512. Small Animal Surgery and Medicine II
(VSM 513.) Winter, Summer. 7(6-3)
Diseases of musculoskeletal, digestive and respiratory systems. Includes radiology and surgical laboratory with demonstrations.

513. Small Animal Surgery and Medicine III
(VSM 513.) Fall Spring. 7(7-0) 512.
Diseases of urogenital, endocrine, cardiovascular, hematopoietic and integumentary systems and specific infectious diseases. Includes radiographic and surgical techniques.

604. Small Animal Clinic II
(VSM 604.) Fall, Winter, Spring, Summer. 12(0-35) 504.
Concepts and practices of clinical veterinary medicine. Rotation through hospital services. Diagnosis, prognosis, treatment, and prevention of disease through handling of clinic patients under direct supervision of staff veterinarians.

614. Small Animal Surgery and Medicine IV
(VSM 614.) Winter, Summer. 3(3-0) Sixth-term Veterinary Medicine students. Occurrence, etiology, symptomatology, diagnosis, treatment and prevention of diseases of nervous system, organs of special senses, physical and chemical agents and neoplasia.

651. Clinico-Pathologic Conference
(VSM 651.) Fall, Winter, Spring, Summer. 6(1-0) May re-enroll for a maximum of 2 credits. Professional Veterinary Medicine students. Clinico-pathologic conference on selected clinical cases. Students will be required to attend each term (first nine terms) without credit and in terms ten and eleven for 1 credit each term.

808. Problems in Small Animal Surgery
(VSM 808.) Fall, Winter, Spring, Summer. Variable credit.

810. Problems in Small Animal Medicine
(VSM 810.) Fall, Winter, Spring, Summer. Variable credit.

813. Seminar
(VSM 813.) Fall, Winter, Spring. 1 credit.

822. Bone and Joint Surgery
(VSM 822.) Winter. 3(2-4) Approval of department. Fundamentals, theory and practice covering the various conditions and surgery of bones and joints.

823. Special Surgery
(VSM 823.) Spring. 3(1-6) May re-enroll for a maximum of 8 credits. Approval of department. Surgical technique and tissue reactions following surgery in small animals.

825. Advanced Anesthesiology
(VSM 825.) Winter. 4(2-3) Approval of department. Principles of drug action pertaining to anesthetics will be discussed including respiratory and cardiovascular effects of inhalation and intravenous agents. Anesthetic techniques for various animal species will be presented.

826. Cardiology
(VSM 826.) Fall. 3(3-4) Approval of department. Study recent advances in veterinary cardiology. Includes electrophysiology, congenital and acquired diseases, cardiac catheterization and surgery.

899. Research

SOCIAL SCIENCE

University College

Students may earn credit in only one of the courses in each of the following three groups:
1. 201, 211, 221, 241
2. 202, 212, 222, 242
3. 203, 213, 223, 243

201. Americans and Their Values
(VSM 231A.) Fall, Winter, Spring, Summer. 4(4-0) Processes by which individuals are socialized to the prevailing patterns of behavior by such agencies as family, school, peer groups, mass media and church. Part played by each in the development of personality.

202. Power in America
(VSM 232A.) Fall, Winter, Spring, Summer. 4(4-0) 201 preferred, or 211, 221, 241. Problems of regulating and controlling human behavior. Emphasis placed on major economic and political institutions involved in social control. This includes problems of human wants and needs.

203. A Peaceful World?
(VSM 233A.) Fall, Winter, Spring, Summer. 4(4-0) 202 preferred; or 213, 222, or 243. The international scene with the focus on problems of economic development, conflict among nations and states and attempts at conflict control.

211. The Emergence of Man
(VSM 231B.) Fall, Winter, Spring, Summer. 4(4-0) The bio-social evolution of man. The theories and empirical findings of the behavioral sciences are brought to bear upon the nature of man.

212. Coping with Changing Institutions in Modern Society
(VSM 232B.) Fall, Winter, Spring, Summer. 4(4-0) 211 preferred; or 201, 211, or 241. Individuals and the changing institutional framework of modern society. Emphasis on socialization of personality systems in different cultural settings to cope with life in the future.

213. Casualties of Contemporary Society
(VSM 233B.) Fall, Winter, Spring, Summer. 4(4-0) 212 preferred; or 202, 222, or 242. The meaning of deviant behavior and personal disorganization and their impact on society. Selected problems examined in depth.

221. The Changing American Metropolis: Ecology of the Urban Community
(VSM 231C.) Fall, Winter, Spring, Summer. 4(4-0) Factors and directions in urban change. Impacts on life styles and life strategies of urban groups.

Challenges to traditional family, educational, and community patterns.

