or COMP 220 or CPAS 40)

Introduction to operation, interfacing, and applications of microcomputers and microprocessor-based systems. Assembly language programming, interrupts and interfacing. Three lecture hours and one three-hour laboratory per week.

ECE 375 Intro to Comp Architecture

4.000 Credits

Prerequisites: ECE 270 and ECE 273 and (ECE 276 * or MATH 276 *) and ECE 372 *

Introduction to architecture of mini- and mainframe computers. CPU, memory, and I/O characteristics. Introduction to parallel architectures and hardware design languages. Case studies of popular computer systems and design considerations. A design project is required. Three lecture hours and one laboratory hour per week.

ECE 3801 Intro to Signals and Systems

3.000 Credits

Must be enrolled in one of the following Levels:

Undergraduate

May not be enrolled in one of the following Major fields of

Electrical Engineering

May not be enrolled in one of the following Classes:

Freshman

Prerequisites: ECE 210 and MATH 216

Spectral characterization of periodic and aperiodic signals. Continuous-time filters. Frequency response. Sampling and Fourier Analysis. Discrete time signals. Input-output relationships in discrete-time systems, including impulse response, transfer function, and frequency response. Design and analysis of digital filters - finite impulse response (FIR) and infinite impulse response (IIR). Matlab projects will be assigned. Three lecture hours per week.

ECE 385 Elec Materials and Devices

3.000 Credits

Prerequisites: ECE 311 * and CHEM 144

Introduction to properties of conductors, semi-conductors, and insulators. Definitions of stress and strain. Description of the mechanical behavior of solids. Characterization of selected materials; circuit models for resistors, capacitors, inductors, junction and field-effect transistors, etc. Three lecture hours per week.

ECE 387 Digital Forensics I

4.000 Credits

May not be enrolled in one of the following Levels:

Rackham

Graduate

May not be enrolled in one of the following Colleges:

Coll of Ed, Health, & Human Ser

College of Business

May not be enrolled in one of the following Classes:

Freshman

Prerequisites: (ECE 270 or CIS 200) and (ECE 370 * or

ECE 372 * or CIS 310 *)

This course takes a detailed, hands-on approach to study the procedures and techniques used to identify, extract, validate, document and preserve electronic evidence. Students completing this course will be familiar with the core computer science theory and practical skills necessary to perform basic computer forensic investigations, understand the role of technology in investigating computer-based crime, and are prepared to deal with investigative bodies at a basic level.

ECE 390 Selected Topics in ECE

1.000 TO 3.000 Credits

Special topics in ECE according to student's interest and availability of instructors and equipment.

ECE 399 Internship/Co-op

2.000 Credits

Must be enrolled in one of the following Classes:

Senior Junior

A four-month professional work experience period of the Engineering Internship Program, integrated and alternated with the classroom terms.

ECE 411 Electronics II

4.000 Credits

Prerequisites: ECE 301 and ECE 311

Review of solid state devices and their physical properties, introduction to the state of art devices, design of operational amplifiers, oscillators, switching and digital circuits. A project will be required. Three lecture hours per week and one three-hour laboratory per week.

ECE 413 Intro to VLSI Design

3.000 Credits

Prerequisites: ECE 273 and ECE 311

Introduction to digital systems and VLSI, CMOS fabrication, layout and CMOS integrated circuits, basic principles of MOSFET theory, CMOS logic circuits, subsystem design, Architecture design and HDL, CLSI chip design, advanced topics, laboratory consist of a series of design projects. Three lecture hours per week.

ECE 414 Electronic Systems Design

4.000 Credits

Prerequisites: ECE 311 and (ECE 317 * or ECE 3171 *)

Review of solid state device characteristics and circuit analysis. Design of selected electronic circuits such as operational amplifiers, power amplifiers, power supplies, oscillators, switching and digital circuits to further illustrate analysis and design of representative electronic circuits using classical and computer-aided design techniques. Four lecture/laboratory per week.

ECE 415 Power Electronics

4.000 Credits

Prerequisites: (ECE 317 or ECE 3171) and ECE 385

Introduction to power electronic circuit analysis and design. Power electronic circuits, power converters, power semiconductors. Time domain analysis emphasized. A design project is required. Four lecture/laboratory hours per week.

ECE 420 EMC Measurement and Testing

3.000 Credits

Prerequisites: ECE 319

Introduction to EMC measurements, RF measurement fundamentals, EM waves, radiation mechanisms, measurement and measurement systems, screened rooms, open field test sites, practical measurements, conducted emission measurements, radiated emission measurements, radiated immunity, conducted immunity and electrostatic discharge. Projects will be assigned. (YR).

ECE 428 Cloud Computing

3.000 Credits

Must be enrolled in one of the following Major fields of study:

Computer & Information Science

Computer Engineering

Electrical Engineering

Industrial & Systems Engin

Mechanical Engineering

Software Engineering

Must be enrolled in one of the following Classes:

Senior Junior

Prerequisites: ECE 270

Cloud computing represents the emerging Internet-based services/platforms with elastic and scalable computation powers operating at costs associated with service. Topics may include advanced web technologies (AJAX and Mashup), distributed computing models and technologies (Hadoop and Map Reduce), Infrastructure-as-a-Service (IaaS), Software as a Service (SaaS), Platform-as-a-Service (PaaS), virtualization, parallelization, security/privacy, and other issues in cloud computing. This course will also explore the current challenges facing cloud computing. Course work will include homework assignments, presentations and a term project. Students cannot take both ECE 428 and ECE 528 for degree credit. Three lecture hours per week

ECE 431 Electrical Eng Design

4.000 Credits

Prerequisites: ECE 311 and ECE 373 and ECE 493*

The course is conducted as a guided project design course with the class divided into teams and assigned a specific design project. Periodic progress reports are submitted during the term. A final written report and an oral presentation including demonstration are required at the end of the term. Cost analysis, evaluation of design alternatives and application of engineering principles are emphasized. Two scheduled contact hours and six hours open laboratories per week.

ECE 432 Electrical Eng Design

6.000 Credits

Prerequisites: ECE 311 and ECE 372 and ECE 493 *

The course is conducted as a guided project design course over a two-semester period with the class divided into teams and assigned a specific design project. Periodic progress reports are submitted during the term. A final written report and an oral presentation including demonstration are required at the end of the term. Cost analysis, evaluation of design alternatives and application of engineering principles are emphasized. Two scheduled contact hours and six hours open laboratories per week.

ECE 433 Intr to Multimedia Technolgies

4.000 Credits

Must be enrolled in one of the following Levels:

Undergraduate

Must be enrolled in one of the following Classes:

Senior Junior

Prerequisites: ECE 311 or ECE 370

This course will introduce students to basic terminology and methods of multimedia. Basic concepts of digital audio will be reviewed, including frequency, sampling, and popular compression schemes. Concepts of digital images will be introduced, such as resolution, color theory, and compression formats. Basic concepts of digital video and animation will be introduced. Relevant web technologies will be reviewed. Four lecture hours per week.

ECE 434 Machine Learning in Engin

4.000 Credits

Must be enrolled in one of the following Levels:

Undergraduate

Must be enrolled in one of the following Classes:

Senior Junior

Prerequisites: ECE 370

Introduce fundamental theories and basic techniques in machine learning with an emphasis on engineering applications. Topics include learning concepts, search algorithms, neural networks, fuzzy learning, paradigms for problem solving using machine learning. (F, W).

ECE 435 Intro to Mobil/Smrt Dev & Tech

4.000 Credits

Must be enrolled in one of the following Major fields of study:

Computer Engineering

Electrical Engineering

Software Engineering

Must be enrolled in one of the following Classes:

Senior Junior

Prerequisites: ECE 372

This class will introduce students to the technology used in mobile/smart devices and mobile communication networks. Various hardware and software aspects will be introduced, with particular emphasis on the constraints intrinsic to such systems. Students will get an overview of various mobile operating systems and how to develop software for mobile devices. Four lecture hours per week.

ECE 436 Elec Machines & Hybrid Drives

4.000 Credits

Must be enrolled in one of the following Major fields of study:

Computer Engineering

Electrical Engineering

Software Engineering

Must be enrolled in one of the following Classes:

Senior Junior

Prerequisites: ECE 311

This is an introductory course on electric machines and drive systems and their application in EV, HEV, PHEV and FCV powertrains. The objectives are to familiarize the students with the basic concepts of electromechanical energy conversion and electric drive systems. Students are expected to be able to analyze and design electric drive systems for automotive powertrain applications. The topics covered in this course include DC machines, induction machines, permanent magnet synchronous machines, and switched reluctance motors and drives. Case studies in automotive applications such as electric and hybrid drivetrains will be discussed. Four lecture hours per week.

