### 880. Special Problems
Fall, Winter, Spring, Summer. 1 to 6 credits. May re-enroll for a maximum of 10 credits. Approval of department.

Advanced work for non-thesis projects or advanced individual study in recreation, policy, land use, planning, systems administration and management, economics, recreation forestry, commercial recreation enterprises, recreation and social problems, environmental interpretation, travel and touring, spatial analysis, leisure concepts, research.

### 882. Recreation Research Seminar
Fall, Winter. 2(2-0) May re-enroll for a maximum of 4 credits. Approval of department.

Evaluation of a variety of studies presented by the students to illustrate how principles are applied to recreation research project management.

### 505. Human Pathology IV
Winter. 3(2-2) 504 or approval of department.

A continuation of 504. The systems include lung, kidney, male genitourinary and bone and joints. In the laboratory sections, gross and microscopic changes in diseased tissues are studied and correlated with lecture material. Separate lab sessions covering pulmonary function tests, acid-base balance and urinalysis are included.

### 506. Human Pathology V
Spring. 3(2-2) 505 or approval of department.

A continuation of 505. The systems include gastrointestinal tract (including liver and pancreas), female reproductive tract and breast.

### 550. Veterinary Pathology I
Spring. 6(3-6) Admission to the professional veterinary program, or approval of department.

Principles of pathology, including causes of disease, disturbances of cell growth and metabolism, microcirculatory changes, inflammation and neoplasms; introduction to clinical hematology.

### 608. Pathology Clerkship
Fall, Winter, Spring. 3 to 17 credits. May re-enroll for a maximum of 17 credits. H M 805 or approval of department.

Anatomic and clinical pathology, with emphasis on clinical-pathological correlations. Conducted in the pathology departments of affiliated hospitals.

### 650. Applied Veterinary Pathology
Fall, Winter, Spring. 5(1-12) Completion of eighth term of professional veterinary medicine curriculum.

Instruction, demonstration and practice in laboratory diagnosis of animal diseases, using the techniques of necropsy and clinical pathology and correlating the results with those of microbioLOGY, toxicology and histopathology.

### 800. Problems in Pathology
Fall, Winter, Spring. Summer. Variable credit. Approval of department.

Elective work for students in veterinary medicine interested in pathology as a specialty, or in the special pathology of diseases of a particular class or species, and for graduate minors and majors interested in pathological techniques or in non-thesis research.

### 801. Pathology Seminar
Fall, Winter, Spring, Summer. 1(1-0) May re-enroll for a maximum of 3 credits for M.S. candidates and 6 credits for Ph.D. candidates. Approval of department.

Seminar required of all majors in pathology.

### 802. Advanced Histopathology
Fall. 5(0-6) Approval of department.

A relatively advanced and comprehensive study in the histopathologic aspects of systemic and special pathology; independent study in the field of pathogenesis and microscopic pathology.

### 803. Advanced Histopathology
Winter. 5(0-6) 802 and approval of department.

Continuation of 802.

### 805. Pathology Proseminar
Fall. 2(2-0) Approval of department.

Philosophy and methods of research; theses and other research reports; literature review; illustration of research data; practical assignments.

### 810. Post-Mortem Diagnosis
Winter, Summer. 3(0-9) May re-enroll for a maximum of 6 credits. Approval of department. Required of majors.

Instruction and practice in diagnosis of animal diseases by means of necropsy and other laboratory techniques. Emphasis will be placed upon correlation and interpretation of gross and microscopic lesions and the results of other tests.

### 811. Advanced Clinical Pathology
Fall. 3(1-6) Approval of department.

Application of standard and newer techniques and instrumentations in hematology, biochemistry, parasitology, etc., to the diagnosis of disease.

### 812. Hematology
Winter. 5(3-4) 408 or approval of department.

Pathology of diseases of blood and an analysis of diagnostic laboratory procedures.

### 820. Oncology
Spring. 3(0-6) Approval of department.

A study of benign and malignant neoplasms with emphasis on gross and microscopic characteristics and diagnosis.

### 826. Laboratory Animal Pathology
Fall. 4(0-3) Graduate status and approval of department.

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.

### 899. Research
Fall, Winter, Spring, Summer. Variable credit. Approval of department.

Pathology — Descriptions of Courses