# PATHOBIOLOGY (PABI)

#### PABI\*6000 Bacterial Pathogenesis Fall Only [0.50]

An overview of key concepts in bacterial pathogenesis with emphasis on veterinary and zoonotic pathogens.

Department(s): Department of Pathobiology

Location(s): Guelph

## PABI\*6030 Applied Clinical Pathology I Summer, Fall, and Winter [0.50]

Introduction to laboratory procedures and interpretation of data arising from hematology, cytology, clinical chemistry, urinalysis and hemostatis analysis of clinical material. Intended for students training in clinical pathology and DVM graduates licensed by CVO.

Offering(s): Annually

Restriction(s): Instructor consent required.

Department(s): Department of Pathobiology

Location(s): Guelph

### PABI\*6040 Applied Clinical Pathology II Unspecified [0.50]

A continuation of PABI\*6030 with greater depth in the interpretation of data and increased understanding of ancillary diagnostic methods applied in clinical case material. Intended for students in training in clinical pathology and DVM graduates licensed by CVO.

Offering(s): Annually Prerequisite(s): PABI\*6030

Restriction(s): Instructor consent required.

Department(s): Department of Pathobiology

Location(s): Guelph

## PABI\*6041 Applied Clinical Pathology III Unspecified [0.50]

A continuation of PABI\*6040 with independent and comprehensive interpretation of diagnostic test results, and analysis of laboratory quality assurance quality control procedures. Intended for students training in clinical pathology and DVM graduates licensed by CVO.

Offering(s): Annually

Prerequisite(s): PABI\*6030 and PABI\*6040 Restriction(s): Instructor consent required. Department(s): Department of Pathobiology

Location(s): Guelph

#### PABI\*6050 Applied Avian Pathology I Fall Only [0.50]

Examination and interpretation of gross and microscopic lesions of domestic poultry. Intended for students training in anatomic pathology and Veterinarians licensed by CVO.

Restriction(s): Instructor consent required.

Department(s): Department of Pathobiology

Location(s): Guelph

## PABI\*6060 Applied Avian Pathology II Winter Only [0.50]

A continuation of PABI\*6050, emphasizing seasonal differences in diseases as well as diseases more commonly associated with winter conditions. Intended for students training in anatomic pathology and

Veterinarians licensed by CVO. **Prerequisite(s):** PABI\*6050

Restriction(s): Instructor consent required.

Department(s): Department of Pathobiology

Location(s): Guelph

### PABI\*6070 Applied Avian Pathology III Summer Only [0.50]

A continuation of PABI\*6060, emphasizing seasonal differences in diseases as well as diseases more commonly associated with summer conditions. Intended for students training in anatomic pathology and Veterinarians licensed by CVO.

Prerequisite(s): PABI\*6050 and PABI\*6060 Restriction(s): Instructor consent required. Department(s): Department of Pathobiology

Location(s): Guelph

## PABI\*6080 Diagnostic Pathology I Summer, Fall, and Winter [0.50]

An introductory course of diagnostic pathology, including all body systems but emphasizing diseases affecting the whole body and respiratory, urinary and digestive (including liver and pancreas) systems. Intended for students in training in anatomic pathology and Veterinarians licensed by CVO, engaged in applied anatomic pathology training.

**Restriction(s)**: Instructor consent required. **Department(s)**: Department of Pathobiology

Location(s): Guelph

## PABI\*6090 Diagnostic Pathology II Summer, Fall, and Winter [0.50]

An intermediate course that builds on the skills acquired in PABI\*6080 and further enhances diagnostic veterinary pathology skills to include diseases of the nervous, endocrine and musculoskeletal systems. Intended for students training in anatomic pathology and Veterinarians licensed by CVO, engaged in applied anatomic pathology training.

Prerequisite(s): PABI\*6080

**Restriction(s)**: Instructor consent required. **Department(s)**: Department of Pathobiology

Location(s): Guelph

## PABI\*6091 Diagnostic Pathology III Summer, Fall, and Winter [0.50]

An advanced course that builds on the skills acquired in PABI\*6090 and further enhances diagnostic veterinary pathology skills to include diseases of all organ systems. Intended for students training in anatomic pathology and Veterinarians licensed by CVO, engaged in applied anatomic pathology training.

Prerequisite(s): PABI\*6080 and PABI\*6090 Restriction(s): Instructor consent required. Department(s): Department of Pathobiology

Location(s): Guelph

## PABI\*6100 Immunobiology Fall Only [0.50]

Major areas of immunology, including initiation, regulation, receptors, genetics, immune system development and function.