ECE 4361 Electric Machines and Drives

4.000 Credits

Must be enrolled in one of the following Major fields of study:

Computer & Information Science

Computer Engineering

Electrical Engineering

Industrial & Systems Engin Mechanical Engineering

Software Engineering

Must be enrolled in one of the following Classes:

Senior Junior

Prerequisites: ECE 311

This is an introductory course on electric machines and drive systems and their application in HEV/PHEV powertrain and other industrial and residential systems. The objectives are to familiarize the students with the basic concepts of electromechanical energy conversion and electric drive systems. Students are expected to be able to analyze and design electric drive systems for automotive, industrial, and residential applications. The topics covered in this course include DC machines, induction machines, permanent magnet synchronous machines, and switched reluctant motors and drives. Case studies in automotive applications such as electric and hybrid drivetrains, industrial and residential electric variable speed drive systems, will be discussed. Students cannot take both ECE 436 and ECE 4361 for credit. Four lecture hours per week.

ECE 438 Web Engr: Prin & Tech

4.000 Credits

Must be enrolled in one of the following Major fields of study:

Computer Engineering

Electrical Engineering

Software Engineering

Must be enrolled in one of the following Classes:

Senior

Junior

Prerequisites: ECE 311 or ECE 370

Advanced concepts and techniques of web technology, focusing on interactive applications; real-world web engineering applications including data persistence, web security, hardware/software issues and asynchronous client/server communication. A term project is required. Four lectures per week.

ECE 443 Intr to Electric Power Systems

3.000 Credits

Prerequisites: ECE 317 or ECE 3171

This course will introduce students to basic methods of electric power systems. Topics include AC circuits, phasors, complex power and complex impedance, transformers, per unit system, transmissions lines, power flow, economic dispatch, real and reactive power control, symmetric and unsymmetric faults, transient stability, relaying and protection. Three lecture hours per week.

ECE 4431 Vehicular Pwr Sys & Loads

4.000 Credits

Must be enrolled in one of the following Colleges:

Coll of Engineering & Comp Sci

Must be enrolled in one of the following Classes:

Senior Junior

Prerequisites: ECE 317 or ECE 3171

This is an introductory course on power systems and load analysis with focus on automotive applications. The objectives are to familiarize the students with the basic principles and concepts of vehicular power systems and loads. Students are expected to be able to analyze and design basic vehicular power systems. The topics covered in this course include an overview of power systems, vehicular power system architecture, DC and AC power grid in vehicular systems, power system stability, reliability, reactive power control, load flow analysis, short circuit analysis, and vehicular power system protection. Four lecture hours per week.

ECE 4432 Renewable Elec Pwr Sys

4.000 Credits

Must be enrolled in one of the following Major fields of study:

Computer & Information Science

Computer Engineering

Electrical Engineering

Industrial & Systems Engin

Mechanical Engineering

Software Engineering

Must be enrolled in one of the following Classes:

Senior Junior

Prerequisites: ECE 317

This course is an introduction to present and future electrical power systems, from renewable power sources, interface to the utility grid, and efficient utilization of power. The topics covered in this course include an overview of power systems, power system stability, reliability, reactive power control, load flow analysis, short circuit analysis, DC and AC power grid, photovoltaic (PV) power systems, energy efficient lighting and energy efficiency in electronic systems, wind power systems, hybrid and electric vehicles. Students cannot take both ECE 4431 and ECE 4432 for credit. Four lecture hours per week.

ECE 446 Electromechanical Energy Conv

4.000 Credits

Prerequisites: ECE 311 and (ECE 317 * or ECE 3171 *)

Introduces fundamental concepts and specifications of electromechanical energy conversion: AC and DC machines drive, electric and magnetic storage and transfer, transformer, and performance analysis of AC and DC machines. The topics include principles of energy conversion, permanent magnet synchronous machines, induction machines, and DC machines. The lab projects for the course will focus on modeling, evaluation, and practice of AC and DC machine drives based on computer simulation and DSP based experiments; transient and dynamic analysis; linearization and small signal analysis of machines. Four lecture/laboratory hours per week.

ECE 450 Analog and Digital Comm Sys

4.000 Credits

Prerequisites: (ECE 317 or ECE 3171) and IMSE 317

Topics include introduction to communication systems, base band communications, sampling theorem, amplitude and frequency modulation system design, statistical analysis of error and performance, digital modulation of analogy signals, digital communication and digital modulation schemes, random processes and applications in digital communications, and noise analysis, optimal receiver. Four lecture hours per week.

ECE 451 Signal Detection

3.000 Credits

Prerequisites: ECE 450

Introduction to signal detection, parameter estimation and information extraction theory and its application to communication systems. Subject areas covered within the context of a digital environment are decision theory, detection and estimation of known and random signals in noise, adaptive recursive digital filtering, optimal linear filtering and pattern recognition. Three lecture hours.

ECE 452 Probabilistic Meth/Signal Alys

3.000 Credits

Prerequisites: ECE 300

Introduction to probability, random processes, correlation functions, and spectral density. Response of linear systems to random inputs. Applications in the field of communications.

ECE 454 Intr to Modern Wireless Comm

3.000 Credits

Must be enrolled in one of the following Levels:

Undergraduate

Must be enrolled in one of the following Colleges:

Coll of Engineering & Comp Sci

May not be enrolled in one of the following Classes:

Sophomore Freshman

Prerequisites: ECE 450 and ECE 471

This course provides an introduction to the fundamentals of modern wireless communication. The focus of this course will be on the (i) basic signal propagation issues and channel impairments, (ii) modulation schemes and bandwidth/power trade-offs, and (iii) overcoming channel impairment using equalizers, diversity and channel coding. Additionally case studies will examine current wireless LANs and cellular system. Three Hours of lecture per week.

ECE 456 Intro to Electro-optics

3.000 Credits

Prerequisites: ECE 311 and ECE 321

Laser sources, detectors, imaging systems, optical signal processing, illumination and image acquisition, triangulation, and fiber optics. Three one-hour lecture periods.

ECE 460 Automatic Control Systems

4.000 Credits

Prerequisites: ECE 317 or ECE 3171

Co-requisites: ECE 460L

Modeling and response of dynamic systems. Transfer functions, poles and zeros and their significance to transient and steady state response of feedback systems. Analysis of stability of closed-loop systems. Steady state errors and transient performance of closed-loop systems. Design of feedback control systems by root locus techniques and by frequency domain methods. Laboratory projects include modeling, controller design, controller realization, system performance evaluation, and simulation studies. Three lecture hours and one three hour laboratory per week.

ECE 464 Robotics

4.000 Credits

Prerequisites: (ECE 300 or ECE 365) and ME 265

An overview of robotics systems and current technology. Spatial descriptions and transforms. Lagrange and Newton-Euler equations of motion. Path planning and trajectory calculations. Direct and inverse kinematics and dynamics of open articulated chains. Feedback control problems in manipulators.

ECE 465 Digital Control Desgn and Imp

4.000 Credits

Prerequisites: ECE 460

Discrete model of a continuous-time system. Differential equations and Z-transforms. Similarities and differences between discrete-time and continuous-time models. Translation of analog designs to digital designs. State-space methods including state feedback and observers. Hardware limitations and implementation issues. Four lecture/laboratory hours per week.

ECE 467 Digital Forensics II

4.000 Credits

May not be enrolled in one of the following Levels:

Rackham

Graduate

May not be enrolled in one of the following Colleges:

Coll of Ed, Health, & Human Ser

College of Business

May not be enrolled in one of the following Classes:

Freshman

Prerequisites: (ECE 387 or CIS 387) and (ECE 471 * or

CIS 427 *)

This course is a continuation of Digital Forensics I and will focus on Internet Forensics. Students will examine in-depth concepts in Internet evidence collection and preservation, as well as applications of contemporary commercial forensic investigative software.

ECE 470 Computer Int and Data Comm

4.000 Credits

Prerequisites: ECE 372

Hardware and software techniques used in interfacing between computers and other computers or devices. Analog and digital techniques. Parallel and serial communications. Popular communication protocols. Error detection and correction. Lab project involves interfacing and communicating with a microprocessor.

ECE 471 Comp Networks/Data Comm

4.000 Credits

Prerequisites: IMSE 317 and (ECE 372 or ECE 373)

Hardware and software techniques used in interfacing between computers and other computers or devices. Data transmission techniques and protocols. Introduction to popular local area network protocols. Forward Error Control Techniques and Data Compression. Introduction to wireless communications with focus on major challenges and obstacles and the cellular phone infrastructure. Term projects involve developing a data link layer protocol for interfacing and communication with microprocessors. Four lecture hours per week.

ECE 473 Embedded System Design

4.000 Credits

Prerequisites: ECE 372

This course studies the issues dealing with real-time embedded system design. Topics include: microprocessor architecture, assembly language, real-time programming, space and time limitations, relations between ANSIC Compiler output and assembly language, compiler linkers and using a system development package for C programming. (F,W,S).

ECE 474 Compiler Design

3.000 Credits

Prerequisites: ECE 370

Principles of language compilation. Introduction to formal languages. Lexical analysis, top-down and bottom-up parsing, code generation and optimization. Error handling and symbol table management. Run-time storage management. Programming language design. Introduction to compiler-writing tools. A software design project is required. Three lecture hours per week.

