

pervision of University College professors. Variable elective credit will be determined when the student secures instructor, adviser, and department approval.

**311. Great Cities, Arts, and Ideas:  
The Western Classical Age**  
Fall. 4(4-0) Juniors.

The humanities in an urban culture during the Western classical age. Major ideas and works of art and literature, their significance in the city's life, and their continuing influence. City will be Athens or Rome.

**312. Great Cities, Arts, and Ideas:  
The Renaissance**  
Winter. 4(4-0) Juniors.

The humanities in an urban culture during the Renaissance. Major ideas and works of art and literature, their significance in the city's life, and their continuing influence. City will be Florence, Rome, or Paris.

**313. Great Cities, Arts, and Ideas:  
The Enlightenment**  
Spring. 4(4-0) Juniors.

The humanities in an urban culture during the century of the French Revolution. Major ideas, works of art and literature, their significance in the city's life and their continuing influence. City will be Paris or London.

**341. The Humanities in the  
Contemporary World**

Winter, Spring 4(4-0) Juniors. Previous studies in the humanities are recommended.

Interdisciplinary study of the literature, philosophy, religion, architecture, painting, sculpture, music, film, and other performing arts of the era since 1945 as they reflect and influence the character of contemporary civilization.

**HUMAN MEDICINE H M  
(COLLEGE OF)**

**499. Seminar in Medicine and Society**  
Fall, Winter, Spring. 2(3-0) Must re-enroll for a maximum of 6 credits. Human Medicine students.

Medicine in its wider social and cultural context. Health viewed as an expression of the person's total functioning—sociocultural, psychological, and biological—with illness regarded as the result of a dysfunction in any one of these areas.

**501. Human Biology and Behavior**  
Fall. Variable credit. May re-enroll for a maximum of 12 credits. Year V Human Medicine students.

An integrative approach to the human organism, utilizing development as a central theme, and focusing upon the prenatal period.

**502. Human Biology and Behavior**  
Winter. Variable credit. May re-enroll for a maximum of 12 credits. 501

Continuation of 501 focusing upon birth and the peri-natal period.

**503. Human Biology and Behavior**  
Spring. Variable credit. May enroll for a maximum of 9 credits. 502.

Continuation of 502 focusing upon the period of childhood.

**506. Doctor-Patient Relationship**  
Fall. 2(2-0)

Identification of specified elements of communication and interview responses through the utilization of videotaped interviews. Focus on teaching self-observation, exploration of human interaction.

**508. Immediate Care**  
Fall. 2(2-0) First year Human Medicine student.

Methods of administering immediate life saving and supportive measures in case of accident or medical emergency. Emphasis placed on cardiopulmonary resuscitation, fractures, unconsciousness, wounds, environmental injury and emergency child birth.

**510. Focal Problems**  
(507.) Fall. 1 to 10 credits.

Small group discussions concerned with instruction in the processes of medical problem solving and the integrated learning of basic and clinical medical science concepts around common problems seen in medical practice.

**511. Focal Problems**  
Winter. 1 to 10 credits. 510 or approval of department.

Continuation of 510.

**512. Focal Problems**  
Spring. 1 to 10 credits. 511 or approval of department.

Continuation 511.

**513. Focal Problems**  
Fall. 1 to 10 credits. 512 or approval of department.

Continuation of 512.

**514. Focal Problems**  
Winter. 1 to 10 credits. 513 or approval of department.

Continuation of 513.

**515. Focal Problems**  
Spring. 1 to 10 credits. 514 or approval of department.

Continuation of 514.

**520. Clinical Science**  
(509.) 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. 520 or approval of department.

Continuation of 520.

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

Continuation of 521.

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

Continuation of 522.

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

Continuation of 523.

**530. Human Biology and Behavior**  
Winter. 1 to 8 credits.

A multidisciplinary course integrating the physiological and psycho-social aspects of each stage of human development, from conception to death, with significant clinical problems of that stage.

**531. Human Biology and Behavior...**  
Spring. 1 to 8 credits. 530 or approval of department.

Continuation of 530.

**532. Human Biology and Behavior**  
Fall. 1 to 8 credits. 531 or approval of department.

Continuation of 531.

**533. Human Biology and Behavior**  
Winter. 1 to 8 credits. 532 or approval of department.

Continuation of 532.

**534. Human Biology and Behavior**  
Spring. 1 to 8 credits. 533 or approval of department.

Continuation of 533.

**590. Special Problems in Human Medicine**  
Fall, Winter, Spring, Summer. 1 to 6 credits. May re-enroll for a maximum of 12 credits. Human Medicine students.

