

**512. Focal Problems**  
Spring. 1 to 12 credits. H M 511 or approval of department.  
Continuation of H M 511.

**513. Focal Problems**  
Fall. 1 to 12 credits. H M 512 or approval of department.  
Continuation of H M 512.

**514. Focal Problems**  
Winter. 1 to 12 credits. H M 513 or approval of department.  
Continuation of H M 513.

**515. Focal Problems**  
Spring. 1 to 12 credits. H M 514 or approval of department.  
Continuation of H M 514.

**516. Medical Ethics**  
Winter. 3(3-0) Interdepartmental with the College of Osteopathic Medicine.  
Analysis and evaluation of the ethical elements of medical decision making. Topics include: patient rights, physician responsibilities, euthanasia, informed consent, parentalism, confidentiality, biomedical research, and allocation of scarce resources.

**520. Clinical Science**  
Winter. 1 to 8 credits.  
The basic clinical skills of interviewing, physical examination and problem solving are taught in small group seminars utilizing models, patients and self-instructional materials.

**521. Clinical Science**  
Spring. 1 to 8 credits. H M 520 or approval of department.  
Continuation of H M 520.

**522. Clinical Science**  
Fall. 1 to 8 credits. H M 521 or approval of department.  
Continuation of H M 521.

**523. Clinical Science**  
Winter. 1 to 8 credits. H M 522 or approval of department.  
Continuation of H M 522.

**524. Clinical Science**  
Spring. 1 to 8 credits. H M 523 or approval of department.  
Continuation of H M 523.

**590. Special Problems in Human Medicine**  
Fall, Winter, Spring, Summer. 1 to 6 credits. May reenroll for a maximum of 12 credits. Human Medicine students or approval of department.  
Each student will work under direction of a faculty member of the college on an experimental, theoretical or applied problem. A student should employ this college level course, as distinguished from the departmental level special problems course, when his topic of interest seems to require a broad multidisciplinary approach.

**602. Fundamentals of Patient Care**  
Fall, Winter, Spring, Summer. 15 credits. Approval of department.  
Introductory clinical experiences using selected patients with a broad spectrum of medical, surgical, pediatric, and psychiatric problems. History taking, physical examination and problem formulation are taught as a basis for rational and effective patient care.

**604. Hospital Care Clerkship**  
Fall, Winter, Spring, Summer. 16(0-16) Must reenroll for a total of 32 credits. H M 602.  
Longitudinal, inpatient exposure to severe hospital and consultative care problems. Patient management stressed. Fulfills departmental clerkship objectives (when combined with H M 605). Conducted in Marquette, Michigan.

**605. Comprehensive Care Clerkship**  
Fall, Winter, Spring, Summer. 16(0-16) Must reenroll for a total of 32 credits. H M 602.  
Comprehensive, longitudinal, ambulatory exposure to skills, problems, and content of primary disciplines of medical training. Fulfills departmental objective (when combined with H M 604) for required clerkships. Conducted in Escanaba, Michigan.

**608. Sub-Specialty Clerkships**  
Fall, Winter, Spring, Summer. 1 to 17 credits. May reenroll for a maximum of 41 credits. H M 602.  
Hospital and office based clinical experiences in sub-specialties in medicine and surgery.

**609. Pre-Intern Clerkship**  
Fall, Winter, Spring, Summer. 12 credits. May reenroll for a maximum of 48 credits. Successful completion of required clerkships; approval of instructor.  
Patient care responsibilities similar to internship, under close faculty and resident supervision, in a community hospital.

## HUMAN NUTRITION AND FOODS

See Food Science and Human Nutrition.

## IMPROVEMENT SERVICE

All University

**1941. Quantitative Techniques**  
Fall, Winter. 2(2-0) Proficiency test referral or approval of department. Credits earned in this course are included in computation of GPA and MAPS but are not included in the 180 credits required for graduation.  
Number system; rounding and estimating; fractions; decimals; percent; equations; formulas; direct and inverse proportion, including graphs; problem solving or applications; multiplication and division by powers of ten and their multiples; scientific notation; metric system conversions; bases other than ten.