ECE 475 Comp Hardware Org/Design

4.000 Credits

Prerequisites: ECE 375

Design methodology, performance analysis using probability and statistic methods, hardwired and microprogramming in CPU design, hardware design languages and memory design. Advanced concepts in computer architecture. A design project is required. Three lecture hours per week and one three-hour laboratory per week.

ECE 476 Intro to Parallel Processing

3.000 Credits

Prerequisites: ECE 375

Advances in computer architecture, parallel structures, performance evaluation, memory bandwidth considerations, processing bandwidth, communication and synchronization. A design project is required. Three lecture hours per week.

ECE 478 Operating Systems

4.000 Credits

Prerequisites: ECE 370 and IMSE 317

Introduction to computer operating systems. Process management, threads, CPU scheduling, memory management, process synchronization, file systems and I/O devices. Selected advanced topics, e.g., distributed systems, deadlock, I/O, job

scheduling, and performance analysis using queueing models, will be introduced. Case studies of modern operating systems. A design project is required. Four lecture hours per week.

ECE 479 Artificial Intelligence

3.000 Credits

Prerequisites: ECE 370

Basic concepts and methodology of artificial intelligence from a computer engineering perspective. Emphasis is placed on the knowledge representations, reasoning and algorithms for the design and implementation of intelligent systems. Introduction to an AI language and representative intelligence systems. A design project is required. Three lecture hours per week.

ECE 480 Intro to Dig Signal Processing

4.000 Credits

Must be enrolled in one of the following Colleges:

Coll of Engineering & Comp Sci

Prerequisites: (ECE 317 or ECE 3171) and (MATH 217 or

MATH 227)

Fundamentals of discrete-time signals and systems. Introduction to z-transform and its applications. Design of digital filters. Characteristics of analog-to-digital and digital-to-analog converters. Fourier transform of sequences, DFT and FFT algorithms. An introduction to software tools for the simulation and design of real time-digital filters. Implementation of digital systems using digital signal processing boards. Three hours lecture and three hours laboratory experiments per week.

ECE 488 Introduction to Machine Vision

4.000 Credits

Must be enrolled in one of the following Classes:

Senior

Prerequisites: ECE 270

Applications to machine vision. Representative topics are: optics and lighting, sensor characteristics, image acquisition, image analysis, segmentation, connectivity, shape description, hardware for vision applications, software considerations, applications including automatic inspection and metrology. Open lab and project will be required.

ECE 4881 Introduction to Robot Vision

3.000 Credits

Must be enrolled in one of the following Levels:

Undergraduate

Must be enrolled in one of the following Major fields of study:

Bioengineering

Computer & Information Science

Computer Engineering

Electrical Engineering

Industrial & Systems Engin

Mechanical Engineering

Software Engineering

Must be enrolled in one of the following Classes:

Senior Junior

Prerequisites: ECE 270

This course introduces the theories and modern technologies in robot vision. Topics include sensors, image analysis, region and segmentation, object recognition, stereo vision, optical flow, color image, object tracking and applications. Students cannot

receive credit for both ECE 4881 and ECE 588. Three lecture hours per week.

ECE 490 Selected Topics in Elec Engin

1.000 TO 3.000 Credits

Advanced or applied topics in electrical engineering offered according to student's interest and availability of instructors and equipment. Lecture hours, laboratory, and/or computation period to be arranged.

ECE 491 Directed Studies

1.000 TO 4.000 Credits

Must be enrolled in one of the following Classes:

Senior

Graduate

Student in consultation with a faculty advisor will prepare a proposal in sufficient detail describing a subject topic to be studied. The proposal will be subject to approval by the department. A formal written and oral evaluation of the work performed are required for successful completion. Lecture hours, laboratory, and/or computation periods to be arranged.

ECE 492 Directed Research

1.000 TO 4.000 Credits

Must be enrolled in one of the following Classes:

Senior

Graduate

Student, in consultation with a faculty advisor will prepare a proposal in sufficient detail describing a research problem to be studied. The proposal will be subject to approval by the department. A formal written and oral evaluation of the research performed are required for successful completion. Lecture hours, laboratory, and/or computation period to be arranged.

ECE 493 Design Factors in Eng

2.000 Credits

Must be enrolled in one of the following Classes:

Senior

Graduate

This course is comprised of a series of lectures on the subject of design. It will promote awareness of such factors as literature review, performance specifications, design considerations, product liability, standards and ethics, professional registration codes, patents and copyrights, packaging, documentation and report preparation. Two lecture hours.

ECE 495 Micro Systems Design

4.000 Credits

Prerequisites: ECE 373 and (ECE 311 or ECE 316)

Course content includes discussion and laboratory experience on a number of interfacing topics (timing, serial and parallel communication, ADC/DAC, control loop) and the preparation of a major report on a design topic approved by the course instructor. Team design projects may involve either software or hardware, or both. Two lecture hours and two three-hour laboratories per week.

ECE 4951 Sys Desgn and Microcontrollers

3.000 Credits

Prerequisites: ECE 311 and ECE 372

Techniques for interfacing actuators and sensors to computers with emphasis on the use of a variety of microprocessors and a

broad range of sensors. Topics include introduction to small microprocessors such as PIC16, PIC18, small systems such as oopic, basicx as well as using a PC as a controller. Control of motors and other actuators using opto-isolators and discrete electronics, use of H-bridges. Interfacing sensors that provide different encoding data, such as analog signals, digital communication using I2C protocol, handshake I/O, pulse width encoding. Interfacing to wireless communication using RF or IR. Includes laboratory experiments, individual midterm project and a final team project. Three lecture hours per week. (F,W)

ECE 498 Senior Engineering Design

3.000 Credits

Prerequisites: (ECE 311 or ECE 316) and ECE 373

This course is conducted as a guided project design course over a two-semester period, with the class divided into teams, each assigned a specific design project. Periodic progress reports, a final written report, an oral presentation and project demonstration are required. Cost analysis, evaluation of design alternatives and application of engineering principles will be emphasized. A series of lectures on design issues will be presented in the first semester.

ECE 4981 Electrical Engineering Des I

2.000 Credits

Must be enrolled in one of the following Levels: Undergraduate

Must be enrolled in one of the following Colleges: Coll of Engineering & Comp Sci

Must be enrolled in one of the following Classes:

Senior

Prerequisites: (COMP 220 or CPAS 40 or COMP 106) and (ECE 317 or ECE 3171) and ECE 372 and (ECE 414 or ECE 415 or ECE 450 or ECE 460 or ECE 480 or ECE 4951)

This course is conducted as a guided project design course over a two semester period, with the class divided into teams, each assigned a specific design project. Periodic progress reports, a final written report, an oral presentation and project demonstration are required. Cost analysis, societal impact, safety issues, evaluation of design alternatives and application of engineering principles will be emphasized. A series of lectures on design issues will be presented in the first semester.

ECE 4982 **Computer Engineering Des I**

2.000 Credits

Must be enrolled in one of the following Levels:

Undergraduate

Must be enrolled in one of the following Colleges:

Coll of Engineering & Comp Sci

Must be enrolled in one of the following Classes:

Prerequisites: ECE 372 and ECE 375 and (ECE 471 or

ECE 473 or ECE 478 or ECE 475)

This course is conducted as a guided project design course over a two semester period, with the class divided into teams, each assigned a specific design project. Periodic progress reports, a final written report, an oral presentation and project demonstration are required. Cost analysis, societal impact, safety issues, evaluation of design alternatives and application of engineering principles will be emphasized. A series of lectures on design issues will be presented in the first semester.

ECE 4983 **Electrical Engin Design II**

2.000 Credits

Must be enrolled in one of the following Colleges:

Coll of Engineering & Comp Sci

May not be enrolled in one of the following Classes:

Junior Senior Freshman

Prerequisites: ECE 4981

Second Semester - Electrical Engineering Design This course is conducted as a guided project design course over a two semester period, with the class divided into teams, each assigned a specific design project. Periodic progress reports, a final written report, an oral presentation and project demonstration are required. Cost analysis, societal impact, safety issues, evaluation of design alternatives and application of engineering principles will be emphasized.

ECE 4984 Computer Engin Design II

2.000 Credits

Must be enrolled in one of the following Colleges:

Coll of Engineering & Comp Sci

May not be enrolled in one of the following Classes:

Junior Senior

Freshman

Prerequisites: ECE 4982

Second Semester Computer Engineering Design This course is conducted as a guided project design course over a two semester period, with the class divided into teams, each assigned a specific design project. Periodic progress reports, a final written report, an oral presentation and project demonstration are required. Cost analysis, societal impact, safety issues, evaluation of design alternatives and application of engineering principles will be emphasized.

ECE 4985 Electrical Engineering Design

3.000 Credits

Must be enrolled in one of the following Classes:

Prerequisites: (COMP 270 or COMP 106 or COMP 220 or CPAS 40) and (ECE 317 or ECE 3171) and ECE 372 and (ECE 414 or ECE 415 or ECE 450 or ECE 460 or ECE 480 or ECE 4951)

This course is conducted as a guided project design course over a two-semester period, with the class divided into teams, each assigned a specific design project. Periodic progress reports, a final written report, an oral presentation and project demonstration are required. Cost analysis, societal impact, safety issues, evaluation of design alternatives, and application of engineering principles will be emphasized. A series of lectures on design issues will be presented in the first semester.

