

VM3101: GENERAL PATHOLOGY

Effective Term

Semester A 2024/25

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.

Learning and Teaching Activities (LTAs)

LTAs		Brief Description	CILO No.	Hours/week (if applicable)
1	Lectures	Students will engage in formal lectures to gain knowledge about key concepts and mechanism in various pathology topics, including and not limited to the following: immunity, cellular response to stress and injury, haemodynamics, healing and repair, cancer; and application of pathology in clinical aspects.	1, 2, 3, 4	20 hours in total

2	Tutorials	Students will engage in additional case-based material to reinforce and apply knowledge and concepts gained from the lectures.	1, 2, 3, 4	7 hours in total
3	Laboratory practicals*	Students will participate in handling various types of tissue specimen to reinforce and apply knowledge and concepts gained from the lectures and tutorials including and not limited to the following topics: inflammation, gross lesion description, neoplasia and postmortem examination. 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 LTAs

* 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	Quizzes	1, 2, 3, 4	10
2	Mid-term Test	1, 2, 3, 4	40
3	Final Exam	1, 2, 3, 4	Weighting: 50%

Continuous Assessment (%)

50

Examination (%)

50

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 and quizzes

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+: $\geq 92\%$ A: $\geq 87-91.99\%$ A-: $\geq 82-86.99\%$ B+: $\geq 75-81.99\%$ B: $\geq 68-74.99\%$ B-: $\geq 61-67.99\%$ C+: $\geq 54-60.99\%$ C: $\geq 50-53.99\%$, 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.