621. Anesthesiology Clerkship
Fall, Winter, Spring, Summer. 4 credits.
Satisfactory completion of term 8 of the professional veterinary curriculum, approval of department.
Supervised anesthesiology practice.

622. General Practice Clerkship
Fall, Winter, Spring, Summer. 4 credits.
May reenroll for a maximum of 8 credits.
Satisfactory completion of term 8 of the professional veterinary curriculum, approval of department.
Supervised general practice.

623. Radiology Clerkship
Fall, Winter, Spring, Summer. 4 credits.
Satisfactory completion of term 8 of the professional veterinary curriculum, approval of department.
Supervised radiology practice.

624. Soft Tissue Surgery Clerkship
Fall, Winter, Spring, Summer. 4 credits.
Satisfactory completion of term 8 of the professional veterinary curriculum, approval of department.
Supervised soft tissue surgery practice.

631. Problems in Anesthesiology
Fall, Winter, Spring, Summer. 4 credits.
SSM 621, approval of department.
Supervised anesthesiology problems.

634. Problems in Soft Tissue Surgery
Fall, Winter, Spring, Summer. 4 credits.
SSM 624, approval of department.
Supervised soft tissue surgery problems.

680. Cardiology/Neurology Clerkship
Fall, Winter, Spring, Summer. 4 credits.
Satisfactory completion of term 8 of the professional veterinary curriculum, approval of department.
Supervised cardiology and neurology practice.

661. Internal Medicine Clerkship
Fall, Winter, Spring, Summer. 4 credits.
Satisfactory completion of term 8 of the professional veterinary curriculum, approval of department.
Supervised internal medicine practice.

662. Oncology Clerkship
Fall, Winter, Spring, Summer. 4 credits.
Satisfactory completion of term 8 of the professional veterinary curriculum, approval of department.
Supervised oncology practice.

663. Ophthalmology Clerkship
Fall, Winter, Spring, Summer. 4 credits.
Satisfactory completion of term 8 of the professional veterinary curriculum, approval of department.
Supervised ophthalmology practice.

664. Orthopedic Surgery Clerkship
Fall, Winter, Spring, Summer. 4 credits.
Satisfactory completion of term 8 of the professional veterinary curriculum, approval of department.
Supervised orthopedic surgery.

665. Zoo and Wildlife Clerkship
Fall, Winter, Spring, Summer. 4 credits.
Satisfactory completion of term 8 of the professional veterinary curriculum, approval of department.
Supervised zoo animal and wildlife medicine and surgery.

667. Laboratory Animal Medicine Clerkship
Fall, Winter, Spring, Summer. 4 credits.
Satisfactory completion of term 8 of the professional veterinary curriculum, approval of department.
Supervised laboratory animal management, medicine and surgery.

671. Problems in Internal Medicine
Fall, Winter, Spring, Summer. 4 credits.
SSM 661, approval of department.
Supervised internal medicine problems.

673. Problems in Clinical Ophthalmology
Fall, Winter, Spring, Summer. 4 credits.
SSM 663, approval of department.
Supervised ophthalmology problems.

674. Problems in Orthopedic Surgery
Fall, Winter, Spring, Summer. 4 credits.
SSM 664, approval of department.
Supervised orthopedic surgery problems.

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

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

813. Seminar
Fall, Winter, Spring. 1 credit.

825. Advanced Anesthesiology
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
Fall. (3-2-4) Approval of department.
Study recent advances in veterinary cardiology. Includes electrocardiology, congenital and acquired diseases, cardiac catheterization and surgery.

899. Research
Fall, Winter, Spring, Summer. Variable credit. May reenroll for a maximum of 18 credits.
Supervised research on thesis problems.

Social Science (College of) - Descriptions of Courses

201. Americans and Their Values
Fall, Winter, Spring, Summer. 4(3-0)
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
Fall, Winter, Spring, Summer. 4(4-0)
S 201, S 211, S 221, or S 241 recommended; S 201 preferred.
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. American and World Problems
Fall, Winter, Spring, Summer. 4(4-0)
S 201, S 211, S 221, or S 242 recommended; S 202 preferred.
The international scene with the focus on problems of economic development, conflict among the nation-states and attempts at conflict control.

211. The Emergence of Man
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
Fall, Winter, Spring, Summer. 4(3-0)
S 201, S 211, S 221, or S 242 recommended; S 202 preferred.
Factors and directions in urban change. Impacts on life styles and life strategies of urban groups. Challenges to traditional family, educational, and community patterns.

213. Casualties of Contemporary Society
Fall, Winter, Spring, Summer. 4(4-0)
S 201, S 211, S 221, or S 242 preferred.
The meaning of deviant behavior and personal disorganization and their impact on society. Selected problems examined in depth.

1DC. The Politics of Ecology
For course description, see Interdisciplinary Courses.

