

**852. Studies in Contemporary Spanish-American Literature**  
Fall of odd-numbered years. Spring of even-numbered years. 3(3-0) May reenroll for a maximum of 12 credits.  
Poetry, drama, prose, fiction and essay from the modernist movement to the present.

**860. Graduate Reading**  
Fall, Winter, Spring, Summer. 1 to 5 credits. May reenroll for a maximum of 15 credits. Approval of department.  
Supervised reading course for investigation of special fields.

**899. Master's Thesis Research**  
Fall, Winter, Spring, Summer. Variable credit. Approval of department.

**981. Seminar in Hispanic Literature**  
Fall, Winter, Spring. 3(3-0) May reenroll for a maximum of 18 credits.  
A particular writer, a major work, or a limited theme is chosen for intensive analysis. The topic and the professor of the course change each term.

**999. Doctoral Dissertation Research**  
Fall, Winter, Spring, Summer. Variable credit. May reenroll for a maximum of 36 credits.

## RUSSIAN

See German and Russian.

## SANITARY ENGINEERING

See Civil and Sanitary Engineering.

## SMALL ANIMAL SURGERY AND MEDICINE SSM

### College of Veterinary Medicine

**500. Veterinary Management of Unusual Animals**  
Spring. 2(2-0) Satisfactory completion of term 4 of the professional veterinary curriculum.  
Veterinary management of laboratory animals, reptiles, birds, fish, and wild species kept as pets. Emphasis on capture, restraint and anesthesia, diagnosis and treatment of common diseases.

**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.

**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.

**660. 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. Master's Thesis Research**  
Fall, Winter, Spring, Summer. Variable credit. May reenroll for a maximum of 18 credits. Approval of department.  
Research on thesis problems.

## SOCIAL SCIENCE SS

### College of Social Science

For the University's General Education requirement in the Social and Behavioral Sciences general knowledge area, refer to Undergraduate Education in the Academic Programs section of the University catalog.

No more than one course may be taken in each of the following groups:

1. 201, 211, 221, 241
2. 202, 212, 222, 242
3. 203, 213, 223, 243

**201. Americans and Their Values (S)**  
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.

**Descriptions – SOCIAL SCIENCE**

**of  
Courses**

**202. Power in America (S)**  
Fall, Winter, Spring, Summer. 4(4-0)  
S.S. 201, or S.S. 211, or S.S. 221, or S.S. 241  
recommended; S.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 (S)**  
Fall, Winter, Spring, Summer. 4(4-0)  
S.S. 202, S.S. 212, S.S. 222 or S.S. 242  
recommended; S.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 (S)**  
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 (S)**  
Fall, Winter, Spring, Summer. 4(4-0)  
S.S. 201, S.S. 211, S.S. 221 or S.S. 241  
recommended; S.S. 211 preferred.  
Individuals and the changing institutional framework of modern society. Emphasis on socialization enabling personality systems in different cultural settings to cope with life in the future.

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

**221. The Individual and Metropolitan Society (S)**  
Fall, Winter, Spring, Summer. 4(4-0)  
Factors and directions in metropolitan change. Impacts on life styles and life strategies of individuals and groups. Challenges to traditional family, educational and community patterns.

**222. Economics, Politics and the Individual in the Metropolis (S)**  
Fall, Winter, Spring, Summer. 4(4-0)  
S.S. 201, S.S. 211, S.S. 221, S.S. 241,  
recommended; S.S. 221 preferred.  
Patterns of economic and political participation: The impact on the individual. Employment security and job satisfaction, economic rewards, political power and civil rights. Intermeshing of economic and political activities.

**223. World Urbanization: Cultures and Common Issues (S)**  
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 unity of urban life patterns and the emergence of modern-day urban problems. Cultural variations in approach to issues-comparative political, social, economic, ideological systems.

**241. Cultures in Crisis (S)**  
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 (S)**  
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 (S)**  
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.

**292. Selected Topics**  
(U C 292.) Fall, Winter, Spring. 3 to 5  
credits. May reenroll for a maximum of 8 credits  
if different topic is taken.  
Interdisciplinary study of topics in the social sciences.

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

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

**495. Foreign Area Field Study**  
Fall, Winter, Spring, Summer. 3 to 15  
credits. May reenroll 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.

**810. 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.

**811. 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.

**813. 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. Doctoral Dissertation Research**  
Fall, Winter, Spring, Summer.  
Variable credit. Approval of college.

**SOCIAL WORK SW**

**College of Social Science**

**205. Contemporary Social Work**  
Fall, Winter, Spring. 3(3-0)  
Role of the social worker in relation to social issues and human needs; social service programs, structures and functions of public and voluntary agencies in a changing society.

**228. Marriage**  
Fall, Winter, Spring. 4(4-0) Students  
may not receive credit in both S W 228 and FCS  
145.  
Examination of marriage and the family, from a social work point of view. Consideration of such areas of adjustment as emotional, physical, social, financial, religious and legal.

**322. Child Welfare**  
Winter, Spring. 3(3-0) Juniors.  
Child welfare movement and contemporary children's agencies and their services. Programs for improving home and for substitute care, safeguarding health, employment protection, delinquency prevention, and other needs of children and youth.

**SOCIAL SCIENCE SSC  
(COLLEGE OF)**

**491H. Perspectives in the Social Sciences and Humanities**  
Fall, Winter, Spring. 2 to 6 credits.  
May reenroll for a maximum of 12 credits if  
different topic is taken. Juniors, approval of  
Honors College, or approval of instructor.  
Interdepartmental with Justin Morrill Inter-  
College Programs and the College of Arts and  
Letters. 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.

**492. Integrative Studies**  
(U C 492.) Fall, Winter, Spring,  
Summer. 3 to 5 credits. May reenroll for a  
maximum of 10 credits if different topics are  
taken. Juniors.  
Topics which require an integration within or  
among the social sciences.