## INTERDISCIPLINARY COURSES IDC

All University

**200. Introduction to Resource Ecology**  
Fall, Winter, Spring, Summer. 3(3-0) Interdisciplinary with the departments of Fisheries and Wildlife, Forestry, Geography, Resource Development, and Zoology. Administered by the Department of Fisheries and Wildlife.  
Basic concepts of ecology which are the unifying basis for resource management, conservation policy and the analysis of environmental quality. Extensive use of guest lecturers.  
Approved through Spring 1983.

**210. Introduction to Latin America I**  
Fall. 3(3-0) Interdisciplinary with the departments of Anthropology, Geography, Music, and Romance and Classical Languages. Administered by the Department of Romance and Classical Languages.  
Specialists on Latin American geography, archaeology, cultural anthropology and music introduce the student to life in Central and South America.  
Approved through Summer 1982.

**211. Introduction to Latin America II**  
Winter. 3(3-0) Interdisciplinary with the departments of Art, Romance and Classical Languages, and Sociology. Administered by the Department of Romance and Classical Languages.  
Specialists in the historical literature, art and sociology of Latin America introduce the student to the culture of the area.  
Approved through Fall 1982.

**212. Introduction to Latin America III**  
Spring. 3(3-0) Interdisciplinary with the departments of Economics, Political Science, and Romance and Classical Languages. Administered by the Department of Romance and Classical Languages.  
Specialists on Latin American political science, economics and contemporary literature introduce the student to Ibero-America.  
Approved through Winter 1983.

**255. Introduction to Contemporary China**  
Fall. 4(4-0) Interdisciplinary with the departments of Anthropology, Geography, History, and Political Science and James Madison College. Administered by the Department of History.  
China's transition from a traditional, agrarian state to a modern nation in the world community and an overview of recent political, economic, social, cultural and diplomatic developments.  
Approved through Summer 1983.

**341. Contemporary South Asia**  
Spring. 4(4-0) Interdisciplinary with the departments of Anthropology, Geography, and Political Science and James Madison College. Administered by the Department of Anthropology.  
Current issues in India, Pakistan and adjoining areas. Regional case studies of population growth, agricultural and industrial development, urbanization, and internal and international political and economic relations.  
Approved through Winter 1984.

**Descriptions – Interdisciplinary Courses  
of  
Courses**

**400V. Distinguished Visiting Professor Series**

Fall, Winter, Spring. Variable credit. Approval of the student's major department. The title, content, and credits to be determined by the college sponsoring the course in consultation with the visiting professor. May be counted as credit in any major upon approval of major department, division or dean.

**470. Biological Membranes**

Spring. 3(3-0) BCH 401. Interdisciplinary with the departments of Biophysics, Biochemistry, Microbiology and Public Health, and Physiology. Administered by the Department of Physiology.

The chemistry, physics and mathematics of the permeability, energy transductions and surface functions of differentiated cell membranes and membranous organelles are compared. A brief discussion of theoretical and experimental models is included. Approved through Winter 1983.

**810. Aging and Communication**

Spring. 3(3-0) Approval of instructor. Interdisciplinary with the Department of Family and Child Ecology, the School of Social Work, and the College of Communication Arts and Sciences. Administered by the Department of Family and Child Ecology.

Knowledge and understanding of the importance of communication for older people in various spheres of their lives. Developmental changes in speech, language, and sensory acuity and their implications. Approved through Winter 1982.

**838. Sub-Saharan Africa Seminar**

Fall, Winter, Spring. 4(4-0) May reenroll for a maximum of 12 credits. Graduate standing or approval of instructor. Interdisciplinary with the departments of Anthropology, Economics, Geography, History, Linguistics and Oriental and African Languages, Political Science, and Sociology and the College of Education. Administered by the Department of Anthropology.

African-related archival and field research topics and methodologies viewed from perspective of relevant social science and humanistic disciplines associated with the African Studies Center. Approved through Summer 1983.

**INTERNAL MEDICINE**

**I M**

(Established effective January 1, 1981.)

**College of Osteopathic Medicine**

**620. Directed Studies**

Fall, Winter, Spring, Summer. 2 to 24 credits. Grade P in all courses offered in terms 1 through 8.

Individual or group work on special problems in medicine related to internal medicine.

**650. Medicine Clerkship**

(O M 650.) Fall, Winter, Spring, Summer. 2 to 24 credits. May reenroll for a maximum of 24 credits. Grade P in all courses offered in terms 1 through 8.