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.

**601. Human Biology and Behavior**  
Fall, Winter, Spring. Variable credit. May re-enroll for a maximum of 15 credits. Year V—College of Human Medicine Curriculum.

A multidisciplinary study of the human organism unified by the theme of growth and development. Covers the basic science and clinical aspects of human growth and development from adolescence to death.

**602. Fundamentals of Patient Care**  
Fall, Winter, Spring, Summer. 15 credits. 601.

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.

**603. Human Biology and Behavior**  
Spring. Variable credit. May re-enroll for a maximum of 15 credits. 602.

Continuation of 602.

**608. Sub-Specialty Clerkships**  
Fall, Winter, Spring, Summer. 1 to 17 credits. May re-enroll for a maximum of 41 credits. 602.

Hospital and office based clinical experiences in sub-specialties in medicine and surgery.

**609. Radiology Clerkship**  
Fall, Winter, Spring, Summer. 1 to 17 credits. May re-enroll for a maximum of 34 credits. 602.

Office and hospital based experience to acquaint the student with basic radiological information and develop X-ray interpretation skills.

**610. Family Practice Clerkship**  
Fall, Winter, Spring, Summer. 1 to 17 credits. May re-enroll for a maximum of 43 credits. 602.

A clerkship in a model family practice unit with graded responsibility and supervision in the care of families and their medical problems with emphasis on primary, continuing and comprehensive care.

**611. Anesthesiology Clerkship**

Fall, Winter, Spring, Summer. 1 to 17 credits. May re-enroll for a maximum of 34 credits. 602.

Introducing common anesthetic agents and techniques, the Anesthesia Clerkship stresses pre-operative evaluation of physical and psychological status of patients and provides opportunity for performance of anesthetic procedures under supervision.

**HUMAN NUTRITION  
AND FOODS**

See Food Science and Human Nutrition

**IMPROVEMENT  
SERVICES**

I S

**All University**

**094. Arithmetic Improvement Service**

Fall, Winter, Spring, Summer. 0(2-0) [2(2-0)]†.

Instruction and practice in addition, subtraction, multiplication, and division of whole numbers, common and decimal fractions; problems involving percent; simple problems in ratio and proportion; and one-step equations.

**INTERDISCIPLINARY  
COURSES**

IDC

**All University**

**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 health.

**203. Introduction to Study of the Moon**

Spring. 3(3-0) Interdisciplinary with the departments of Astronomy, Geography, and Geology and administered by the Geology Department.

Lunar science presented from the viewpoints of astronomy, geography and geology with particular emphasis on the increasing importance of the moon in man's present and future. Evening lunar observations required.

**341. Contemporary Problems of South Asia**

Spring. 4(3-0) Not open to Freshmen. Administered by the Geography Department.

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 and Japan**

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.

**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 (342.)**

Winter. 4(3-0) Not open to Freshmen. Interdisciplinary with the Departments of Anthropology, Geography, and History. Administered by the Department of Geography.

**389. Continuing Revolution in China: Problems and Approaches**

Fall, Winter, Spring. 4(4-0) Not open to Freshmen. Interdisciplinary with the Departments of Anthropology and History and administered by the History Department.

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.

**390. Survey of Subsaharan 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 Geography Department.

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 Subsaharan Africa**

Spring. 4(4-0) Credits may be counted in any of the cooperating departments listed in 390. Administered by the Geography Department. 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.

**421. Seminar on Recent Advances in Science and Mathematics**

Fall, Winter, Spring, Summer. 2(2-0) May re-enroll for a maximum of 6 credits. Bachelor's degree.

A structured course which cuts across the other four major offerings. Selected topics in recent

developments will be discussed by staff members and guest lecturers. Recent research is stressed and effort is made to show the inter-relatedness of the topics to general science course content materials.

**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 Agricultural Engineering Department.

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 Agricultural Engineering Department.

Weather map analysis, meteorological experimentation and instrumentation.

**435. Microclimatology**

Fall. 3(3-0) MTH 108. Administered by Agricultural Engineering Department.

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.

**476. Canadian-American Studies**

Spring. 4(3-0) May re-enroll for a maximum of 8 credits. Credits may be counted in any of the cooperating departments. Interdisciplinary with the following: Anthropology, Secondary Education, English, Geography, History, and Romance Languages. Administered by the Canadian-American Studies Committee. Juniors.

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. 3(4-0) 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 Animal Husbandry Department.

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.

**800V. 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.

**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 So-

†See page A-2 item 3