ECE 4986 **Computer Engineering Design**

3.000 Credits

Must be enrolled in one of the following Classes:

Senior

Prerequisites: (COMP 270 or CPAS 40 or COMP 106 or COMP 220) and (ECE 317 or ECE 3171) and ECE 372 and ECE 375 and (ECE 471 or ECE 473 or ECE 478 or ECE This course is conducted as a guided project design course over a two-semester period, with the class divided into teams, each assigned a specific design project. Periodic progress reports, a final written report, an oral presentation, and application of demonstration are required. Cost analysis, societal impact, safety issues, evaluation of design alternatives and application of engineering principles will be emphasized. A series of lectures on design issues will be presented in the first semester.

ECE 499 Internship/Co-op

2.000 Credits

Must be enrolled in one of the following Classes:

A four-month professional work experience period of the Engineering Internship Program, integrated and alternated with the classroom terms.

Industrial and Manufacturing Systems Engineering (IMSE)

COURSE OFFERINGS

IMSE 150 Computer Science I

3 .000 OR 4.000 Credits Prerequisites: MATH 115 * Co-requisites: IMSE 150L

This course provides a foundation for further studies in computer and information science. It emphasizes a structured approach to problem solving and algorithm development. Students learn principles of program design, coding, debugging, testing, and documentation. Student are introduced to the Unified Modeling Language for requirements analysis using use-cases and activity diagrams, an object-oriented programming language (C+ +), and the fundamentals of computer hardware, system software, and components.

IMSE 200 Computer Science II

3 .000 OR 4.000 Credits

Prerequisites: MATH 115 and (CIS 150 or IMSE 150 or

CCM 150)

Co-requisites: CIS 275 IMSE 200L

This course presents techniques for the design, writing, testing, and debugging of medium-sized programs, and an introduction to data structures (stacks, queues, linked lists) using the C++ programming language. C++ topics covered include pointers, templates, and inheritance. The principles of UML modeling are also introduced. This course will consist of three lecture hours and one two-hour laboratory.

IMSE 255 Computer Programming for Eng.

3.000 Credits

Prerequisites: ENGR 100 or MATH 105 or MPLS 113

Intermediate topics in computer programming: arrays, files, structured data types, pointers, functions. Overview of digital computer hardware and system software components: machine architecture, operating systems, computer networks, data security, and performance evaluation.

IMSE 299 Internship (Co-op)

3.000 Credits

Must be enrolled in one of the following Classes:

Junior Senior Graduate This is a Cooperative Education course. Students wishing to experience a work experience before graduation may elect to participate in the Cooperative Education Program (minimum of two terms). (F,W,S).

IMSE 3005 Intro to Operations Research

4.000 Credits

Prerequisites: (MATH 217 or MATH 227) and IMSE 317 *

This course introduces some basic techniques or operations research used in decision making and system performance evaluation in both deterministic and probabilistic environments. Topics in linear programming, especially the simplex method with duality theory and sensitivity analysis is included. Other topics include integer programming, deterministic dynamic programming, network problems, and PERT-CPM, discrete-time and continuous-time Markov chain models of random processes, queuing theory and applications. (YR)

IMSE 317 Eng Probability and Statistics

3.000 Credits

Prerequisites: MATH 116 or MPLS 215 or MATH 114

Set theory, combinatorial analysis, probability and axioms, random variables, continuous and discrete distribution functions, expectations, Chebychev's inequity, weak law of large numbers, central limit theorem, sampling statistics and distributions, point and interval estimation and linear regression. Three hours lecture.

IMSE 334 Org of Hospital Systems

3.000 Credits

Must be enrolled in one of the following classes:

Junior Senior

Graduate

The fundamental concepts of organizational behavior are explored. The interrelationships among personnel in an organization, and the functions and responsibilities of individuals are discussed. Topics studied include decision-making theory, organizational authority and adjunct responsibility, leadership and supervision. Particular emphasis is placed upon hospitals and the health care industry. Lectures are supplemented with actual case studies from the health care industry in which the student has the opportunity to apply problem-solving techniques to true-to-life situations. Three hours lecture.

IMSE 350 Data Structures

4.000 Credits

Prerequisites: MATH 115 and (CIS 200 or IMSE 200) and CIS 275 and CIS 275

This course focuses on data design and algorithm designs. Data design topics include object-oriented discussions of hashing, advanced tree structures, graphs and sets. Algorithm design topics include the greedy, divide-and-conquer, dynamic programming, backtracking, and branch-and-bound techniques. A significant discussion of algorithm complexity theory, including time and space trade-off and elementary computability theory is included.

IMSE 351 Data Struc & Algorithm Anlysis

3.000 Credits

Prerequisites: IMSE 255 or CIS 150 or IMSE 150 or CCM 150

Object-oriented design, programming, and analysis techniques review; structured programming concepts; data structures; algorithm design and analysis; lists, stacks, and queues; heaps, sorting, trees, graphs, and algorithm development utilizing modern languages, such as C++, Java.

IMSE 352 Intro to File Processing

3.000 Credits

Prerequisites: IMSE 200 and CIS 175

File processing environment, storage media, sequential, random and indexed sequential files, inverted lists, multilists, tree structures, file control systems. Three hours lecture.

IMSE 356 Real Time Computing

3.000 Credits

Prerequisites: IMSE 150 or IMSE 255

Introduction to real time computing concepts applicable to discrete systems. Fundamentals of real time hardware, operating systems and C programming language. Selected coverage of instrumentation, input/output modes, data conversion, single task and multitask programming. Two hours of lecture and three hours of laboratory per week.

IMSE 381 Industrial Robots

3.000 Credits

Must be enrolled in one of the following Classes:

Junior

Senior

Graduate

Prerequisites: MATH 115

The course introduces students in engineering, management, and computer science to modern robot technology and the application of this technology to improve productivity in manufacturing and assembly operations. The emphasis will be on applications of robot technology to production problems rather than on the extensive theory of robotics.

IMSE 382 Manufacturing Processes

4.000 Credits

Prerequisites: ENGR 250 and (ME 265 or ME 260)

This course introduces the students to the fundamentals and principles of manufacturing processes for engineering materials. It seeks to transfer an understanding of the application of principles of engineering materials and their influence on manufacturing processes. Topics covered include structure and manufacturing properties of metals, casting, heat treatments, bulk deformation processes, sheet metal working processes, processing of polymers and composites, surfaces and coating, powder metallurgy, machining and joining. Case studies of design for manufacturing and measurement of product quality; economical aspects and cost considerations in manufacturing systems will be studied. Three lecture hours and three laboratory hours.

IMSE 390 Selected Topics I

3.000 Credits

Study of topics selected from any of the areas of Industrial and Systems Engineering. May include design or laboratory research.

IMSE 391 Selected Topics II

3.000 Credits

Study of Advanced topics selected from any of the areas of Industrial and Systems Engineering. May include design or laboratory research.

IMSE 398 Independent Study in IMSE

1.000 TO 3.000 Credits

Must be enrolled in one of the following Colleges:

Coll of Engineering & Comp Sci

May not be enrolled in one of the following Classes:

Graduate Sophomore

Freshman

Individual study design or laboratory in an area of interest to the student. Contents may be chosen from any of the areas of Industrial and Manufacturing Engineering. The student will submit a report on his or her project at the end of the term. Written permission of the instructor required. (F,W,S).

IMSE 399 Internship

2.000 Credits

Must be enrolled in one of the following Classes:

Junior Senior

Graduate

A four-month professional work experience period of the Engineering Internship Program, integrated and alternated with the classroom terms.

IMSE 400 Programming Languages

4.000 Credits

Must be enrolled in one of the following Levels:

Undergraduate

Prerequisites: IMSE 350 or CIS 350 or CCM 350

Systematic study of programming languages with regard to their implementation, structures, and use. Languages are compared with regard to their various data types, data structures, operations, control structures, programming environments, and ease of use in solving various programming problems.

IMSE 421 Eng Economy and Dec Anlys

3.000 Credits

Must be enrolled in one of the following Classes:

Junior

Senior

Graduate

Study of the concepts involved in the analysis of engineering management decisions, both short and long term. Time valued investments and the effects of depreciation and taxes in comparing alternatives are discussed. Specific attention is devoted to deterministic and probabilistic replacement policies for single and chain replacements of equipment. Basic elements of utility theory are introduced. Applications of decisions under risk, uncertainty, and of game theory to capital investment, bidding, and to competitive decisions are included.

IMSE 437 Health Care Management

3.000 Credits

Must be enrolled in one of the following Classes:

Junior

Senior

Graduate

This course is intended for those who have to deal with the administrative aspects of health care systems and not only the technical. The goal of the course is to provide the hospital staff

member with an understanding of operations of the total hospital system. Topics covered include functions, problems, and organization of the medical agencies and their effect upon hospitals: methods of nursing staff organization: techniques of determining nursing staff levels; development of staff schedules; financial reimbursement and governmental regulations.

