VTPB - VETERINARY PATHOBIOLOGY

VTPB 613 Mammalian Genomics and Bioinformatics
Credits 3. 3 Lecture Hours. Exploration of fundamental concepts and principles in mammalian genomics and bioinformatics; includes case studies involving applications of modern technologies and experimental practices that are foundational for historic and modern discovery. Prerequisite: Graduate classification.

VTPB 910 Veterinary Immunology
Credits 2. 2 Lecture Hours. Introduction to veterinary immunology; mechanisms of resistance of infectious diseases and tumors; tissue injury caused by the immune system, including hypersensitivity reactions and autoimmunity; immunization theory and practices; immunologic methods for diagnosis of disease. Prerequisite: Enrollment in the first year of professional curriculum.

VTPB 911 Veterinary Microbiology
Credits 4. 3 Lecture Hours. 2 Lab Hours. Introduction to veterinary microbiology; bacterial, viral, and mycotic agents of veterinary significance; mechanisms of host injury by pathogenic microorganisms; principles of disinfection, antisepsis, and sterilization; classes and mechanisms of mechanisms of action of antibacterial, antifungal, and antiviral drugs; diagnostic procedures and methods of sample collection. Prerequisite: Enrollment in the first year of professional curriculum.

VTPB 912 Infectious Diseases
Credits 2. 2 Lecture Hours. Case-based approach to infectious diseases of animals; includes infectious diseases of major body systems; etiologic agents include viruses, bacteria, fungi, protozoa, helminths, and arthropods; differential diagnosis of infectious agents, diagnostic approaches, prevention, and treatment emphasized; management practices to control infectious diseases covered by host species. Prerequisite: Enrollment in second year of the professional curriculum.

VTPB 920 Parasitology
Credits 5. 3 Lecture Hours. 4 Lab Hours. Taxonomy, biological and clinical aspects of the commonly occurring helminth, protozoan and arthropod parasites of domestic and laboratory animals. Signs, pathogenesis, diagnosis, treatment, prevention, and control; public health and economic importance of parasitic diseases. Prerequisite: Enrollment in the second year of professional curriculum.

VTPB 921 Pathology I
Credits 3 to 6. 2 to 5 Lecture Hours. 2 Lab Hours. Structural and functional changes in cells, tissues and organ systems of animals; pathogenesis, mechanisms and morphologic features of diseases and their relationship to clinical signs; laboratory consists of studies of gross and microscopic pathology. Prerequisite: Enrollment in the first year of professional DVM curriculum.

VTPB 923 Pathology II
Credits 3. 2 Lecture Hours. 2 Lab Hours. Structural and functional changes in cells, tissues and organ systems of animals; pathogenesis, mechanisms and morphologic features of diseases and their relationship to clinical signs; laboratory consists of studies of gross and microscopic pathology. Prerequisite: Enrollment in the second year of professional DVM curriculum.

VTPB 925 Agents of Disease I
Credits 4. 3 Lecture Hours. 2 Lab Hours. Introduction to the agents of infectious diseases: bacteria, fungi, viruses, prions, protozoa, helminths and arthropods; agents by general taxonomy and structural features as they relate to diagnosis and therapy, replication strategies, diagnostic procedures and mechanisms of disease production; infectious diseases representing each class of agents with emphasis on characteristics of infectious diseases for each body-system, establishing differential diagnoses for disease syndromes and developing a diagnostic approach. Prerequisite: Enrollment in first year professional DVM curriculum.

VTPB 927 Clinical Laboratory Medicine-
Clinical Pathology
Credits 5. 4 Lecture Hours. 2 Lab Hours. Laboratory testing and data interpretation to support and/or confirm disease processes, assess prognosis and assist in determining treatment options and monitoring response to treatment; validation and accuracy of laboratory tests. Prerequisite: Enrollment in the second year of professional DVM curriculum.

VTPB 930 Agents of Disease II
Credits 4. 3 Lecture Hours. 2 Lab Hours. Continuation of Agents of Disease I: bacteria, fungi, viruses, prions, protozoa, helminths and arthropods; emphasis on characteristics of infectious diseases for each body system, establishing differential diagnosis for disease syndromes and developing a diagnostic approach. Prerequisite: Enrollment in second year professional DVM curriculum.

VTPB 932 Organ Dysfunction:
Recognition, Diagnostics and Supportive Care
Credits 4. 3 Lecture Hours. 2 Lab Hours. Recognition and diagnosing disorders of various body systems using clinical scenarios and laboratory data analysis; introduction to evaluation and implementation of basic treatment options to provide supportive care to animals given a disorder(s) of the body systems. Prerequisite: Enrollment in the second year of professional DVM curriculum.

VTPB 940 Diagnostics
Credits 2. 35 Lab Hours. Student group participation on a rotating schedule in applied clinical activities in the area of diagnostic medicine including clinical pathology, necropsy, microbiology, parasitology, and serology. Prerequisite: Enrollment in the fourth year professional curriculum.

VTPB 941 Clinical Microbiology and Parasitology I
Credits 2. 35 Lab Hours. Clinical rotation in microbiology and parasitology with emphasis on performance and interpretation of diagnostic procedures. Prerequisite: Enrollment in the fourth year of professional curriculum.
VTPB 948 Didactic Elective
Credits 1 to 12. 1 to 12 Lecture Hours. Elective course in veterinary microbiology, pathology, genetics, immunology or parasitology for professional students who wish to supplement required curriculum. May be repeated for credit. **Prerequisite:** Enrollment in the third year of professional curriculum.

VTPB 985 Directed Studies
Credits 1 to 4. 1 to 4 Other Hours. Problems in various subdisciplines. **Prerequisite:** Approval of instructor.

VTPB 988 Veterinary Pathobiology Selective
Credits 2. 2 Lecture Hours. Selective course in veterinary pathobiology. **Prerequisites:** Third year classification in veterinary medicine and in good standing.

VTPB 989 Special Topics in...
Credits 1 to 4. 1 to 4 Lecture Hours. 1 to 4 Lab Hours. Selected topics in an identified area of microbiology, pathology, genetics, immunology or parasitology. May be repeated for credit. **Prerequisite:** Approval of department head.