

514. Focal Problems
Winter. 1 to 10 credits. H M 513 or approval of department.
Continuation of H M 513.

515. Focal Problems
Spring. 1 to 10 credits. H M 514 or approval of department.
Continuation of H M 514.

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.

534. Aging: Clinical and Community Perspectives
Spring. 3(3-0) Medical student or approval of department.
Multi-dimensional aspects of aging and their application to long-term, continuing care of the chronically ill older adult.

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.

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.

HUMAN NUTRITION AND FOODS

See Food Science and Human Nutrition

IMPROVEMENT SERVICE

I S

All University

194. Quantitative Techniques
Fall, Winter, Spring, Summer. 2(2-0)
Proficiency test referral or approval of department.
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. Approved through Fall term 1978.

INTERDISCIPLINARY COURSES

IDC

All University

100. Career Planning and Academic Programming
Winter, Spring. 1(1-0) Administered by University College.
Philosophical and practical aspects of making career choices and designing academic programs to meet career objectives. Tools and techniques for self-evaluation and evaluation of career alternatives; employability, trends in occupations.

200. Resource Ecology and Man
Fall, Winter, Spring. 3(3-0) Interdisciplinary with the following departments: Anthropology, Botany and Plant Pathology, Fisheries and Wildlife, Forestry, Geography, Park and Recreation Resources, Resource Development, and Zoology. Administered by the Department of Fisheries and Wildlife.
Mechanisms by which the environment regulates man and his resources. Ecology as the unifying basis for resource management. Resource conservation policy and environmental quality.

201. Introduction to Environmental Systems
(SYS 150.) Fall. 3(3-0) Interdisciplinary with Systems Science and Engineering. Administered by Systems Science.
Basic systems concepts presented in a non-mathematical manner. Application to selected ecological topics, e.g., energy, water quality, food production, population dynamics. Interactive models provide opportunity for students to play decision-making role.

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 in Latin American geography, archaeology, cultural anthropology and music introduce the student to life in Central and South America. Approved through Summer 1980.

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 1980.

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 1981.

220. The Politics of Ecology
Spring. 4(3-0) Interdisciplinary with the departments of Political Science and Social Science and administered by the Department of Social Science.
Political considerations fundamental to environmental issues. Theory, practice, and prescriptions for action are included. Economic, legal, and ethical factors influencing public policy decisions will be emphasized.

255. Continuing Revolution in China: Problems and Approaches
(389.) 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.
The continuing revolution in China viewed first historically, then as it has affected various sectors of Chinese society, and finally as it has affected China's relations with other nations.

256. Energy Consumption and Environmental Quality
Spring. 3(3-0) Interdisciplinary with Lyman Briggs College and the Department of Physics. Administered by Lyman Briggs College.
The role of energy as a fundamental pollutant will be discussed along with the availability of fossil energy sources. Limitations on the safe utilization of both fossil and nuclear energy will also be considered.

341. Contemporary Problems of South Asia
Spring. 4(3-0) Not open to Freshmen.
Interdisciplinary with the departments of Anthropology, Geography, and Political Science and administered by the Department of Political Science.
Current problems in India, Pakistan and adjoining areas, studied through regional case studies of population growth, agricultural and industrial development, urbanization, and internal and international political and economic relationships.

344. Modernization: India, Pakistan, Bangladesh
Winter. 4(4-0) Not open to freshmen. Administered by the Department of Social Science.
Social, economic, and political development of three nations in the change from traditional, non-industrial, formerly colonial nations to the modern industrializing stage as independent nations.

Descriptions – Interdisciplinary Courses of Courses

345. Modernization: The Middle East
 Winter, Spring. 4(4-0) Not open to Freshmen. Administered by the Department of Social Science.
 Social, economic, and political development of non-western cultures in the movement from the traditional, non-industrial to the modernizing, industrializing stage.

346. Far East: Contemporary Issues and Problems
 Spring. 4(4-0) Administered by the Department of Social Science.

Contemporary political, economic and social issues in the Far East affecting relationships among Far Eastern peoples and relationships between these peoples and the United States and other powers.

384. Contemporary Problems of Japan
 Winter. 4(3-0) Not open to Freshmen. Interdisciplinary with the departments of Anthropology, Geography, and History. Administered by the Department of Geography.
 Current problems in Japan studied through case studies of major policy issues, agricultural and industrial development, urbanization, student and youth movement, political and governmental institutions, and problems of external relations.