IMSE 4425 **Human Factors and Ergonomics**

4.000 Credits

Must be enrolled in one of the following Levels:

Undergraduate Prerequisites: IMSE 317

The course integrates the elements of traditional methods of engineering and time-motion studies with ergonomics and human factors concepts. Methods improvement, work measurement, and work design, applied to manufacturing and service industries, so as to increase productivity and improve worker health and safety. The topics covered include: problem solving tools; operation analysis; time-motion analysis; work sampling; manual and cognitive work design; workplace, equipment, tool and work environment design; allowances; and lean manufacturing. Lectures and laboratory. (YR)

IMSE 450 Operating Systems

4.000 Credits

Prerequisites: (CIS 350 or CIS 3501 or IMSE 350) or (ECE 370 and MATH 276) or (ECE 276 and ECE 370) and **IMSE 317**

Introduction to computer operating systems. Process management, CPU scheduling, memory management, file systems and I/O devices. Advanced topics, multiprogramming and multitasking, virtual memory, deadlock, I/O, job scheduling, and performance analysis using queueing models, will be introduced. Case studies of modern operating systems. A design project is required.

IMSE 451 Computer Graphics

3.000 Credits

Prerequisites: IMSE 351 or CIS 351 or CIS 350 or IMSE 350 or CCM 350

The mathematics, algorithms and data structures of computer graphics programming in 2 or 3 dimensions. Applications of computer graphics in Engineering Science and Data Processing.

IMSE 453 Data Comm/Distributed Process

4 000 Credits

Prerequisites: CIS 350 or CIS 3501 or IMSE 351 or (ECE 370 and MATH 276) or (ECE 370 and ECE 276) and

Study of the technical and management aspects of computing networks and distributed systems. Topics include network architectures (ISO/OSI, TCP/IP, and ATM), communication hardware (transmission media, network adapters, switches), encoding, framing, error detection and correction, reliable transmission, data link control and LAN technology, internetworking. routing/congestion control. network design/management.

IMSE 4545 **Information Systems Design**

4.000 Credits

Must be enrolled in one of the following Levels:

Undergraduate

Prerequisites: IMSE 255 or CIS 205

Role of information systems in organizations. Economic factors and social impact of information systems. Phases to design an information system: systems objectives and criteria establishment, fact investigation and analysis, feasibility study. output-input design, processing design, file and database design, safety and reliability considerations, detailed systems description, programming specifications, testing analysis and design skills will be assigned. A series of cases will be used in developing an information system. SQL will be used to develop data tables and access information. Three lecture hours and one three-hour laboratory. (W)

IMSE 456 Intro to Data Base Systems

4.000 Credits

Prerequisites: CIS 350 or CIS 350A or IMSE 351 or (ECE 370 and MATH 276)

An introduction to database system concepts and techniques. Topics covered include database environments, ER modeling, relational data model, object-oriented database, object-relational database, database design theory and methodologies, database languages, query processing and optimization, concurrency control, database recovery, and database security.

IMSE 457 Compiler Design

3.000 Credits

Prerequisites: IMSE 350 or CIS 350 or CCM 350

The design and construction of compilers and programming systems. Lexical scan; parsing techniques; code generation and optimization. Run-time organization; storage allocation. Applications of formal language theory in compiler design. Translator writing systems; XPL. Three one-hour lectures.

IMSE 585 Simulation in Systems Design

4.000 Credits

Must be enrolled in one of the following Levels: Undergraduate

Prerequisites: (IMSE 300 or IMSE 3005) and IMSE 317

This course introduces digital simulation as a design and modeling tool. The fundamental techniques of constructing a simulation model and evaluating the results are studied. A computer simulation software is used (such as ARENA, ProModel, Witness, Simul8). Topics include random number and random variate generation, input and output data analysis, design of experiments and optimization of simulated systems, verification and validation, discrete and continuous simulation models, comparison of simulation modeling software, and applications of simulation in different industries. Students are asked to select problems of interest and present final project reports. Four lecture hours. (YR)

IMSE 4675 Six Sigma & Stat Proc Improv

4.000 Credits

Must be enrolled in one of the following Levels: Undergraduate

Prerequisites: IMSE 317

Review of graphical methods, probability theory and statistics (stem-and -leaf plots, histograms, scatter diagrams, counting methods, axioms of probability, common discrete and continuous probability models, expectation, linear combinations, estimation, sampling distributions, confidence intervals, hypothesis testing, and A vs. B type of experimentation for both unpaired and paired data); introduce quality terminology in manufacturing and service industry contexts, study the theory, design and application of common statistical process control

models for variables and attributes; study process capability and gauge and measurement capability methods; study the design and analysis, both graphical and analytic, of statistically designed experiments (one-way completely randomized designs, and randomized, complete block designs); study the application and analysis of two-level, factorial and fractional factorial designs. Learn to apply and interpret analysis of variance to above situations. Extensive analytic homework and applications used throughout course to motivate material. Each student completes an individual project of his/her own design, subject to instructor approval, entailing a modeling application or controlled experiment where the student collects the data. Four hours lecture. (YR)

IMSE 4745 Facilities Design

4.000 Credits

Must be enrolled in one of the following Levels:

Undergraduate

Prerequisites: Undergraduate level (COMP 270 or COMP 106 or COMP 220 or CPAS40) Minimum Grade of D and Undergraduate level IMSE 3005 Minimum Grade of D and Undergraduate level IMSE 317 Minimum Grade of D and Undergraduate level IMSE 421 Minimum Grade of D

Analysis, planning and design of physical facilities utilizing research, engineering and economic principles. Synthesis of physical equipment and workers into an integrated system for either service or manufacturing activities. Design of material handling and storage systems. Layout of lean manufacturing facilities. Design of atmospheric, electrical, lighting, and life safety systems for a facility. Students are required to select problems of interest and present design project reports. (F)

IMSE 4795 Prod, Inven Control & Lean Mfg

4.000 Credits

Must be enrolled in one of the following Levels:

Undergraduate

Prerequisites: Undergraduate level (COMP 270 of COMP 106 or COMP 220 or CPAS40) Minimum Grade of D and Undergraduate level IMSE 3005 Minimum Grade of D

Study of concepts involved in forecasting demand, inventory control, MRP, JIT production, lean manufacturing, aggregate scheduling, and project management. The application of mathematical programming techniques, bottleneck analysis, and lean techniques such as value stream mapping, error proofing, cellular manufacturing, etc. are used in design and analysis of production systems. Use of the computer programs in the design and analysis of such systems. Students are asked to select problems of interest and present final project reports. (OC)

IMSE 4815 Manufacturing Process II

4.000 Credits

Must be enrolled in one of the following Levels:

Undergraduate

Prerequisites: (COMP 270 or COMP 220 or COMP 106 or

CPAS 40) and IMSE 382 Co-requisites: IMSE 4675

This course introduces the students to machining processes, metal forming processes and molding and forming of plastics. Metal cutting theory is emphasized including the mechanics of metal cutting, cutting tools, measurement of tool life, selection of cutting conditions, and chip control; theory and applications of non-traditional manufacturing processes. Metal forming theory is emphasized including formability of metals; analysis of bulk and sheet metal forming processes as applied to practical cases such as automobile manufacturing. Basic principles of

plastic molding and forming processes of plastics, ceramics and composites. (W)

IMSE 4825 Industrial Controls

4.000 Credits

Must be enrolled in one of the following Levels:

Undergraduate

Must be enrolled in one of the following Colleges:

Coll of Engineering & Comp Sci

Prerequisites: Undergraduate level ME 265 Minimum

Grade of D

Corequisites: Undergraduate level ECE 305 Minimum

Grade of D

This course introduces the basics of calibration, error analysis, and dynamic response characteristics of instrumentation. Fundamentals of metrology include linear and angular measurements, standards, gauges, machine tool accuracy, and automation of inspection processes. The course also introduces the principle aspects of computers and their applications in system control, as well as principles of automation with emphasis on manufacturing industries. Discussion of the hardware and software associated with this task and other topics such as integrated systems modeling, sensor technologies, digital and analog signal processing and control, and information communication are also included. Laboratory exercises and projects are required. (F)

IMSE 4835 Comp.-Aided Prcs Desgn & Mfg

4.000 Credits

Must be enrolled in one of the following Levels:

Undergraduate

Must be enrolled in one of the following Classes:

Senior

Prerequisites: IMSE 382

This course focuses on the fundamentals of component and system designs through the use of Computer-Aided Design (CAD) tools. Issues related to the manufacture of molds, jigs and fixtures are also introduced and Computer-Aided Manufacturing (CAM) tools are used as means for the production of these machine components. The principles of design for manufacture and assembly as applied to tool and machine design are also discussed. Computer-Aided Process Planning (CAPP) tools, flexible manufacturing systems, and information flow in manufacturing systems are also presented. Hands-on experiments and course projects are required. (W)

IMSE 484 CA Machine and Tool Design

3.000 Credits

Must be enrolled in one of the following Levels:

Undergraduate

Prerequisites: IMSE 382 or ME 381

Study of the fundamentals of machine tool design, cutting tools, metal forming dies, and jig fixtures for practical applications in machining and assembly. Principles of design for manufacture and assembly as applied to tool and machine design. Laboratory exercises and projects are required using computer-aided design software. Two lecture hours and three laboratory hours.