Department(s): Department of Pathobiology

Location(s): Guelph

#### PABI\*6104 Mechanisms of Disease Winter Only [0.50]

Molecular, cellular and tissue processes involved in the pathogenesis of adaptive, degenerative, inflammatory, infectious, proliferative and neoplastic diseases.

**Department(s):** Department of Pathobiology

Location(s): Guelph

PABI\*6190 Topics in Immunology Winter Only [0.50]

Aspects of immune and non-specific host resistance, diagnostic

immunology and immune-mediated disease. **Department(s):** Department of Pathobiology

Location(s): Guelph

### PABI\*6221 Comparative Veterinary Pathology I Unspecified [0.50]

Pathological changes associated with diseases of amphibia, reptiles, wild and captive non-domestic birds, and wild mammals including fur-bearers. Intended for students training in anatomic pathology and Veterinarians licensed by CVO.

Offering(s): Even-numbered years

Restriction(s): Instructor consent required.

Department(s): Department of Pathobiology

Location(s): Guelph

#### PABI\*6222 Comparative Veterinary Pathology II Unspecified [0.50]

Pathological changes associated with diseases of poultry and pet birds,

fish and various laboratory animals. **Offering(s):** Even-numbered years

Restriction(s): Instructor consent required.

Department(s): Department of Pathobiology

Location(s): Guelph

#### PABI\*6300 Clinical Pathology I Unspecified [0.50]

Principles and applications of veterinary hematology and cytology, with emphasis on the hematopoietic systems. Veterinarians licensed by CVO.

Offering(s): Occasional years

Restriction(s): Instructor consent required.

Department(s): Department of Pathobiology

Location(s): Guelph

## PABI\*6320 Clinical Pathology II Winter Only [0.50]

In depth study of principles and applications of biochemical tests to evaluate the function of selected organ systems, including the renal, hepatic, pancreatic and endocrine systems. Veterinarians licensed by CVO.

Restriction(s): Instructor consent required.

Department(s): Department of Pathobiology

Location(s): Guelph

## PABI\*6330 Viral Diseases Fall Only [0.50]

A study of important viral diseases of animals, with emphasis on etiology,

host responses, diagnosis and control. **Offering(s):** Odd-numbered years

**Department(s):** Department of Pathobiology

Location(s): Guelph

## PABI\*6350 Molecular Epidemiology of Bacterial Diseases Fall Only [0.50]

This is a basic introduction to molecular epidemiology of bacterial diseases. It provides an understanding of molecular epidemiology methodologies and of their use for improving our understanding of infectious diseases epidemiology and control. Lab component requires WHIMIS certificate.

Prerequisite(s): STAT\*2040

Restriction(s): Instructor consent required.

Department(s): Department of Pathobiology

Location(s): Guelph

# PABI\*6430 Academic and Professional Skills in Pathobiology Summer and Fall [0.00]

Students will be introduced to fundamental elements of scientific research and communication and to various academic skills through lectures, seminars, and completion of in class activities. Throughout the course, relevant ethical, and regulatory issues will be discussed.

Department(s): Department of Pathobiology

Location(s): Guelph

# PABI\*6440 MSc Seminar in Pathobiology Summer, Fall, and Winter [0.50]

Students registered in the MSc program will develop a written critical review of the literature and plan for their thesis research. This material will also be presented in the form of a public seminar. Students are also required to provide oral and written critical reviews of thesis plan presentations.

Prerequisite(s): PABI\*6430

Department(s): Department of Pathobiology

Location(s): Guelph

# PABI\*6450 Doctoral Seminar in Pathobiology Summer, Fall, and Winter [0.50]

Students registered in the PhD or DVSc programs will develop a written critical review of the literature and plan for their thesis research. This material will also be presented in the form of a public seminar. Students are also required to provide oral and written critical reviews of the thesis plan presentations of other students.

Prerequisite(s): PABI\*6430

Department(s): Department of Pathobiology

Location(s): Guelph

#### PABI\*6500 Infectious Diseases and Public Health Fall Only [0.50]

Prevention and control of infectious diseases is an important aspect of public health. This course will involve detailed discussion of selected infectious diseases of public health concern, excluding zoonotic diseases. Relevant aspects of microbiology, epidemiology, clinical presentation, diagnosis and treatment will be covered, with additional emphasis on prevention and control.

Restriction(s): Restricted to Public Health students.

