Supervised curriculum, approval of department.

**A-160**

**621. Histopathology**

Interpretation of histologic lesions caused by animal diseases.

**550. Veterinary Pathology**

Spring, 3(3-4) Third-term Veterinary Medicine students or approval of department. Principles of pathology, including causes of disease, distribution of cell growth and metabolism, necrosis, circulatory changes, inflammation and neoplasia.

**552. Veterinary Clinical Pathology**

Winter, 4(3-3) Fifth-term Veterinary Medicine students or approval of department. Technical aspects, principles and interpretation of selected laboratory procedures in hematology, chemistry, cytology and related areas.

**508. Pathology Clerkship**

Fall, Winter, Spring, Summer. 3 to 17 credits. May enroll for a maximum of 17 credits. Grade P in all courses offered in terms 1 through 8.

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

**609. Laboratory Medicine Clerkship**

Fall, Winter, Spring, Summer. 1 to 6 credits. May enroll for a maximum of 12 credits. Grade P in all courses in terms 1 through 8.

Current laboratory procedures. Correlation of data from patients with clinical disease, to morphologic abnormalities and altered pathophysiology.

**621. Histopathology Clerkship**

Winter. 4 credits. Satisfactory completion of term 8 of the professional veterinary curriculum, approval of department. Supervised instruction in the examination and interpretation of histologic lesions caused by animal diseases.

**651. Veterinary Clinical Pathology Clerkship**

Fall, Summer. 4 credits. Satisfactory completion of term 8 of the professional veterinary curriculum, approval of department. Concepts in laboratory interpretation and diagnosis.

**652. Veterinary Necropsy Clerkship**

Fall, Winter, Spring. 4 credits. Satisfactory completion of term 8 of the professional veterinary curriculum, approval of department. Supervised necropsy and interpretation of findings.

**656. Problems in Veterinary Necropsy**

Fall, Winter, Spring. 4 credits. PT1 652, approval of department. Problems related to necropsy and interpretation of findings.

**800. Problems in Pathology**

Fall, Winter, Spring. 1 to 12 credits. May enroll for a maximum of 12 credits. Approval of department. Elective work for students in medicine interested in pathology as a specialty, or in the special pathology of diseases of a particular class or species, and for graduate students interested in pathologic techniques or in nonthesis research.

**801. Pathology Seminar**

Fall, Winter, Spring. 3 credits. May enroll for a maximum of 3 credits for M.S. candidates and 6 credits for Ph.D. candidates. Approval of department. Preparation and discussions by departmental graduate students, faculty or outside speakers on current topics in pathology.

**802. Advanced Histopathology**

Fall, 4(3-3) Approval of department. Comprehensive study of the histopathologic aspects of systemic and special pathology; review of current literature and concepts of pathogenesis, microscopic and ultrastructural pathology.

**803. Advanced Histopathology**

Winter. 4(3-3) Approval of department. Continuation of PTH 802.

**804. Oncology**

Fall, Winter, Spring. 4(3-3) Approval of department.

B cells and T cells and their role in neoplasia. Emphasis on the role of the immune system in neoplastic disease.

**805. Pathology Proseminar**

Fall. 2(2-0) Approval of department. In preparation and presentation of seminars, philosophy and methods of research; themes and other research projects; literature review, illustration of research data, practical assignments.

**808. Clinical Pathology Diagnosis**

Summer, 3(0-8) Approval of department. Diagnosis of animal diseases based on hematology, cytochemistry and biochemical tests. Emphasis on the correlation of laboratory data with clinical history and physical findings.

**810. Postmortem Diagnosis**

Fall. 3(0-8) May enroll for a maximum of 6 credits. Approval of department. Diagnosis of animal diseases by means of necropsy and other laboratory techniques. Emphasis on correlation and interpretation of gross and microscopic lesions and results of other tests.

**812. Advanced Human Hematology**

Winter. 3(3-4) M T 407 or approval of department. Selected topics in hematology including the pathogenesis, mechanisms and morphology of hematologic diseases in humans.

**815. Histopathologic Diagnosis**

Fall, Winter, Spring. 3 to 6 credits. May enroll for a maximum of 6 credits. PT1 802, PT1 803, PT1 804, PT1 810, approval of department. Preparation, histopathologic examination, description, diagnosis and reporting of specimens from biopsy and necropsy.

**818. Pathotoxicology**

Summer of even-numbered years. 4(0-4) One quarter course in pathology or approval of instructor. Pathologic changes in tissues of animals used in toxicologic studies. Clinical pathologic assessments. Gross, histologic and ultrastructural changes in organ systems.

**820. Advanced Human Hematology**

Fall of odd-numbered years. 2(2-0) M T 420, M T 421 or approval of department. Selected topics in hematology including the pathogenesis, mechanisms and morphological picture of hematologic diseases in humans.

**821. Advanced Veterinary Hematology**

Spring of odd-numbered years. 4(3-3) Approval of department. Current concepts in the pathogenesis, mechanisms and morphology of hematologic diseases of animal species.

**822. Advanced Clinical Biochemistry**

Spring of even-numbered years. 4(3-3) Approval of department. Selected topics in clinical biochemistry, enzy­mology, immunopathology and related subdisciplines that focus on current technology used in the diagnosis of disease.

**826. Laboratory Animal Pathology**

Winter of even-numbered years. 4(3-3) Approval of department. Gross, histologic, ultrastructural and clinico-pathologic study of diseases of laboratory animals.

**840. Advanced Hemostasis**

Fall of even-numbered years. 2(3-0) M.S. candidates in Clinical Laboratory Science or approval of department. Physiology, pathophysiology and laboratory evaluation of hemostatic disorders.

**899. Master's Thesis Research**

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

**900. Advanced Correlative Pathology**

Fall, Spring, 5(1-15) Approval of department. Compilation and formal presentation of the correlative findings of case material in anatomic and/or clinical pathology.

**999. Doctoral Dissertation Research**

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