

SANITARY ENGINEERING

See Civil and Sanitary Engineering.

SMALL ANIMAL SURGERY AND MEDICINE* SSM

College of Veterinary Medicine

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.

*Established November 1, 1968. Formerly a part of the Department of Veterinary Surgery and Medicine.

810. Problems in Small Animal Medicine

(BSM 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. Ventilation and Anesthesia in Surgical Patient

(VSM 825.) Winter. 2(1-3) Approval of department.

Management of anesthesia and ventilation of the surgical patient. Description of various anesthetic agents, monitoring equipment and anesthetic machines.

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

Alternative approaches or tracks are offered on an optional basis all of which meet the course objectives of 231, 232, 233. These are described briefly below and are designated by letters which are used as part of the course number for registration. A student will normally proceed through the three courses in the same track. No student may receive credit for more than one track within a course (231, 232, 233).

231. Social Science

Fall, Winter, Spring, Summer. 4(4-0)

A. Social science as an approach to knowledge and reality. The nature of social change. The individual in society and culture. Problems of equalizing opportunity in American society, economic, educational, associational and political. The problem of deprivation.

B. Interdisciplinary approach to understanding forces which impinge upon contemporary man and shape his current and emergent social problems. Nature and relationship of personality, society and culture.

C. Social problems examined within the context of political, economic, and social institutions and major values themes. Impact of social-cultural factors on family, school, peer group, and community.

D. Interdisciplinary approach to the understanding of political ideologies and their underlying social realities. Nature and sources of social cohesion in different societies. Modernization of traditional societies, problems and alternative strategies.

232 Social Science

Fall, Winter, Spring, Summer. 4(4-0)
Four credits in a 231 track.

A. Problem in the exercise of power in the market economy, economic growth, stability and public policy. Problems of political control in a changing society.

B. Man and his changing institutions. Role performance in various social, economic, and political settings. Patterns of inter-personal and inter-group relations. Management and reduction of inter-personal, inter-group, and international tension and conflict.

C. Issues and policy determination in the major institutional complexes in American society. Cross-cultural comparisons in terms of values, goals, traditions, and trends in institutional arrangements.

D. Social, political and economic features of modern societies. Focus upon universal problems such as socialization, culture conflict, economic organization and distribution of power. Comparison of the American solution to contrasting approaches of other societies.

233. Social Science

Fall, Winter, Spring, Summer. 4(4-0)
Four credits in a 232 track.

A. Problems of change. Achieving national, political, economic and social objectives in the emerging nations. The Soviet Union and directed change. Problems of reconciling national self-interest with the needs for world peace.

B. The individual and emergent social problems. Social pathology and deviance in contemporary societies. Forces involved in inducing and reducing stress and strain in individuals within different social settings. Selected problem areas.

C. Impact of American Society on relations with other nations. Conflicts and alternatives in foreign policy. Changing world conditions and their influence upon American society. Emergence of an international community.

D. Perennial problems of international conflict and co-operation. Contemporary problems associated with modern technology—the nuclear age. Mass movements and revolution. Political, economic, and cultural developments in the emerging international community.

300. Supervised Individual Study

Fall, Winter, Spring. 1 to 4 credits.
233; 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.

SOCIAL SCIENCE SSC (COLLEGE OF)

210. Methods of Social Science I

Fall, Winter. 4(3-0) S S 232 or concurrently.

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

Winter, Spring. 4(3-0) 210.

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.

811. System Methodology and Simulation

Fall. 3(2-3) MTH 215; STT 441 or concurrently. Interdepartmental with the Computer Science Department and Systems Science and administered by Systems Science.

First of three courses providing a working knowledge of the design and control of multi-process systems by simulation. Needs analysis, feasibility analysis, preliminary design using simulation models, microscopic simulations—Monte Carlo, analog, digital and hybrid simulation of macroscopic systems, simulation languages, applications to physical and socio-economic systems.

812. System Identification

Winter. 3(2-3) SYS 811. Interdepartmental with the Computer Science Department and Systems Science and administered by Systems Science.

Identification of system structure from operating data; correlation function, frequency response, multi-point boundary value, econometric and other methods, applications to physical and socio-economic systems.

813. System Project

Spring. 3(1-6) SYS 812. Interdepartmental with the Computer Science Department and Systems Science and administered by Systems Science.

Team application of simulation methods to the design and/or control of a multi-process system. Projects will be taken from case studies or new problem areas where appropriate.

428. Dynamics of Marriage and Family Relations

Fall, Winter, Spring, Summer. 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.

433. Social Work as a Profession I

Fall. 4(3-2) Junior majors; PSY 225; SOC 241.

Social work in relation to development of the individual and his adaptation to his environment. Related laboratory experience.

434. Social Work as a Profession II

Winter. 4(3-2) 433.

Continuation of 433. Human reactions under stress; social work intervention through welfare organizations and social action. Related laboratory experience.

435. Social Work as a Profession III

Spring. 4(3-2) 434.

Continuation of 434. Social welfare programs to meet human needs; social planning for services. Related laboratory experience.

438. Social and Emotional Development

Fall, Winter, Spring, Summer. 4(4-0) Juniors; PSY 225; SOC 241.

Interplay of emotional, social and physical factors that influence individual's adjustment to change and stress. Illustrative case material from social work agencies and related settings.

439. Interviewing in Social Welfare

Fall, Winter, Spring, Summer. 3(3-0) Juniors. PSY 225 or SOC 351.

Analysis of generic principles of interviewing as used in social welfare and related fields.

444. Social Work in Corrections

Spring. 3(3-0) 205 or 433 or approval of school.

Introduction to juvenile and adult probation and parole, clinical services in juvenile institutions, and classification in prisons. Intended for students planning to enter corrections field.

467. Field and Agency Experience

Fall, Winter, Spring, Summer. Variable credit. May re-enroll for a maximum of 16 credits. Senior majors 433 or 434 or 435 concurrently; approval of school.

Individual experience in approved social agencies and institutions. Weekly class. Credit calculated on basis of 30 contact hours per term, per credit.

490. Special Problems in Social Work

Fall, Winter, Spring, Summer. Variable credit. May re-enroll for a maximum of 12 credits. 367 or concurrently; approval of school.

Each student will work under direction of a faculty member on an experimental, theoretical, or applied problem.

810. Human Behavior and Social Environment I

Fall, Summer. 4(4-0) Majors or approval of school.

Interrelationship of social, cultural, subcultural, small group and situational factors that influence human adaptation to change and stress. Examination of psychoanalytic, behavioral and role theory approaches to personality development.

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 345.

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. Field and Agency Observation

Fall, Winter, Spring, Summer. 3(2-2) Junior majors, 205, approval of school.

Group observation in local social agencies, with classroom discussion of social welfare programs and problems encountered in these agencies.

400H. Honors Work

Fall, Winter, Spring, Summer. 1 to 16 credits. Juniors; approval of school.

Independent study of a phase of social work, for particularly able students.

420. Current Issues in Social Work

Fall, Winter, Spring, Summer. Variable credit. May re-enroll for a maximum of 9 credits. Seniors; approval of school.

Designed to integrate knowledge of social issues within a social science framework useful for social work. Includes review of selected issues and exploration of their relevance for social work.