390. Survey of Sub-Saharan Africa
 Winter. 4(4-0) Credits may be counted in any of the cooperating departments. Interdisciplinary with the following departments cooperating: Anthropology, Geography, History, Political Science and Sociology. Administered by the Department of Geography.
 Africa introduced through integration of the approaches of several disciplines in the social sciences and humanities. Designed as basis for further work in departmental African area courses.

391. Survey of Sub-Saharan Africa
 Spring. 4(4-0) Credits may be counted in any of the cooperating departments listed in IDC 390. Administered by the Department of Geography.
 Continuation of IDC 390.

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.

401. Interdisciplinary Issues in Aging
 Winter. 4(4-0) Administered by University College.
 Interdisciplinary and cross cultural exploration of the aging process. Concern with aging as a personal experience as well as a biological, social and psychological event.

432. Introduction to Meteorology
 Spring. 3(3-0) Credit may be counted in either of the cooperating departments. Interdisciplinary with the departments of Agricultural Engineering and Geology. Administered by the Department of Agricultural Engineering.
 Atmospheric science's view of earth's atmosphere, its physical structure, energy and moisture balance, vertical and horizontal motions, formation of air masses, general circulation, fronts, cyclones, and weather. Applications of meteorology.

433. Introductory Meteorology Laboratory
 Spring. 1(0-2) IDC 432 or concurrently. Credit may be counted in either of the cooperating departments. Interdisciplinary with the departments of Agricultural Engineering and Geology. Administered by the Department of Agricultural Engineering.
 Analysis of meteorological data, meteorological experimentation and instrumentation.

435. Microclimatology
 Fall. 3(3-0) MTH 108. Administered by the Department of Agricultural Engineering.
 The physical environment in the lower few hundred meters of the atmosphere and within the biosphere is described and the components of the energy budget are qualitatively evaluated.

447. Refugees, Displaced Persons, Hostages, Exiles
 (347.) Spring. 4(4-0) Juniors. Interdisciplinary with the departments of History, Political Science, Social Science and Sociology and administered by the Department of Social Science.
 The new refugedom is caused mainly by the new nations' emergence into independence. Course examines historical experiences, political causes and solutions, shocks and adjustments of assimilation, social life and organizations of refugees.

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.
 Membranes and membranous organelles of cells are discussed in terms of the chemistry, physics and mathematics of permeability, energy transductions and surface functions. Theoretical and experimental models are analyzed. Approved through Winter 1981.

476. Canadian-American Studies
 Spring. 4(3-0) May reenroll for a maximum of 8 credits. Juniors. Credits may be counted in any of the cooperating departments. Interdisciplinary with the following: Anthropology, Secondary Education, English, Geography, History, and Romance and Classical Languages. Administered by the Canadian-American Studies Committee.
 Introduction to Canadian-American studies. Materials from various disciplines enable the student to integrate subject-matter, areas, and methodology. Content varies from term to term, but course is always focused upon significant issues and subjects in the interrelated fields of Canada and the United States.

488. The Impact of Animal Resource Management Upon the World's Developing Nations
 Winter. 4(5-0) Interdisciplinary with the following departments: Agriculture, Animal Husbandry, Crop and Soil Sciences, Dairy Science, Large Animal Surgery and Medicine, and Poultry Science, and administered by the Department of Animal Husbandry.
 Role of the domesticated animal resources of the underdeveloped world as managed by man to produce essential nutrients to alleviate starvation and deficiency disease and in diversifying economic development in the utilization of land resources.

803. Seminar in Industrial Relations
 Fall, Winter, Spring. 4(3-0) May reenroll for a maximum of 16 credits, all applicable to the student's major field, with approval of the student's major department. Conducted jointly by the departments of Economics, Management, Political Science, Psychology, and Sociology, and the School of Labor and Industrial Relations. Administered by the School of Labor and Industrial Relations.
 Research and literature in industrial relations with emphasis on current research.

838. Interdisciplinary Seminar on Africa
 Fall. 4 credits. Approval of department. Credits may be counted in any of the cooperating departments. Interdisciplinary with the following departments: Anthropology, Economics, Education, Geography, History, Linguistics, Political Science, and Sociology. Administered by the Department of Anthropology.
 Behavioral science problems in an African setting, viewed from perspective of relevant social science and humanistic disciplines associated with African Studies Center.

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, Winter. 4(2-2)
 Introduction to the social sciences and related disciplines as these apply to the study of major social, economic and political problems.