Department(s): Department of Pathobiology

Location(s): Guelph

### PABI\*6550 Epidemiology of Zoonoses Winter Only [0.50]

Characterization and distribution of diseases common to people and

Department(s): Department of Pathobiology

Location(s): Guelph

# PABI\*6560 Principles and Practice of Antimicrobial Therapy Unspecified [0.50]

This course will cover antimicrobial therapy in veterinary medicine, encompassing microbial, pharmacological and clinical aspects of prudent and effective antimicrobial use. Students should hold a DVM degree or equivalent.

Offering(s): Occasional years

Restriction(s): Instructor consent required.

Department(s): Department of Pathobiology

Location(s): Guelph

#### PABI\*6630 Applied Comparative Pathology I Unspecified [0.50]

Introductory course in the diagnostic pathology of mammals, birds, reptiles, amphibians, and fish. Cases may be restricted by animal taxa or context (e.g., free-ranging Canadian wildlife, zoological collections, aquaculture). The three-semester course in Applied Comparative Pathology builds in expected level of accomplishment. Intended for students training in anatomic pathology and Veterinarians licensed by CVO.

Offering(s): Occasional Years

Restriction(s): Instructor consent required.

Department(s): Department of Pathobiology

Location(s): Guelph

#### PABI\*6640 Applied Comparative Pathology II Unspecified [0.50]

Intermediate course in the diagnostic pathology of mammals, birds, reptiles, amphibians, and fish. Cases may be restricted by animal taxa or context (e.g., free-ranging Canadian wildlife, zoological collections, aquaculture). The three-semester course in Applied Comparative Pathology builds in expected level of accomplishment. Intended for students training in anatomic pathology and Veterinarians licensed by CVO.

Offering(s): Occasional years Prerequisite(s): PABI\*6630

Restriction(s): Instructor consent required.

Department(s): Department of Pathobiology

Location(s): Guelph

### PABI\*6650 Applied Comparative Pathology III Unspecified [0.50]

Advanced course in the diagnostic pathology of mammals, birds, reptiles, amphibians, and fish. Cases may be restricted by animal taxa or context (e.g., free-ranging Canadian wildlife, zoological collections, aquaculture). The three-semester course in Applied Comparative Pathology builds in expected level of accomplishment. Intended for students training in anatomic pathology and Veterinarians licensed by CVO.

Offering(s): Occasional years

Prerequisite(s): PABI\*6630 and PABI\*6640 Restriction(s): Instructor consent required. Department(s): Department of Pathobiology

Location(s): Guelph

#### PABI\*6700 Laboratory Animal Science Unspecified [0.50]

Basic information on various aspects of laboratory animal science, including IACUC function, regulatory oversight, ethics, historical review of animal research, animal models and alternatives, experimental design and considerations, biology, management and uses of common species in research. [Occasional years]

Restriction(s): Instructor consent required.

Department(s): Department of Pathobiology

Location(s): Guelph

## PABI\*6710 Applied Laboratory Animal Science I Unspecified [0.50]

This course will emphasize practical aspects of laboratory animal science including research protocol review, writing and reviewing standard operating procedures, animal monitoring, pathology procedures, and case management.

Offering(s): Occasional years

**Restriction(s)**: Instructor consent required. **Department(s)**: Department of Pathobiology

Location(s): Guelph

#### PABI\*6720 Applied Laboratory Animal Science II Unspecified [0.50]

Continuation of I with emphasis on biohazard and personnel safety, monitoring for disease, quality control and diagnostic procedures.

[Occasional years]

Restriction(s): Instructor consent required.

Department(s): Department of Pathobiology

Location(s): Guelph

#### PABI\*6730 Applied Laboratory Animal Science III Unspecified [0.50]

Continuation of I and II, with emphasis on a comparison of programs and procedures in other facilities in Canada, nonhuman primate medicine, and surgical, clinical and necropsy procedures. [Occasional years]

Restriction(s): Instructor consent required.

Department(s): Department of Pathobiology

Location(s): Guelph

#### PABI\*6740 Avian Diseases Unspecified [0.50]

Detailed study of recent concepts of preventive medicine, diagnosis and therapeutics as applied to clinical recognition and control of avian diseases. [Occasional years]

Restriction(s): Instructor consent required.

Department(s): Department of Pathobiology

Location(s): Guelph

# PABI\*6960 Special Topics in Pathobiology Summer, Fall, and Winter [0.50]

In-depth independent study of subjects related to student's principal area of interest. Major paper(s), laboratory studies, and/or written and oral examination, with or without seminar preparation.

Restriction(s): Instructor consent required.

Department(s): Department of Pathobiology

Location(s): Guelph