Clinical exposure in osteopathic medicine. Program developed to achieve proficiency in motor skills and aptitudes; comprehension of concepts and principles; patient evaluation, diagnosis, management, and therapy.

**651. Cardiology Clerkship**

Fall, Winter, Spring, Summer. 6 credits. May reenroll for a maximum of 12 credits. Grade P in all courses offered in terms 1 through 8.

Intensive experience in bedside diagnosis and care of patients with the more frequently seen cardiac problems.

**652. Gastroenterology Clerkship**

Fall, Winter, Spring, Summer. 6 credits. May reenroll for a maximum of 12 credits. Grade P in all courses offered in terms 1 through 8.

Inpatient and outpatient clinical gastroenterology. Reinforcement of fundamentals of gastrointestinal diseases, including evaluation of GI patients, cost effectiveness in patient management, behavioral science related to patient care.

**653. Oncology/Hematology Clerkship**

Fall, Winter, Spring, Summer. 6 credits. May reenroll for a maximum of 12 credits. Grade P in all courses offered in terms 1 through 8.

Diagnosis, staging and treatment methods of solid tumors and other neoplasms. Pharmacology of cytotoxic agents. Issues in nutrition. Behavioral approaches to the terminally-ill patient.

**654. Pulmonary Disease Clerkship**

Fall, Winter, Spring, Summer. 6 credits. May reenroll for a maximum of 12 credits. Grade P in all courses offered in terms 1 through 8.

Evaluation and treatment of patients with common pulmonary diseases, including acute and chronic respiratory failure, primary and metastatic lung tumors, various bacterial and non-bacterial pneumonias.

**655. Nephrology Clerkship**

Fall, Winter, Spring, Summer. 6 credits. May reenroll for a maximum of 12 credits. I M 650 or approval of department.

Clinic and hospital based experience to develop basic skills in evaluation and management of patients with renal disease. Emphasis on integration of renal physiology and pathophysiology.

**656. Neurology Clerkship**

(O M 657.) Fall, Winter, Spring, Summer. 6 credits. May reenroll for a maximum of 12 credits. Grade P in all courses offered in terms 1 through 8.

Clinical exposure in area of neurology. Program structure developed to achieve proficiency in motor skills, aptitudes; comprehension of concepts and principles; patient evaluation, diagnosis, management, and therapy.

**ITALIAN**

See Romance and Classical Languages.

**JAMES MADISON  
COLLEGE**

**M C**

**111. Identity and Community in America: An Approach to Writing**

Fall. 3(3-0).

Identity in contemporary America. Emphasis on family, love, work, education, race. Materials include journals, biographies, fiction, films, and essays. Students write narratives, autobiographies, and critical analyses based on personal experience.

**112. Identity and Community in America: An Approach to Writing**

Winter. 3(3-0) M C 111.

The quest for community in early America. Autonomy, authority, and morality in the 'good society.' Materials include literary and historical sources, films, and community studies. Students write expository and argumentative essays.

**113. Identity and Community in America: An Approach to Writing**

Spring. 3(3-0) M C 112.

Identity and community in American society under stress, such as the Great Depression of Civil War. Materials include fiction, interviews, photography, films. Students investigate primary documents and write expository essays.

**200. Introduction to the Study of Policy Problems**

Fall. 4(2-2)

Introduction to the social sciences and related disciplines as these apply to the study of major social, economic and political problems.

**201. Introduction to the Study of Policy Problems**

Winter. 4(2-2) M C 200.

Continuation of M C 200.

**202. Introduction to the Study of Policy Problems**

Spring. 4(2-2) M C 201.

Continuation of M C 201.

**205. Methodology for Policy Sciences**

Fall, Winter, Spring. 4(3-1)

Introduction to the logic of social research, techniques of data collection, and procedures in quantification. Emphasis will be on interpretation and evaluation of findings for policy decision making.

**215. Utopia and the Quest for Social Progress**

Spring. 4(3-0)

Survey of utopian thought and literary utopias combined with detailed study of selected major utopias from 'The Republic' to 'Walden Two.'

**218. Contemporary Ideologies**

Fall. 4(3-0) Students may not receive credit in both M C 218 and PLS 170.

The doctrines by which socio-political movements justify and explain their goals and programs. An introduction to such movements and doctrines as socialism, communism, fascism, nationalism and democracy.