# VM3101: GENERAL PATHOLOGY

**Effective Term**
Semester A 2025/26

## 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 LTA 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 ("-" for nil entry) | Allow Use of GenAI? |
|---|---|---|---|---|---|
| 1 | Quizzes | 1, 2, 3, 4 | 10 | - | No |
| 2 | Mid-term Test | 1, 2, 3, 4 | 40 | - | No |
| 3 | Final Exam | 1, 2, 3, 4 | 0 | Weighting: 50% | No |

**Continuous Assessment (%)**

50

**Examination (%)**

50

**Examination Duration (Hours)**

2

**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-)**
(For C+, C) Basic competence in understanding, explaining, exploring and integrating the knowledge

See additional information for AR regarding mark range below, as in the BVM programme only C+ and C grades are awarded.

**Marginal (D)**
Not applicable for the BVM programme

**Failure (F)**
Poor in understanding, explaining, exploring and integrating the knowledge

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**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-)**
(For C+, C) Basic competence in understanding, explaining, and integrating the knowledge in written format

See additional information for AR regarding mark range below, as in the BVM programme only C+ and C grades are awarded.

**Marginal (D)**
Not applicable for the BVM programme

**Failure (F)**
Poor in understanding, explaining, and integrating the knowledge in written format

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**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+: ≥92% A: ≥87-91.99% A-: ≥82-86.99% B+: ≥75-81.99% B: ≥68-74.99% B-: ≥61-67.99% C+: ≥54-60.99% C: ≥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. |