

## 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) Ap-  
proval 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 follow-  
ing surgery in small animals.

#### 825. Ventilation and Anesthesia in Surgical Patient

(VSM 825.) Winter. 2(1-3) Ap-  
proval 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) Ap-  
proval 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)

- 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.
- 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.
- 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.

- 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.

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

- 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.
- 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.
- 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.
- 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.