277A. Spanish Track II

277B. Spanish Track II
(277B.) Winter, 3 credits. 277A concurrently. Oral practice. Continuation of 216B.

318A. Spanish Track II
(318A.) Spring, 4 credits. 217A, 277B; 318B concurrently. Continuation of 217A.

318B. Spanish Track II
(318B.) Spring, 3 credits. 318A concurrently. Oral practice. Continuation of 227B.

236A. Spanish Track III
(236A.) Fall, 4 credits. Three years high school Spanish, placement test. 216B Concurrently.

Language and Culture
141A. Studies in Language and Culture
Fall, 3 credits. 216B concurrently. Oral practice. Continuation of 317B.

141B. Studies in Language and Culture
Fall, 1 credit. 141A concurrently. Independent study in language and culture.

142A. Studies in Language and Culture
Winter, 4 credits. 141A or approval of college; 142B concurrently. Lecture on the basic concepts of phonetics and phonemics with intensive drills in the recognition, transcription and reproduction of sound, rhythm, tone and intonation to prepare students to transcribe any language he may study. Phonemic drills will be possible for the language students will study in the following term.

142B. Studies in Language and Culture
Winter, 1 credit. 142A concurrently. Independent study in language and culture.

Independent, Field, and Foreign Study
400A. Independent Study
Fall, Winter, Spring, Summer. 2 to 12 credits. Approval of college. Study in a selected number of ways on a selected number of topics under the guidance of the student's advisor.

400B. Field Study
Fall, Winter, Spring, Summer. 4 to 12 credits. Approval of college. Study in off-campus situations in a variety of ways using involvement in community service, government, or business as means to cultural insight.

400C. Foreign Study
Fall, Winter, Spring, Summer. 4 to 12 credits. Approval of college. Study abroad in a variety of places under the guidance of an advisor.

410. Studies in Composition
Fall, Winter, Spring. 4 to 8 credits. 103.

490. Senior Seminar
Fall, Winter, Spring. 5 to 10 credits. Seminar. Study of selected topics of international and cross-cultural significance in small groups. Each student will be expected to approach his topic from at least two disciplinary points of view.
833. Data Sources and Research Methods in Labor and Industrial Relations
Fall, Winter, 4(3-0) One undergraduate statistics course.
Review and evaluation of sources and data, analysis of research design and methods used in study of labor and industrial relations.

841. Collective Bargaining in Public Employment
Spring, Summer. 4(3-0) EC 305 or approval of school.
History and current status of collective bargaining practices and governmental policies in the public sector.

854. Comparative Industrial Relations Systems
Winter. 4(3-0) EC 305.
Comparative analysis of industrial relations systems in countries of various stages of economic development.

857. Wage Theory
Fall. 3 credits. EC 320, 324, or approval of department. Interdepartmental with and administered by the Economics Department.
Advanced analysis of theories of wage determination; labor market research, economic effects of collective bargaining upon the national wage structure, output, employment, distribution of national income, the price level; nature and effects of government wage policies.

858. Industrial Relations
Winter. 3 credits. EC 305 and approval of department. Open to graduate students in economics and related fields such as labor and industrial relations, psychology, sociology, anthropology, political science, business, and history. Interdepartmental and administered jointly with the Economics Department.
Problems and issues in the administration and negotiation of collective bargaining agreements; includes both economic and noneconomic aspects of industrial relations policies and practices.

865. Grievance Administration and Arbitration
Winter, Spring. 4(3-0) Approval of school.
Grievance procedure and arbitration as the terminal step in the grievance process. Analysis of industrial common law.

881. Advanced Seminar in Labor and Industrial Relations
Spring. 4(4-0) May re-enroll for a maximum of 8 credits. Twelve graduate credits or approval of school.
Integrative and synthesizing seminar for advanced students; intensive analysis of selected problems in labor and industrial relations.

895. Readings in Labor and Industrial Relations
Fall, Winter, Spring, Summer. Variable credit.
May re-enroll for a maximum of 9 credits. Approval of school.

901. Theories of the Labor Movement
Fall 4(4-0) 801 or approval of school.
Selected topics in the philosophy, theory, and behavior of the labor movement.