IMSE 486 Design for Assembly & Mfg

3.000 Credits

Must be enrolled in one of the following Levels:

Undergraduate

Prerequisites: IMSE 382

This course will cover topics in manufacturing with emphasis on the parallel product design and selection of specifications for processes. Topics included are the principles of concurrent engineering, geometric dimensioning and tolerancing (GD&T), process engineering, process planning, cost estimating, and design for manufacturing. Projects using computer tools are required on a team-oriented basis.

IMSE 488 Metal Forming Processes

3.000 Credits

Must be enrolled in one of the following Levels:

Undergraduate Prerequisites: IMSE 382

This course focus is on fundamentals of metal forming processes; mechanics of metal forming; formability of materials; tool and die design; design for manufacture; and economic aspect of the process. Emphasis is placed on analysis of bulk and sheet metal forming processes as applied to practical cases such as automobile manufacturing. Laboratory and course project are required.

IMSE 489 Robotics Systems Simulation

3.000 Credits

Must be enrolled in one of the following Classes:

Senior Graduate

The course emphasizes the fundamentals of the design of robotics systems with the aid of robot simulation technology; structure and basic components of robots and robotics manufacturing workcells; control, kinematics, and dynamics of robots and manufacturing devices; robot accuracy and calibration of robot motion; applications of robots in manufacturing such as spot welding, are welding, machining, assembly and CMM; robot simulation software such as ROBCAD or IGRIP. Course project is required. Available for graduate credit. (YR)

IMSE 490 Selected Topics

3.000 Credits

Individual or group study, design or laboratory research in a field of interest to the student. Topics may be chosen from any of the areas of industrial and systems engineering including management, work measurement, methods, organization, industrial sciences, industrial mathematics, systems and procedures. If preliminary arrangements are made, the work internship periods can be used to formulate the problem and gather data. Completion of the analysis and submission of a report shall be done during the academic periods under the supervision of a faculty member or members. The student should be prepared for both a written and oral presentation of the report. This course is highly recommended as a technical elective. Permission of department.

IMSE 491 Directed Studies in IMSE

1.000 TO 3.000 Credits

Group study of contemporary topics in industrial and systems engineering and general systems design. Course may be elected for credit more than once under different instructors. Permission of department.

IMSE 4951 Design Project I

2.000 Credits

Must be enrolled in one of the following Levels:

Undergraduate

Must be enrolled in one of the following Colleges:

Coll of Engineering & Comp Sci

Must be enrolled in one of the following Major fields of study:

Industrial & Systems Engin

Manufacturing Engineering

Must be enrolled in one of the following Classes:

Senior

Prerequisites: ENGR 400 *

Design of a system to produce or service using knowledge gained in previous courses in the program. Two two-hour lecture/lab periods. (F,W,S)

IMSE 4952 Design Project II

2.000 Credits

Must be enrolled in one of the following Levels:

Undergraduate

Must be enrolled in one of the following Colleges:

Coll of Engineering & Comp Sci

Must be enrolled in one of the following Major fields of study:

Industrial & Systems Engin

Manufacturing Engineering

Must be enrolled in one of the following Classes:

Senior

Prerequisites: IMSE 4951

Design of a system to produce or service using the knowledge gained in previous courses in the program. It is the continuation of the project started in Design Project I course. (F,W,S)

IMSE 498 Guided Study in IMSE

1.000 TO 3.000 Credits

Must be enrolled in one of the following Levels:

Undergraduate

Must be enrolled in one of the following Colleges:

Coll of Engineering & Comp Sci

May not be enrolled in one of the following Classes:

Sophomore

Freshman

Individual study, design, or laboratory research in a field of interest to the student. Content may be chosen from any of the areas on industrial and manufacturing engineering. The student will submit a report on his or her project at the close of the term. Permission of department. (F,W,S).

IMSE 499 Internship

2.000 Credits

Must be enrolled in one of the following Levels:

Undergraduate

Must be enrolled in one of the following Classes:

Senior

A four-month professional work experience period of the Engineering Internship Program, integrated and alternated with classroom terms.

IMSE 500 Models of Oper Research

3.000 Credits

Must be enrolled in one of the following Classes:

The method of mathematical modeling and its application to decision-making problems in organizations. Some widely used models and techniques: linear programming, queuing, inventory, and simulation.

IMSE 514 Multivariate Statistics

3.000 Credits

Prerequisites: IMSE 510

Linear statistical models used in simple and multiple regression, and analysis of variation. Principles and techniques of principle component analysis are studied and applied to business and engineering problems using statistical computer software. (YR)

IMSE 521 Mfg Cost Estimation & Control

3.000 Credits

Must be enrolled in one of the following classes:

Graduate

In this course, concepts of strategic costing in product development and manufacturing are introduced. Engineering economy techniques are used in the study of life cycle cost elements. Equipment acquisition and replacement justification methods under risk and uncertainty are presented.

IMSE 533 Manufacturing Systems

3.000 Credits

Must be enrolled in one of the following Classes:

Graduate

This course introduces methodologies and tools for modeling, design and operations planning of manufacturing systems. Topics include introduction to integrated manufacturing manufacturing systems, system and data modeling planning, methodologies, group technology, process manufacturing system layout, scheduling, push and pull production systems. Industrial case studies are presented and discussed.

Mechanical Engineering (ME)

COURSE OFFERINGS

ME 230 Thermodynamics

4.000 Credits

Must be enrolled in one of the following Major fields of study:

Bioengineering

Electrical Engineering

Engineering

Industrial & Systems Engin

Manufacturing Engineering

Mechanical Engineering

Prerequisites: PHYS 150 and (MATH 116 or MPLS 215)

and (CHEM 134 or CHEM 144)

The course is a general introduction to thermodynamics with emphasis on engineering applications. Properties of pure substances. Work and heat. The first and second laws of thermodynamics. Entropy and efficiency. Applications to systems and control volumes. Mixtures of gases and vapors, air conditioning. Introduction to cycles. This course will become the first in a two-course series for mechanical engineering students, and will also be elected as a terminal course by IMSE students. Four hours lecture.

ME 260 Design Stress Analyses

4.000 Credits

Must be enrolled in one of the following Colleges:

Coll of Engineering & Comp Sci

Prerequisites: PHYS 150 and (ENGR 250* or ECE 385 *) and (MATH 205 * or MPLS 215 or MATH 215 *)

An introduction to statics and stress analyses with emphasis on both mechanics fundamentals and design applications. (F,W,S).

ME 265 Applied Mechanics

4.000 Credits

Prerequisites: PHYS 150 and (MATH 205 * or MPLS 215

or MATH 215 *)

A comprehensive introduction to the science of applied mechanics, encompassing a study of forces and the stresses, deflections, and motions which they produce. Topics include the concept of equilibrium and static force analysis; the mechanics of deformable bodies (internal stresses, constitutive relationships, strains, deflections, flow, failure); statics of indeterminate systems; kinematics; kinetics of particles, systems of particles, and rigid bodies. Four hours lecture. (F,W,S).

ME 290 Spec Topics in Mech Engin

1.000 TO 3.000 Credits

Special topics in mechanical engineering selected according to students' interest and availability of instructors and equipment.

ME 299 Internship (Co-op)

3.000 Credits

Must be enrolled in one of the following Classes:

Junior

Senior

Graduate

This is a Cooperative Education course. Students wishing to experience a work experience before graduation may elect to participate in the Cooperative Education Program (minimum of two terms). (F,W,S).

ME 325 Thermal Fluid Sciences I

4.000 Credits

Must be enrolled in one of the following Colleges:

Coll of Engineering & Comp Sci

Must be enrolled in one of the following Classes:

Sophomore

Senior

Junior

Prerequisites: (ENGR 216 or ME 215) and ME 230 and ME 260

Power and refrigeration cycles. Thermodynamic relations. Ideal gas mixtures and psychrometrics. Reacting ideal gas mixtures. Fluid properties. Fluid flow kinematics. Integral fluid flow analysis; the conservation laws - mass, energy, momentum. Introduction to differential analysis of fluid flow. Dimensional analysis. (F,W,S).

ME 3251 Applied Thermodynamics

2.000 Credits

Must be enrolled in one of the following Levels:

Undergraduate

Must be enrolled in one of the following Major fields of study:

Mechanical Engineering

Prerequisites: ME 230 and ENGR 216

Power and refrigeration cycles. Thermodynamic relations. Ideal gas mixtures and psychrometrics. Reacting ideal gas mixtures. (F,W,S)

ME 3252 Fluid Mechanics

2.000 Credits

Must be enrolled in one of the following Levels:

Undergraduate

Must be enrolled in one of the following Major fields of study:

Mechanical Engineering

Prerequisites: ME 230 and ENGR 216

Fluid properties. Fluid statics. Fluid flow kinematics. Integral fluid flow analyses; the conservation laws - mass, energy, momentum. Introduction to differential analysis of fluid flow. Diversional analysis. (F,W,S)

ME 345 Engineering Dynamics

4.000 Credits

Prerequisites: (ME 215 or ENGR 216) and ME 260

A comprehensive treatment of statics and the kinematics and kinetics of particles, systems of particles, and rigid bodies from a Newtonian view point utilizing rigorous vector techniques. The time-dependent description of kinematical quantities and of dynamic forces and moments. Matrix methods and digital computer techniques.

