

## 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 Fisheries and Wildlife Department.

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.

### 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.

### 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.

### 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

(LBC 256.) Spring. 3(3-0) Interdisciplinary with Lyman Briggs College and the Physics Department. 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.

### 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.

### 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 390. Administered by the Department of Geography.

Continuation of 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.

A purview of atmospheric science including a study of the interactions between meteorology and living organisms.

### 433. Introductory Meteorology Laboratory

Spring. 1(0-2) 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.

Weather map analysis, 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 refugeedom 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 Biochemistry, Biophysics, 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 summarized.

**476. Canadian-American Studies**

Spring. 4(3-0) May re-enroll 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 re-enroll 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 the 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) Students may not receive credit in both M C 111 and ATL 121, 131, 141, 151, 161, 171, 181, 191H.

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) 111. Students may not receive credit in both M C 112 and ATL 122, 132, 142, 152, 162, 172, 182, 192H.

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) 112. Students may not receive credit in both M C 113 and ATL 123, 133, 143, 153, 163, 173, 183, 193H.

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.

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

Winter. 4(2-2) 200.

Continuation of 200.

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

Spring. 4(2-2) 201.

Continuation of 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**

Winter. 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.

**220. Contemporary World Politics**

Fall, Winter. 4(3-0) Students may not receive credit in both M C 220 and PLS 160.

Theories explaining actions and interactions of nation-states, regions, and political movements. Analysis of histories, capabilities, and policies. Examination of factors accounting for conflict and collaboration in international relations.

**221. The American Foreign Policy Establishment**

(321.) Winter. 4(3-0) 220 recommended.

Institutions, processes and doctrines of contemporary American foreign policy. The role of the Presidency, Congress, governmental agencies, pressure groups and public opinion.

**226. Socio-Cultural Factors in Developmental Change**

Spring. 4(3-0) 220 recommended.

The network of socio-cultural institutions related to economic decay, stagnation, or development. Conditions under which socio-cultural factors accelerate or retard economic development.

**240. Applications of Economic Policy Analysis**

Spring. 4(3-0) EC 200 and 201 or 210.

Economic principles and concepts applied to contemporary economic policy problems. Emphasis on alternative explanations for selected problems, the institutions of economic policy-making and normative implications of various policy solutions.

**249. Historical Development of Urban Society**

(250.) Fall. 4(3-0) Interdepartmental with the Department of History.

The evolution of cities, from the Industrial Revolution. Particular stress will be placed upon the processes of urbanization, and upon the social, economic, and political aspects of American urban history.

**251. The Contemporary American City**

Winter. 4(3-0)

Analysis of urban social and political organization and the policy-making process. Selected topics such as urban neighborhoods, class and sub-culture and urban bureaucracy.

**252. Urban Policy Problems**

Spring. 4(3-0)

The study of contemporary urban problems, their policy implications and the role of these problems in future cities. Students must confront alternative solutions and their value assumptions.