Pathobiology and Veterinary Science (PVS)

patho.uconn.edu

5094. Pathobiology Seminar

One credit. Prerequisite: Instructor consent. May be repeated for a total of 10 credits.

5099. Research and Independent Study in Animal Diseases

Variable (1-6) credits. Prerequisite: Instructor consent. May be repeated for credit.

5201. Microbiology of Atypical Bacteria

Two credits.

An in-depth presentation of current information on medically significant atypical bacteria, with emphasis on molecular aspects of pathogenesis.

5202. Viral Pathogenesis

Three credits. Prerequisite: A course in virology or microbiology and one in biochemistry, with consent of the instructor. Recommended preparation: a course in immunology or pathology.

Review and discussion of recent advances regarding mechanisms involved in the development of viral disease at the virus, host, organ, tissue, cell, sub-cellular and molecular levels. Current advances in virus-host interactions will be discussed, including virulence factors, mechanisms of suppression and evasion of host responses, oncogenesis, persistence, immunopathology, neurotropism, neuroinvasion.

5203. Principles of Antibacterial Development

Three credits. Prerequisite: A course in general microbiology or bacteriology with consent of the instructor.

Important concepts and pioneering strategies currently being used to develop novel antibacterials.

5300. Disc of Pathobiology and Veterinary Science Literature

One credit. Prerequisite: Instructor consent. May be repeated for a total of three credits. Students taking this course will be assigned a final grade of S (satisfactory) or U (unsatisfactory).

Weekly discussion of current peer-reviewed literature related to pathobiological basis of disease.

5303. Veterinary Pathology Lecture Series

Variable (1-3) credits. May be repeated for a total of nine credits.

Lectures on veterinary and comparative anatomic pathology organized by animal species or disease classification utilizing lectures on electronic media in the context of a prescribed plan of study.

5392. Practicum in Veterinary Anatomic Pathology

Three credits. Prerequisite: Open only to veterinarians accepted into the residency program in veterinary pathology; instructor consent. May be repeated for credit. Students taking this course will be assigned a final grade of S (satisfactory) or U (unsatisfactory).

Service-based learning of veterinary anatomic pathology through gross and histologic evaluation of necropsy and biopsy case material by direct review with faculty pathologists.

5394. Veterinary Pathology Seminar

Two credits. Prerequisite: Instructor consent. May be repeated for a total of 12 credits.

Blinded examination of gross and histologic lesions with emphasis on lesion recognition, description and disease diagnosis, followed by group discussion of each case.

5401. Immunobiology

Four credits. Prerequisite: Open with consent of instructor to graduate students, upper-level Honors students, and senior undergraduate students with recommended preparation. Recommended preparation: Previous coursework in biochemistry, genetics, cell biology, and microbiology.

Principles of basic and clinical immunobiology; phylogeny and ontogeny of the immune response, characteristics of the immune response, cellular and humoral immunity; central and peripheral lymphoid tissues; mechanisms of immunologic injury and immunologic diseases; comparative and veterinary immunology; transplantation and tumor immunology.

5431. Avian Pathology

Two credits. Prerequisite: Instructor consent.

A comprehensive study of systemic avian pathology, stressing the correlation of pathological changes with clinical and microbiological findings.

5503. Molecular Approaches to Disease Diagnosis and Prevention

Two credits. Prerequisite: Instructor consent.

Molecular aspects of disease, with emphasis on methodologies and strategies for diagnosis, analysis and prophylaxis.

5594. Current Veterinary Pathology Literature

One credit. Prerequisite: Instructor consent. May be repeated for a total of six credits.

Detailed study of current veterinary pathology literature, with particular emphasis on lesions and mechanisms of disease.

5632. Vaccines: Mechanisms of Immune Protection

(Also offered as AH 5632.) Three credits. Prerequisite: Instructor consent.

Focuses on several different approaches to inducing prophylactic immunity in the host. Both traditional and modern molecular approaches to vaccine design will be discussed. In addition, the mechanisms employed by pathogenic microbes to avoid hosts' immune responses will be examined in the context of vaccine design. The students will gain an appreciation for the transition from basic research to practical applications.