VPAT - VETERINARY PATHOLOGY

VPAT 601 Comparative Pathology
Credits 4. 3 Lecture Hours. 3 Lab Hours.
Pathologic processes occurring in diseased cells, tissues and organs of animals and humans; their pathogenesis and morphologic manifestations.
Prerequisites: Courses in gross and microscopic mammalian anatomy and physiology and approval of instructor.

VPAT 610 Cell Mechanisms of Disease
Credits 3. 3 Lecture Hours.
Cellular mechanism, morphologic manifestations and clinical presentation of illustrative disease processes.
Prerequisites: Graduate classification with a major in BIMS, VTPB, or BMEN; approval of instructor.

VPAT 640 Mechanisms of Disease
Credits 4. 4 Lecture Hours.
Overview of general pathology concepts and the pathophysiology of these processes.
Prerequisite: DVM degree or equivalent, or approval of instructor.

VPAT 641 Systemic Pathology I
Credits 4. 4 Lecture Hours.
Disease manifestations in special organs and tissues and interrelations of pathologic processes in individual and functionally related organs.
Prerequisite: DVM degree or equivalent.

VPAT 643 Applied Pathology
Credits 1 to 6. 1 to 6 Other Hours.
Application of information and concepts of anatomic and clinical pathology to the diagnosis of animal disease; gross pathological changes observed in necropsy are correlated with and corrected by histopathologic observations; confirmatory methods of clinical pathology and laboratory medicine used where indicated. May be taken more than once but not to exceed 6 hours of credit toward a graduate degree.
Prerequisite: DVM degree or equivalent.

VPAT 645 Neoplastic Diseases
Credits 1 to 8. 1 to 8 Other Hours.
Theoretical, histopathological and clinical aspects of neoplasia. Diagnosis of neoplastic and related conditions in all species. May be taken more than once but not to exceed 8 hours of credit toward a graduate degree.
Prerequisite: DVM degree or equivalent.

VPAT 650 Neuropathology of Animals
Credits 1 to 4. 1 to 4 Other Hours.
Pathology and pathogenesis of diseases of the central and peripheral nervous systems. Interpretation of gross and microscopic lesions of the nervous system associated with disease processes. May be taken more than once but not to exceed 4 hours of credit toward a graduate degree.
Prerequisite: DVM degree or equivalent.

VPAT 651 Systemic Pathology II
Credits 4. 4 Lecture Hours.
Continuation of VPAT 641. Disease manifestations in special organs and tissues and interrelations of pathologic processes in individual and functionally related organs.
Prerequisite: VPAT 641.

VPAT 652 Cell Mechanisms of Disease
Credits 3. 3 Lecture Hours.
Basic cellular mechanisms and general manifestations of disease; illustration of clinical and anatomical/morphological aspects of various diseases.
Prerequisites: Graduate classification; enrollment in BIMS or BMEN curriculum; approval of instructor.

VPAT 653 Diseases of Laboratory Animals
Credits 3. 3 Lecture Hours.
Pathology and pathogenesis of spontaneous infectious, parasitic, metabolic and neoplastic diseases of laboratory animals.
Prerequisite: VTPB 922 or equivalent.

VPAT 654 Fundamentals in Laboratory Animal Medicine
Credits 2. 2 Lecture Hours.
Knowledge of the biology, management, and diseases of laboratory animals; preparation of comparative medicine residents for the board certifying examination of the American College of Laboratory Animal Medicine (ACLAM).
Prerequisites: DVM degree and acceptance into the laboratory animal residency program; or approval of instructor.

VPAT 655 Contemporary Topics in Laboratory Animal Medicine
Credit 1. 1 Lecture Hour.
Analysis of at least one article per week and deliverance of a short oral presentation to the class concerning the article's main points as well as commenting on the quality of the paper experimental design; relies heavily from the current literature published through two main laboratory animal medical journals, Comparative Medicine (CompMed) and Journal of the American Association for Laboratory Animal Science (JAALAS).
Prerequisites: DVM and acceptance into the laboratory animal residency program; or approval of instructor.

VPAT 656 Mammalian Cell Pathobiology
Credits 3. 3 Lecture Hours.
Cell signaling and organelle perspective of pathogenesis, mechanisms leading to a disease state; fundamental understanding of structural and functional properties of mammalian cells; molecular and cellular mechanisms underlying health-disease transitions.
Prerequisites: BIOL 111 and BIOL 112, or approval of instructor.

VPAT 661 Seminar
Credit 1. 1 Lecture Hour.
For graduate and special students in veterinary or comparative pathology; presentation and discussion of special topics and research data concerning pathology and pathogenesis of disease.
Prerequisite: Approval of instructor.

VPAT 681 Directed Studies
Credits 1 to 4. 1 to 4 Other Hours.
Advanced special problems concerned with pathogenesis and pathology of disease.
Prerequisite: Approval of instructor.

VPAT 685 Directed Studies
Credits 1 to 4. 1 to 4 Other Hours.
Selected topics in an identified area of veterinary or comparative pathology. May be repeated for credit.
VPAT 690 Theory of Research  
Credits 3. 3 Lecture Hours.  
Theory and design of research related to current biomedical problems especially those involving study of animal disease; philosophical perspectives underlying historical advances in research pertaining to the study, prevention and treatment of disease. Must be taken on a satisfactory/unsatisfactory basis.  
Prerequisite: Graduate classification.  
Cross Listing: NRSC 690, VIBS 690 and VTPP 690.

VPAT 691 Research  
Credits 1 to 23. 1 to 23 Other Hours.  
Research for thesis or dissertation.