222. Work and Politics in Urban America
(VSM 232C.) Fall, Winter, Spring, Summer. 4(4-0) 221 preferred; or 201, 211, 241. Changing patterns of economic and political participation. Issues of employment, security and job satisfaction. Distribution of economic rewards, political power, and civil rights. Interactions of economic and political activities.

223. The World's Cities: An Urban Culture and Common Problems
(VSM 233C.) Fall, Winter, Spring, Summer. 4(4-0) 222 preferred; or 203, 212, or 242. The unity of urban life patterns and the emerging of modern-day urban problems. Cultural variations in approach to issues—comparative political, social, economic, ideological systems.

241. Modernization: Political and Social
(VSM 241D.) Fall, Winter, Spring, Summer. 4(4-0) The nature and sources of social cohesion. Approaches to the modernization of traditional societies. Problems and alternative strategies of nation building.

242. Modern Ideologies: Justifications of Political and Economic Power
(VSM 242D.) Fall, Winter, Spring, Summer. 4(4-0) 241 preferred; or 201, 211 or 241. Ideologies of change in the modern world—sources, appeals, problems. Issues of social justice and individual freedom.

243. Revolutionary Change and International Conflict
(VSM 243D.) Fall, Winter, Spring, Summer. 4(4-0) 242 preferred; or 202, 212, or 292. Social tensions and revolutionary change. The causes of war: international conflict and the great powers. Strategies for peace. Man's conscience versus state policies.

300. Supervised Individual Study
Fall, Winter, Spring. 2 to 4 credits. 8 credits completed in the Social Science Department and approval of department.

Selected students requesting individual study of interdisciplinary problems will work under supervision of University College professors. Variable elective credit will be determined when the student secures instructor, adviser, and department approval.

344. Modernization: India and Japan
For course description, see Interdisciplinary Courses.

345. Modernization: The Middle East
For course description, see Interdisciplinary Courses.

346. Far East: Contemporary Issues and Problems
For course description, see Interdisciplinary Courses.

SOCIAL SCIENCE

SCS (COLLEGE OF)

210. Methods of Social Science I
Fall, Winter, Spring, Summer. 4(4-0)
Sophomores.

Characteristics of social science theory and method. Logical and practical aspects of data collection; standard techniques of investigation in the social sciences.
211. Methods of Social Science II  
Fall, Winter, Spring, Summer. 4(4-0)
Principles of measurement and scaling. Types of variables. Techniques and problems of sampling. Research design. Role of explanation and of value judgments in social science.

450H. Perspectives in Social Science  
(300H.) Fall, Winter, Spring. 4(4-0)
Juniors, approval of Honors College. Preference given to majors in Social Science and professional schools of the College of Social Science. Seminars in selected topics in areas of knowledge represented by the social science disciplines and allied professional fields.

470. Selected Topics in Social Science  
Winter, Spring. 4(4-0) May re-enroll for a maximum of 8 credits. 18 credits in Social Science.
An interdisciplinary investigation of social science problems, including computer utilization in social science research, and interdisciplinary approaches to contemporary problems. Topics will vary from term to term.

480. Contemporary Social Problems in the United States  
Fall, Winter. 4(4-0) May re-enroll for a maximum of 8 credits. 18 credits in Social Science.
Interdisciplinary investigation of selected major social problems of the United States, such as urban redevelopment, environmental control, welfare reform, crime and society, the future of American society.

492. Contemporary Social Problems Abroad  
Spring. 4(4-0) 18 credits in Social Science.
Seminars dealing with major theoretical topics and social problems concerning foreign areas, such as economic and educational development, population explosions, war crises and peacekeeping. A multidisciplinary approach involving specialists from the social science disciplines and allied professional fields.

490. Individual Research Projects  
Fall, Winter, Spring. 4 credits. May re-enroll for a maximum of 9 credits. Multidisciplinary social science majors and 12 credits in social sciences - agricultural economics, anthropology, economics, geography, political science, psychology and sociology.
Individually supervised study and research on a topic using a multidisciplinary approach.

495. Foreign Area Field Study  
Fall, Winter, Spring, Summer. 3 to 12 credits. May re-enroll for a maximum of 24 credits. Juniors and 12 credits in social science.
Study in a variety of foreign settings under the guidance of an advisor, such as American University Field Study Centers in Rome and Singapore.

810. Introduction to Linear System Theory  
(812.) Fall. 3(3-0) MTH 214. Interdepartmental with the Computer Science Department and Systems Science and administered by Systems Science.
A first course in system theory for students from a range of disciplines. Mathematical representation of system variables, transform and state space method of analysis, introduction to control theory, applications to physical, economic and social systems.