ME 349 Instrument & Measuremt Systems

3.000 Credits

Must be enrolled in one of the following Levels:

Undergraduate

Must be enrolled in one of the following Colleges:

Coll of Engineering & Comp Sci

Must be enrolled in one of the following Classes:

Sophomore

Senior

Junior

Prerequisites: (ME 265 or ME 345) and ECE 305

Co-requisites: ME 349L

Modern instrumentation systems are considered beginning with generic issues such as calibration, error analysis, and dynamic response characteristics of instrumentation. Specific transducer systems (temperature, force and pressure, etc.) are presented, as well as interfacing techniques and elementary signal processing. Microprocessors are introduced for use in measurement and control applications. (F,W,S).

ME 3601 Des and Analy of Mach Elem

4.000 Credits

Must be enrolled in one of the following Major fields of study:

Mechanical Engineering

Must be enrolled in one of the following Classes:

Sophomore

Senior

Junior

Prerequisites: (ENGR 216 or ME 215) and ME 260

Application of fundamental mechanics to analysis and design of elementary mechanical components and systems. Topics include: stress and strain analysis; experimental measurement; stress concentration; failure theories; safety factor; fatigue; fracture; combined loading; impact; buckling; energy methods. Components considered: fasteners; springs; bearings; gears; beams; shafts and other power transmission components. Numerical techniques. (F,W,S).

ME 364 Prob, Stats, and Rel in Mach D

3.000 Credits

Prerequisites: (MATH 217 or MATH 227) and ME 260 and ENGR 216 and ENGR 216

Introduction to planned experiments in machine design and mechanical metallurgy with emphasis on orthogonal test programs with small blocks. Classical statistical analyses (e.g., analysis of variance for randomized complete block and splitplot designs) as well as computer intensive analyses (e.g., permutation and randomization tests). Maximum likelihood analysis for censored and uncensored life data and for strength (quantal response) data. Systems reliability in machine design.

ME 371 Heat Transfer

3.000 Credits

Prerequisites: ME 320 and ECE 305 *

Mechanisms of heat transfer processes. Steady and transient conduction in solids; analytical, numerical, and analogical methods. Thermal radiation processes; steady radiation exchange with black and gray surfaces and enclosures. Hydrodynamic boundary layer theory in convection heat transfer; thermal boundary layer, exact and integral analyses. Aerodynamic heating. Turbulent boundary layers. Reynolds' and Pradtl's analogies. Free convection. Working formulas for forced and free convection, condensation, and boiling. Combined heat transfer mechanisms; heat exchangers. Three hours lecture.

ME 375 Thermal Fluid Sciences II

4.000 Credits

Must be enrolled in one of the following Colleges:

Coll of Engineering & Comp Sci

Must be enrolled in one of the following Classes:

Sophomore

Senior

Junior

Prerequisites: (ME 325 or ME 320) and ECE 305 *

Mechanisms of heat transfer processes. Steady state and transcient conduction. Numerical methods in conduction. Internal and external flows. Boundary layer theory. Compressible flows. Convection heat transfer in internal and external flows. Heat exchanger theory. Introduction to radiation. (F,W,S).

ME 379 Thermal-Fluids Laboratory

3.000 Credits

Prerequisites: (ME 3251 or ME 3252 or ME 325 or ME 320) and (ME 349 or ME 348) and (ME 371 * or ME 375 *) and (COMP 270 or COMP 106 or CPAS 40 or COMP 220)

An experimental investigation of thermodynamic, fluid mechanic, and heat transfer principles. Students will learn about thermal-fluids instrumentation and conduct experiments. In addition, they will design their own experiments to demonstrate their understanding of the principles. (F,W,S).

ME 381 Manufacturing Processes I

4.000 Credits

Prerequisites: ENGR 250 and (ME 260 or ME 265)

This course introduces the students to the fundamentals and principles of manufacturing processes for engineering materials. It seeks to transfer an understanding of the application of principles of engineering materials and their influence on manufacturing processes. Topics covered include structure and manufacturing properties of metals, casting, heat treatments, bulk deformation processes, sheet metal working processes, processing of polymers and composites, surfaces and coating, powder metallurgy, machining and joining. Case studies of

design for manufacturing and measurement of product quality; economical aspects and cost considerations in manufacturing systems will be studied. Three lecture hours and three laboratory hours.

ME 399 Internship (Co-op)

2.000 Credits

Must be enrolled in one of the following Classes:

Junior

Senior

Graduate

A four-month professional work experience period of the Engineering Internship Program, integrated and alternated with the classroom terms.

ME 410 **Finite Element Method wth Appl**

3.000 Credits

Prerequisites: ME 345 and (ME 360 or ME 3601) and ME

A presentation of the basic concepts and fundamentals of the Finite Element Method of Analysis in general, followed by applications to both continuum and field problems. Selected areas of application: dynamics and vibration including wave propagation; acoustics; fluid mechanics including film lubrication and ground water flow; heat transfer; elasticity and stress/strain analysis including structures; electrical field problems including electrostatics and electromagnetics. Two lectures and a comp/rec. period. (F,W,S).

ME 4191 Structural Mech & Design

4.000 Credits

Must be enrolled in one of the following Levels: Undergraduate

Must be enrolled in one of the following Colleges:

Coll of Engineering & Comp Sci

Must be enrolled in one of the following Classes: Senior

Junior

Prerequisites: ME 345 and (ME 3601 or ME 360)

A presentation of the methods of plane elasticity to solve a variety of problems arising in the analysis and design of structures. Review of the concepts of plane stress and strain, basic equations of plane elasticity and problems, energy methods approximate/numerical techniques, elastic-plastic bending and torsion, instability of columns and frames. (F,W,S).

ME 4201 Design of Turbomachinery

4.000 Credits

Must be enrolled in one of the following Levels:

Undergraduate

Must be enrolled in one of the following Colleges:

Coll of Engineering & Comp Sci

Must be enrolled in one of the following Classes:

Senior Junior

Prerequisites: ME 325 or ME 320

Principles of turbomachinery design and practices. Euler's equation for energy transfer calculations. Two- and threedimensional velocity diagrams. Characteristic curves of axial and radial flow compressors. Design procedures of fans and blowers. Basic design and selection of pumps. Student is required to conduct a turbomachinery design project by applying the theory learned from the course. (W).

ME 4202 Design Turbo. and Wind Gen.

4.000 Credits

Must be enrolled in one of the following Colleges:

Coll of Engineering & Comp Sci

May not be enrolled in one of the following Classes:

Freshman

Prerequisites: ME 375

Principles of turbomachinery design and practices with emphasis on wind power generation. Euler's equation for energy transfer calculations. Two- and three-dimensional velocity diagrams. Aerodynamics of wind turbines. Wind turbine design and control. Power generation of wind turbines, wind energy system economics and environmental impacts. Design procedures and characteristics of compressors, fans and blowers. Basic design calculations and selection of pumps. A turbomachinery design project by using the theory learned from the course may be required.

ME 4301 Computational Thermo-Fluids

3.000 Credits

Must be enrolled in one of the following Colleges:

Coll of Engineering & Comp Sci

Must be enrolled in one of the following Classes:

Senior

Prerequisites: ME 325 and ME 375 *

This course introduces students to fundamentals and practical skills of computational fluid dynamics and heat transfer. Governing equations and their mathematical classification. Spatial and temporal approximation techniques, stability, consistency, and convergence. Finite-difference and finitevolume formulations. Survey of methods for solving discretized equations. Applications to technological flow and heat transfer problems.

ME 4361 Design of HVAC Systems

4.000 Credits

Must be enrolled in one of the following Levels: Undergraduate

Must be enrolled in one of the following Colleges:

Coll of Engineering & Comp Sci

Must be enrolled in one of the following Classes:

Senior

Junior

Prerequisites: (ME 325 or ME 320 or ME 3251 or ME

3252) and (ME 375 * or ME 371 *)

A comprehensive treatment of the design principles and practices in the heating, ventilating, and air conditioning. Psychrometrics, design loads, distribution systems, equipment selection.

ME 442 Control Syst Anly and Design

4.000 Credits

Prerequisites: ECE 305 and ME 345

Co-requisites: ME 442L

Modeling of mechanical systems and feedback controllers using Laplace transform techniques and block diagram analysis. System response characteristics and stability criterion. Introduction of feedback concepts, including analysis and design of feedback controllers using root locus techniques. Frequency response concepts and use of frequency response measures in stability analysis and controller design.

