

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 689 Special Topics in...

Credits 1 to 4. 1 to 4 Other Hours. Special topics in an identified area of veterinary pathobiology. May be repeated for credit. **Prerequisites:** 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 action of antibacterial, antifungal, and antiviral drugs; diagnostic procedures and methods of sample collection. **Prerequisite:** Enrollment in the first year of professional curriculum.

VTPB 913 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 922 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.