911. Seminar in Manpower
Fall. 4(3-0) Approval of school.
Critical study of research and policy on selected manpower problems.

955. Seminar in Collective Bargaining
Spring. 4(3-0) EC 858 or approval of school.
Critical study of selected contemporary areas and issues in collective bargaining.

LABORATORY ANIMAL RESOURCES

College of Veterinary Medicine

524. Laboratory Animal Medicine (VSM 884) Fall, Spring. 3(2-3)
Completion of ninth-term professional Veterinary Medicine program.
Basic physiologic data, housing requirements, genetics, breeding systems, diseases, humane practices, and nutrition of major laboratory animal species; administration of animal quarters, techniques of handling and treatment.

525. Comparative Medical Experimentation
Spring. 2(1-3) Graduate status. B.S. in biological sciences and approval of department.
Critical analysis of animal experimentation reported in biological journals related to the students' interest, with special emphasis on effects of environment and host variables upon validity of experimental results.

526. Laboratory Animal Pathology
Spring. 4(3-2) Graduate status and approval of department. Interdepartmental with the Department of Pathology.
Macro and microscopic studies on the diseases of laboratory animals, with special emphasis on naturally-occurring diseases which might interfere with the interpretation of experimental results.

LANDSCAPE ARCHITECTURE

See Urban Planning and Landscape Architecture

LARGE ANIMAL SURGERY AND MEDICINE* (LSM)

College of Veterinary Medicine

412. Livestock Hygiene and Disease Control (VSM 412) Winter, Spring. 3(3-0) Junior, Agricultural majors.
Fundamentals of health and disease in animals, relation of infectious and parasitic diseases of animals to human health, disease prevention and role of veterinarian in preventive medicine.

*Established November 1, 1958. Formerly part of the Department of Veterinary Surgery and Medicine.

Winter. 5(5-0)
For course description, see Interdisciplinary Courses.

505. Large Animal Clinic I
Fall, Winter, Spring, Summer. 3(0-10)
Eleventh-term or ninth-term Veterinary Medicine students.
Clinical instruction and experience in diagnosis, patient care, medication, surgery, disease prevention, and herd health.

521. Large Animal Surgery and Medicine I
(VSM 531) Fall, Spring. 8(7-3)
Seventh-term Veterinary Medicine students.
Occurrence, etiology, symptomatology, diagnosis, prognosis, treatment and prevention of diseases of reproductive, digestive, and respiratory systems. Demonstrations of laboratory experience in basic clinical skills including restraint, diagnosis, medication, and surgery.

522. Large Animal Surgery and Medicine II
(VSM 532) Winter, Summer. 6(5-3)
Occurrence, diagnosis and treatment of surgical diseases of large animals. Discussion of diseases of cardiovascular, hematopoietic, urinary, nervous and integumentary systems. Demonstrations and laboratory experience in large animal surgery techniques.

523. Large Animal Surgery and Medicine III
(VSM 533) Fall, Spring. 7(7-0)
Occurrence, diagnosis and treatment of surgical and reproductive diseases. Includes radiology and disease of locomotion.

531. Meat Hygiene
(VSM 531) Fall, Spring. 2(2-0)
Ninth-term Veterinary Medicine students.
Judging fitness of meat for human consumption based on a knowledge of bacteriology, parasitology and pathology. Organization and operation of meat inspection programs. Field trip required.

605. Large Animal Clinic II
(VSM 605) Fall, Winter, Spring, Summer. 12(0-36) 505.
Advanced clinical instruction and experience in diagnosis, patient care, and herd health. Includes handling of clinic patients under direct supervision of staff veterinarians and ambulatory clinic.

624. Large Animal Surgery and Medicine IV
(VSM 644) Winter, Summer. 4(4-0)
Etiology, pathogenesis, epidemiology, pathological changes, differential diagnosis, prevention, control and treatment of specific infectious diseases of large animals.

630. Jurisprudence, Ethics and Business Management
(VSM 630) Fall, Spring. 5(5-0)
Eleventh-term Veterinary Medicine students.

509. Problems in Large Animal Surgery
(VSM 509) Fall, Winter, Spring. Summer. Variable credit.