ME 4461 Mech Vibration & Noise Control

4.000 Credits

Must be enrolled in one of the following Levels:

Undergraduate

Must be enrolled in one of the following Colleges:

Coll of Engineering & Comp Sci

Must be enrolled in one of the following Classes:

Senior Junior

Prerequisites: ME 345 and (ME 349 * or ME 348 *)

Fundamentals of mechanical vibration and principles of noise control. Use of transducers and instruments to conduct sound and vibration measurements. Free and forced vibration in single multiple degrees-of-freedom systems, damping, eigenvalues, eigenvectors, frequency response function, modal analysis, description of sound fields, acoustical materials and material testing, acoustics of rooms and enclosures, sound quality, and principles of noise control. Students will be required to conduct either a vibration or a noise control project. Two oneand-one-half hour lectures and one three-hour laboratory. (F).

ME 4471 Solar Energy Sys Analy&Design

4.000 Credits

Must be enrolled in one of the following Major fields of

Mechanical Engineering

Must be enrolled in one of the following Classes:

Senior

Prerequisites: ME 325 and ME 375 *

The course introduces students to the fundamentals of solar energy conversion and solar energy systems. Principles in thermodynamics and heat transfer required to understand the solar energy use is reviewed. Design of different types of solar energy systems are explored and assessed. Issues relating to the practical implementation of solar energy will also be considered.

ME 452 Sustainable Energy & Environ

4.000 Credits

Must be enrolled in one of the following Colleges:

Coll of Engineering & Comp Sci

Must be enrolled in one of the following Classes:

Prerequisites: ME 325 and ME 375 *

This course introduces students to the fundamentals of energy sources and their environmental impacts. It covers a wide range of conventional and alternative energy sources, which includes renewable and presents the tools for assessing their sustainability and environmental impacts. It also reviews issues related to energy storage, transportation and distribution, and challenges and future opportunities.

ME 4521 Intro Sust Energy Systems

3.000 Credits

Must be enrolled in one of the following Colleges:

Coll of Engineering & Comp Sci

Must be enrolled in one of the following Major fields of study:

Mechanical Engineering

Must be enrolled in one of the following Classes:

Senior

Junior

Prerequisites: ME 375

The course provides an overview of energy technology from a broad perspective that encompasses technical and environmental aspects. It covers a wide range of traditional and alternative

energy sources and presents assessments of their availability, sustainability, and environmental impacts as well as evaluation of their potential role in solving the global energy problem.

ME 460 **Design for Manufacturing**

3.000 Credits

Prerequisites: (ME 360 or ME 3601) and ME 381

Design decisions based on manufacturability and processproperty relationships. Design for assembly. Manufacturing tolerances and quality control methods including NDT. Design methodology used for product development.

ME 467 Senior Design I

3.000 Credits

Prerequisites: ME 330 and ME 345 and ME 360 and ME

A guided design project course with emphasis on decisionmaking process associated with establishing alternatives and evaluation procedures to synthesize designs. Students will propose design projects and work in teams. Written and oral presentations will be required at the close of the term.

ME 4671 Senior Design I

4.000 Credits

Must be enrolled in one of the following Major fields of

Mechanical Engineering

Must be enrolled in one of the following Classes:

Senior Junior

Prerequisites: ME 345 and (ME 360 or ME 3601) and (ME

375 or ME 371) and (ME 378 * or ME 379 *)

A guided design project with emphasis on the decision-making process associated with establishing alternatives and evaluation procedures to synthesize designs. Students propose design projects and work in teams to produce analytical designs, conduct evaluative experiments, and construct a physical design prototype. Engineering ethics and responsibility. Written and oral presentations are required at the close of the term. (F,W,S).

ME 469 Senior Design II

1.000 TO 4.000 Credits Prerequisites: ME 4671

Student teams develop mechanical or interdisciplinary design projects, or continue projects begun in ME 4671. Work includes mechanical engineering design, and could possibly include fabrication and testing. Projects can involve efforts by interdisciplinary teams. Written and oral presentations are required.

ME 472 Prin & Appl of Mechatronic Sys

4.000 Credits

Must be enrolled in one of the following Colleges:

Coll of Engineering & Comp Sci

May not be enrolled in one of the following Classes:

Sophomore

Freshman

Prerequisites: ME 442 or (ECE 460 and ME 265) or (ME 345 and ECE 460)

This course provides the student with hands-on interdisciplinary experience of mechatronic systems, which integrate mechanical, electrical/electronic components with computer microprocessors to design a high performance system. Subjects will be covered including Mechanical and Electrical Actuator Systems, Digital Transducers and Modulators, Microcomputers and Microcontrollers Interfacing Actuators using graphic programming techniques, Programmer Logic Controllers (PLC), and Modeling of Fluid Systems. Laboratories form the core of the course. They cover microprocessor controlled mechanical actuator system for motion controls, materials handling, PLC programming and fluid power systems. The labs make extensive use of Simulink, a MATLABtoolbox, Mikro - C and/or Arduino. Each student builds control circuits on a breadboard kit to simulate a real operation. Student will be required to perform a course design project with mechatronic application in nature.

ME 481 Manufacturing Processes II

3.000 Credits Prerequisites: ME 381

A study of casting, welding, plastic forming, and machining of materials; analysis of forces, energy requirements, and temperature effects; design specifications economically obtainable in terms of dimensional accuracy, surface finish, and material properties, functional characteristics of equipment. Two lectures and a laboratory.

ME 483 Dsgn Cons in Poly and Comp Mat

3.000 Credits

Prerequisites: ME 360 or ME 3601

Physical and mechanical behavior of unreinforced and reinforced (composite) polymeric materials in relation to their applications in modern technology. Emphasis is given to the design considerations with these materials in contrast to those with metallic materials. Time-dependent properties, such as creep and stress relaxation, are considered. Manufacturing methods are covered. Three lectures/recitation.

ME 484 Manufacturing Poly Comp Matl

3.000 Credits

Prerequisites: ME 381 or IMSE 382

This course will consider the manufacturing processes for production of plastics and composite parts. The emphasis will be on manufacturing principles that are based on rheology, polymer flow and transport phenomena. Design considerations and quality control techniques for manufacturing plastic and composite parts will also be covered.

ME 490 Directed Design Project

1.000 TO 3.000 Credits

Must be enrolled in one of the following Classes:

Senior Graduate

Prerequisites: ME 360 or ME 381 or ME 425 or ME 464

Design project involving not only design but also analysis, fabrication and/or testing. Topics may be chosen from any of the areas of mechanical engineering. Students who have taken ME 425 and ME 464 will be encouraged to take this course. The student will submit a report on his or her project and give an oral presentation at the close of the term. (F,W,S).

ME 491 Directed Research Problems

1.000 TO 3.000 Credits

Must be enrolled in one of the following Classes:

Senior Graduate

Special problems selected for laboratory or library investigation with intent of developing initiative and resourcefulness. (F,W,S).

ME 492 Guided Study in Mech Eng

1.000 TO 3.000 Credits

Must be enrolled in one of the following Classes:

Senior Graduate

Individual study, design or laboratory research in a field of interest to the student. Topics may be chosen from any of the areas of mechanical engineering. The student will submit a report on his or her project at the close of the term. (F,W,S).

ME 493 Advanced Vehicle Energy Sys

3.000 Credits

Must be enrolled in one of the following Colleges:

Coll of Engineering & Comp Sci

Must be enrolled in one of the following Classes:

Senior Junior

Prerequisites: ME 325 * and ECE 305 *

This course will introduce the advanced energy conversion systems in automotive vehicles and cover the fundamentals, characteristics, and design consideration of the energy systems. The topic includes using alternative fuels in internal combustion engines, advanced power train systems in hybrid, electric, and fuel cell vehicle, and exhaust energy recovery systems.

ME 496 Internal Combustion Engines I

2.000 TO 3.000 Credits

Prerequisites: ME 320 and (ME 330 or ME 325)

Comparison of characteristics and performance of several forms of internal combustion engines including the Otto and diesel types of piston engines and the several types of gas turbines; thermodynamics of cycles, combustion, ignition, fuel metering and injection, pollution from engines and modeling techniques. Lectures, theory demonstrations, and experiments.

ME 4981 Automotive Engineering

4.000 Credits

Must be enrolled in one of the following Major fields of study:

Mechanical Engineering

Must be enrolled in one of the following Classes:

Senior Junior

Prerequisites: ME 345 and (ME 360 or ME 3601)

Analysis of vehicle performance in terms of acceleration, gradability, speed, fuel economy, ride comfort, stability and safety. Engine-transmission compatibility and matching. Fundamental vehicle dynamics. Computer modeling and simulation of vehicle systems by numerical techniques. Transmission ratio and torque analysis. Design of vehicle systems such as brakes, suspensions, drive line components, steering mechanisms and other subsystems. Four hours lecture. (F,W).

ME 499 Internship

2.000 Credits

Must be enrolled in one of the following Classes:

Senior

Graduate

A four-month professional work experience period of the Engineering Internship Program, integrated and alternated with the classroom terms.

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