

VM3101: GENERAL PATHOLOGY

Effective Term

Semester B 2023/24

Part I Course Overview

Course Title

General Pathology

Subject Code

VM - Jockey Club College of Veterinary Medicine and Life Sciences

Course Number

3101

Academic Unit

Veterinary Clinical Sciences (VCS)

College/School

Jockey Club College of Veterinary Medicine and Life Sciences (VM)

Course Duration

One Semester

Credit Units

3

Level

B1, B2, B3, B4 - Bachelor's Degree

Medium of Instruction

English

Medium of Assessment

English

Prerequisites

Completion of Year 2 courses with C grade or above

Precursors

Nil

Equivalent Courses

Nil

Exclusive Courses

Nil

Part II Course Details

Abstract

The purpose of this course is for students to build an understanding of the basic mechanisms by which tissues and organisms react to stress and injury including the basic mechanisms of the immune response. The material in this course is

meant to build on the solid foundation of anatomy and histology, complement the material presented in the cell biology and genetics courses, and provide the basis for further understanding of the aetiopathogenesis and diagnosis of diseases that will be essential in future courses and in clinical rotations.

Course Intended Learning Outcomes (CILOs)

CILOs	Weighting (if app.)	DEC-A1	DEC-A2	DEC-A3
1	Describe the role of pathology and the pathologist in diagnostic medicine.	x	x	
2	Explain the basic tissue responses to injury and describe underlying mechanisms driving these responses.	x	x	
3	Recognise and describe the features of abnormal tissue on a gross and microscopic level, and determine what process or processes are occurring in the abnormal tissue.	x	x	
4	Formulate an appropriate morphologic diagnosis for the processes occurring in the abnormal tissue.	x	x	x

A1: Attitude

Develop an attitude of discovery/innovation/creativity, as demonstrated by students possessing a strong sense of curiosity, asking questions actively, challenging assumptions or engaging in inquiry together with teachers.

A2: Ability

Develop the ability/skill needed to discover/innovate/create, as demonstrated by students possessing critical thinking skills to assess ideas, acquiring research skills, synthesizing knowledge across disciplines or applying academic knowledge to real-life problems.

A3: Accomplishments

Demonstrate accomplishment of discovery/innovation/creativity through producing /constructing creative works/new artefacts, effective solutions to real-life problems or new processes.

Teaching and Learning Activities (TLAs)

TLAs	Brief Description	CILO No.	Hours/week (if applicable)
1	Lectures	Lecture topics consist of: Introduction to Pathology and Lesion Description; Tissue Degeneration and Adaptation Death; Haemodynamic Disorders and Shock; Basic Immunology and Inflammation; Healing and Repair; Disturbances of Growth (Carcinogenesis) and its clinical manifestations.	1, 2, 3, 4 20 hours in total

2	Tutorials	Tutorials will centre on case discussions applying newly gained knowledge of principles of disease development in this course. They may involve self-directed study of provided online material with the opportunity to discuss the case face to face in a following wrap up and/or lecture.	1, 2, 3, 4	7 hours in total
3	Laboratory practicals*	The laboratories are designed to give students experience evaluating fresh (or Klotz fixed) tissues, gross photographs of tissues and histologic specimens. Additionally, each student will be able to do 2 full macroscopic post mortem examinations including review of clinical history where available and a discussion of all findings.	1, 2, 3, 4	12 hours in total

Additional Information for TLAs

* These are participation and engagement-required TLA sessions. Students can be absent from no more than one of these sessions per course per semester. Additional absence will constitute a course failure.

Assessment Tasks / Activities (ATs)

ATs	CILO No.	Weighting (%)	Remarks (e.g. Parameter for GenAI use)
1	Mid-term Test	1, 2, 3, 4	40
2	Final Exam	1, 2, 3, 4	Weighting: 60%

Continuous Assessment (%)

40

Examination (%)

60

Examination Duration (Hours)

2

Additional Information for ATs

Students will pass the course if they reach an overall 50% mark or more.

Assessment Rubrics (AR)**Assessment Task**

Mid-term test

Criterion

Ability to explain the mechanisms driving tissue response to injury, and describe the features of abnormal tissue

Excellent (A+, A, A-)

Excellent in understanding, explaining, exploring and integrating the knowledge

Good (B+, B, B-)

Good in understanding, explaining, exploring and integrating the knowledge

Fair (C+, C, C-)

Basic competence in understanding, explaining, exploring and integrating the knowledge

Failure (F)

Poor in understanding, explaining, exploring and integrating the knowledge

Assessment Task

Examination

Criterion

Ability to explain the mechanisms driving tissue response to injury, and describe the features of abnormal tissue

Excellent (A+, A, A-)

Excellent in understanding, explaining, and integrating the knowledge in written format

Good (B+, B, B-)

Good in understanding, explaining, and integrating the knowledge in written format

Fair (C+, C, C-)

Basic competence in understanding, explaining, and integrating the knowledge in written format

Failure (F)

Poor in understanding, explaining, and integrating the knowledge in written format

Additional Information for AR

Mark Range

The following is the mark range for each letter grade that must be used for assessment of any examinations or coursework of BVM courses (VM- and GE-coded) offered by PH and VCS.

A+: ≥85% A: 80-84.99% A-: 75-79.99% B+: 70-74.99% B: 65-69.99% B-: 60-64.99% C+: 55-59.99% C: 50-54.99%, F:<50%

Part III Other Information

Keyword Syllabus

Immunology, Inflammation, Acute and chronic, Mechanisms, Morphology, Lesion description, Cellular injury, Necrosis, Apoptosis, Pigments, Depositions, Coagulation, Haemostasis, Haemodynamic disorders, Shock, Neoplasia, Carcinogenesis, Cancer, Tumour biopsies, Healing and repair, Necropsy

Reading List

Compulsory Readings

Title	
1	Zachary JF, eds. (2016). Pathologic Basis of Veterinary Disease. 6th ed. St. Louis, MO: Elsevier; Elsevier Health Sciences.

Additional Readings

Title	
1	Kumar, Abbas and Aster (2014). Robbins & Cotran Pathologic Basis of Disease. 9th ed. Elsevier; Elsevier Health Sciences.