221. The Changing American Metropolis: Ecology of the Urban Community
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. Metropolitan Perspectives: Economics, Politics and Policies
Fall, Winter, Spring, Summer. 4(3-0)
S 201, S 211, S 221, or S 241, S 242 recommended; S 221 preferred.
Changing patterns of economic and political participation. Issues of employment security and job satisfaction. Distribution of wealth, political power, and civil rights. Intermeshing of economic and political activities.
223. **World Urbanization: Human Consequences**  
(233C) Fall, Winter, Spring, Summer. 4(4-0) S S 202, S S 212, S S 222 or S S 242 recommended; S S 222 preferred. The unit of urban life patterns and the emergence of modern-day urban problems. Cultural variations in approach to issues comprising political, social, economic, and ideological systems.

241. **Cultures in Crisis**  
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. **Freedom and Justice**  
(232D) Fall, Winter, Spring, Summer. 4(4-0) S S 201, S S 211, S S 221 or S S 241 recommended; S S 241 preferred. Ideologies of change in the modern world—sources, appeals, problems. Issues of social justice and individual freedom.

243. **War and Morality**  
(233D) Fall, Winter, Spring, Summer. 4(4-0) S S 202, S S 212, S S 222 or S S 242 recommended; S S 242 preferred. 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, Summer. 2 to 4 credits. 8 credits completed in general education social science; 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.

**IDC. Modernization: India, Pakistan, Bangladesh**  
For course description, see Interdisciplinary Courses.

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

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

**IDC. Refugees, Displaced Persons, Hostages, Exiles**  
For course description, see Interdisciplinary Courses.

**SOCIAL WORK**  

**SOCIAL SCIENCE**  

491H. **Perspectives in the Social Sciences and Humanities**  
Fall, Winter, Spring. 2 to 6 credits. May reroll for a maximum of 12 credits if different topics are taken. Juniors, approval of Honors College, or approval of instructor. Interdepartmental with the colleges of Arts and Letters and Justice, Morality, and administered by the College of Arts and Letters. An integration of subject matter and methodologies of several disciplines as they are relevant to particular topic areas.

495. **Foreign Area Field Study**  
Fall, Winter, Spring, Summer. 3 to 15 credits. May reroll 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 adviser, such as American University Field Study Centers in Rome and Singapore.

510. **Introduction to Linear System Theory**  
Fall, 3(3-0) MTH 214. Interdepartmental with 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.

511. **System Methodology and Simulation**  
Winter, 3(3-0) SYS 810, STT 441. Interdepartmental with and administered by Systems Science. Problem definition, design of abstract models for system design and control, simulation of systems described by differential and difference equations, generation of random variables, simulation of discrete object stochastic systems, simulation languages, applications to physical, economic and social systems.

513. **System Project**  
Spring, 3(1-6) SYS 811. Interdepartmental with and administered by Systems Science. Individual or team application of simulation methods to system design and/or management.

999. **Research**  
Fall, Winter, Spring, Summer. Variable credit. Approval of college.

**SOCIAL WORK**

**SOCIAL SCIENCE**  

445. **Minorities and Women in the World of Work**  
Fall, Winter, 4(4-0) Senior majors or approval of department. Interdepartmental with the departments of Management and Social and Ethnic Studies and administered by the Department of Management. Racial, ethnic, sexual and other minority experiences and problems in the world of work. Awareness training approach (what it's like to be ... featuring movies, guests, subgroup discussions and encounter-type exercises.

425. **Dynamics of Marriage and Family Relations**  
Winter, Spring. 3(3-0) Juniors. Analysis of post-marital interpersonal adjustment from standpoint of family social work. Includes current social changes affecting these relationships, and specialized services available to families.

**SOCIAL WORK**  

**SOCIAL SCIENCE**  

433. **Social Work as a Profession I**  
Fall, 3(3-0) Junior majors. Historical development and philosophical basis of social welfare policy in relation to methods for problem solving at individual, group and community levels.

434. **Social Work as a Profession II**  
Winter, 3(3-0) S W 433. Continuation of S W 433. Human reactions under stress; social work intervention through welfare organizations and social action.

435. **Social Work as a Profession III**  
Spring, 3(3-0) S W 434. Social welfare programs to meet human needs; social planning for services.

439. **Interviewing in Social Welfare**  
Fall, Winter, Spring. 3(1-4) Junior majors. Principles of interviewing as applied to social welfare. Related laboratory experience.

440. **Social Work Intervention I**  
Fall, 3(3-0) Senior majors, S W 487 concurrently. Intervention related to individuals and families based on application of social work and social science knowledge and utilization of interviewing techniques.

441. **Social Work Intervention II**  
Winter, 3(3-0) S W 440; S W 467 concurrently. Continuation of S W 440. Development of techniques in social work practice focused on the situational-environmental assessment of client.

442. **Social Work Intervention III**  
Spring, 3(3-0) S W 441; S W 467 concurrently. Continuation of S W 441. Advanced study of choice and utilization of intervention modes emphasizing social work conceptual framework for enhancement of client social functioning.