

VM4111: COMPANION ANIMAL SURGERY

Effective Term

Semester B 2025/26

Part I Course Overview

Course Title

Companion Animal Surgery

Subject Code

VM - Jockey Club College of Veterinary Medicine and Life Sciences

Course Number

4111

Academic Unit

Veterinary Clinical Sciences (VCS)

College/School

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

Course Duration

One Semester

Credit Units

6

Level

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

Medium of Instruction

English

Medium of Assessment

English

Prerequisites

Completion of Year 3 courses with C grade or above

Precursors

Nil

Equivalent Courses

Nil

Exclusive Courses

Nil

Part II Course Details

Abstract

This course covers the theoretical and practical approach to surgical principles, wound management and common surgical disorders and diseases including soft tissue as well as musculoskeletal abnormalities. It connects the before learnt anatomy,

physiology, pathology and pharmacology with clinical knowledge. To do so, a number of training laboratories but also real time surgery will be offered. The course focuses on dogs and cats.

Key Areas:

- General Surgical Principles
- Wound Healing and Wound Management
- Soft Tissue Surgery
- Musculoskeletal Surgery

This course provides a sound foundation for clinical rotations in later parts of the program. A variety of teaching techniques are used, including lectures, live animals, cadaver and mannequin laboratories, wet lab exercises, dry lab exercises and discussion, demonstrations and case discussions.

Course Intended Learning Outcomes (CILOs)

	CILOs	Weighting (if app.)	DEC-A1	DEC-A2	DEC-A3
1	Describe common surgical diseases, including their pathogenesis, pathophysiology, diagnostic investigation, treatment and prognosis.		x	x	
2	Apply data collection skills to be able to take and interpret comprehensive surgical histories for canine and feline patients that include background epidemiological information and specific history relevant to the presenting complaint.		x	x	
3	Evaluate patient histories, clinical examination findings, relevant laboratory findings and diagnostic imaging findings to develop differential diagnoses, and propose logical diagnostic investigations.			x	
4	Develop an appropriate treatment plan, considering the diagnosis, overall health of the animal and client resources.			x	x
5	Communicate surgical and non-surgical options available to owners including euthanasia and referral to a specialist considering the welfare of the animal, client resources and relevant veterinary legislation.			x	x
6	Plan and perform desexing surgery on a female cat, and assess the post-surgical recovery.				x
7	Perform common surgical procedures involving the alimentary and urogenital tracts and fracture repair using models and/or simulations.		x	x	x
8	Choose and apply the correct techniques of wound repair, bandaging and splinting as appropriate for the injury.			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 lecture activities where they will learn the essential facts and knowledge to be applied in practice.	1, 2, 3, 4, 5, 6, 7, 8	47 hours in total
2	Case discussions and tutorials	In case discussions students will engage in discussions and will to work through these real-life clinical cases. During tutorials students will analyse and interpret data.	1, 2, 3, 4, 5, 6	6 hours in total
3	Practical classes *^	During the practical classes the students will have the opportunity to experience and learn hands-on practical skills, both on-farm and in the clinical skills laboratory.	1, 2, 3, 4, 5, 6, 7, 8	25 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.

^ Students must complete the surgery of a cat undergoing ovariohysterectomy (i.e. cat spays) to successfully complete the course.

Assessment Tasks / Activities (ATs)

ATs	CILO No.	Weighting (%)	Remarks ("- for nil entry)	Allow Use of GenAI?	
1	Quizzes*	1, 2, 3, 4, 5, 6, 7, 8	35	There will be 3 quizzes accounting for 11.66% each	No
2	OSCE Assessment	1, 2, 3, 4, 5, 6, 7, 8	15	Must Pass OSCE	No
3	Final examination (2 hours)**	1, 2, 3, 4, 5, 6, 7, 8	0	Weighting 50%	No

Continuous Assessment (%)

50

Examination (%)

50

Examination Duration (Hours)

2

Additional Information for ATs

Students need to sit all 3 quizzes and the final exam and obtain a minimum 50% mark as a whole. Additionally they need to pass the OSCE in order to pass the course.

A failing grade in the Practical Examination (OSCEs) will lead to an overall F grade for the entire course. Students must pass the Practical Examination (OSCEs) before live animal surgery.

Assessment Rubrics (AR)

Assessment Task

Quizzes and Examinations

Criterion

Student can integrate the clinical sciences of medicine, surgery, anaesthesiology, radiology, and theriogenology with systems pathology and relevant aspects of applied pharmacology to establish a cognitive framework applicable to particular disease situations.

Excellent (A+, A, A-)

Excellent in understanding and ability to develop and explain differential diagnoses, definitive diagnoses, treatment options, and treatment plans.

Good (B+, B, B-)

Good in understanding and ability to develop and explain differential diagnoses, definitive diagnoses, treatment options, and treatment plans.

Fair (C+, C, C-)

(For C+, C) Has basic understanding and ability to develop and explain differential diagnoses, definitive diagnoses, treatment options, and treatment plans.

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)

Weak understanding and ability to develop and explain differential diagnoses, definitive diagnoses, treatment options, and treatment plans.

Assessment Task

OSCE Assessment

Criterion

Demonstrates safety and competency in practical skills manner.

Excellent (A+, A, A-)

Excellent execution of task with few or no errors. No safety concerns.

Good (B+, B, B-)

Good execution of task, with some minor permissible errors. No safety concerns.

Fair (C+, C, C-)

(For C+, C) Adequate execution of task, but with more significant errors. No safety concerns.

Marginal (D)

Not applicable for the BVM programme.

Failure (F)

Fails to demonstrate appropriate level of competency in practical procedures or completes procedures in an unsafe manner.

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

- Animal Health
- Disease
- Pathology
- Veterinary Pharmacology
- Surgery
- Soft Tissue
- Musculoskeletal
- Radiology
- Therapy

Reading List

Compulsory Readings

Title	
1	All of the material that students are expected to know is presented in the lectures and any notes provided to the students by the lecturer, and in most cases, those notes are the most helpful study tool as the faculty have synthesized and expanded upon information contained in multiple textbooks, and integrated their years of clinical experience, to create these notes for students.

Additional Readings

Title	
1	This textbook is meant to supplement the information presented in lecture and are best reviewed after lecture on an as-needed basis. We do not recommend that students read any of these texts prior to lecture due to the sheer volume of information.
2	Small Animal Surgery, 5th edition, Theresa Fossum