

860. Graduate Reading

Fall, Winter, Spring, Summer. 1 to 5 credits. May re-enroll for a maximum of 15 credits. Approval of department.
Supervised reading course for investigation of special fields.

899. Research

Fall, Winter, Spring, Summer. Variable credits. Approval of department.

981. Seminar in Hispanic Literature

Fall, Winter, Spring. 3(3-0) May re-enroll 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. Research

Fall, Winter, Spring, Summer. Variable credit. May re-enroll 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

501. Introduction to Veterinary Medicine I

Summer. 2(2-0) Admission to professional veterinary program. Interdepartmental with Center for Laboratory Animal Resources. Species and breed identification, predisposition for specific diseases, basic care and feeding, restraint and handling of small domestic animals, unusual pet, and laboratory animals.

502. Introduction to Veterinary Medicine II

Spring. 4(3-3) Admission to the professional veterinary program. Interdepartmental with the Department of Large Animal Surgery and Medicine.

Anesthetic principles, agents and techniques. Basic surgical principles, including aseptic technique, hemostasis, wound healing, suturing and suturing materials. Fundamentals of radiology.

503. Introduction to Veterinary Medicine III

Spring. 4(3-3) Admission to professional veterinary program. Interdepartmental with and administered by the Department of Large Animal Surgery and Medicine.

Physical and systemic examination of the various domestic and laboratory species. Common restraint procedures, clinical skills, diagnostics and an approach to clients are included.

504. Small Animal Clinic I

Fall, Winter, Spring, Summer. 3(0-10) Eighth-term or ninth-term Veterinary Medicine students.

Concepts and practices of clinical veterinary medicine. Rotation through hospital services including outpatient clinic, medicine, surgery, radiology, clinical pathology, and pharmacy.

511. Small Animal Surgery and Medicine I

(VSM 511.) Fall, Spring. 8(7-3) Seventh-term Veterinary Medicine students.

Basic surgery. Laboratory and lectures with television demonstrations. Anesthesiology, basic radiology, small animal husbandry, and diseases of the upper digestive system.

512. Small Animal Surgery and Medicine II

(VSM 512.) Winter, Summer. 7(6-3)

511. 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(0-36) 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)

513. Occurrence, etiology, symptomatology, diagnosis, treatment and prevention of diseases of nervous system, organs of special sense, physical and chemical agents and neoplasia.

651. Clinico-Pathologic Conference

(VSM 651.) Fall, Winter, Spring, Summer. 0 or 1(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 enroll 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 6 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(2-4) Approval of department.

Study recent advances in veterinary cardiology. Includes electrocardiology, congenital and acquired diseases, cardiac catheterization and surgery.

833. Radiology

(VSM 833.) Spring. 3(3-0) Approval of department.

Advanced Roentgen diagnosis, with particular emphasis on early detection of diseases of bone. Problem studies concurrent with course.

899. Research

(VSM 899.) Fall, Winter, Spring, Summer. Variable credit. May re-enroll for a maximum of 18 credits. Approval of department.

Research on thesis problems.

SOCIAL SCIENCE

S S

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

(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

(232A.) Fall, Winter, Spring, Summer. 4(4-0) 201 preferred; or 211, 221, or 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?

(233A.) Fall, Winter, Spring, Summer. 4(4-0) 202 preferred; or 212 or 222, or 242.

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

(231B.) Fall. 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

(232B.) Winter. 4(4-0) 211 preferred; or 201, 221, or 241.

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
(233B.) Spring. 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
(231C.) Fall. 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

(232C.) Winter. 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. Inter-meshing of economic and political activities.

223. The World's Cities: An Urban Culture and Common Problems
(233C.) Spring. 4(4-0) 222 preferred; or 202, 212, or 242.

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. Modernization: Political and Social
(231D.) Fall. 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
(232D.) Winter. 4(4-0) 241 preferred; or 201, 211 or 221.

Ideologies of change in the modern world—sources, appeals, problems. Issues of social justice and individual freedom.

243. Revolutionary Change and International Conflict

(233D.) Spring. 4(4-0) 242 preferred; or 202, 212, or 222.

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 (COLLEGE OF) SSC

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.

390H. Perspectives in Social Science

Fall, Winter, Spring. 4(4-0) Juniors; approval of the 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.

480. Contemporary Social Problems in the United States

Fall, Winter. 4(4-0) To receive credit both 480 and 481 must be completed satisfactorily. 24 credits in social science.

Seminars dealing with major theoretical and social problems in the United States, such as urban redevelopment, next steps in evolution of American life-styles, and domestic factors affecting the United States' interactions with the outside world. A multidisciplinary approach involving specialists from the social sciences and allied professional fields.

481. Contemporary Social Problems in the United States

Winter, Spring. 4(4-0) To receive credit both 480 and 481 must be completed satisfactorily. 480.

Continuation of 480.

482. Contemporary Social Problems Abroad

Fall, Winter. 4(4-0) To receive credit both 482 and 483 must be completed satisfactorily. 24 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 peace-keeping. A multi-disciplinary approach involving specialists from the social science disciplines and allied professional fields.

483. Contemporary Social Problems Abroad

Winter, Spring. 4(4-0) To receive credit both 482 and 483 must be completed satisfactorily. 482.

Continuation of 482.

490. Individual Research Projects

Fall, Winter, Spring. 4 credits. May re-enroll for a maximum of 8 credits. Multi-disciplinary 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.

810. Introduction to Linear System Theory

(812.) Fall. 3(3-0) MTH 214. Interdepartmental with the Computer Science De-

partment 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.

811. System Methodology and Simulation

Winter. 3(3-0) 810, STT 441. Interdepartmental with the Computer Science Department and Systems Science 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) 811. Interdepartmental with the Computer Science Department and Systems Science 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 S W

College of Social Science

205. Contemporary Social Work

Fall, Winter, Spring, Summer. 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 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.

311S. Summer Projects

Summer. 1 to 3 credits. Juniors; approval of school. Not open to students in residence.

Constructive work experience in social centers, summer camps, city recreation departments, state welfare institutions, and other approved agencies and organizations. Weekly progress reports and final written evaluation of total experience required.

322. Child Welfare

Winter. 3(3-0) Juniors; SOC 351 or PSY 245.

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.

367. Social Services in Selected Settings

Fall, Winter, Spring, Summer. 2(1-2) Junior majors, 205.

Self-instruction laboratory and classroom discussion of social agency programs.