

VM4301: CLINICAL ROTATIONS: PART I

Effective Term

Semester B 2024/25

Part I Course Overview

Course Title

Clinical Rotations: Part I

Subject Code

VM - Jockey Club College of Veterinary Medicine and Life Sciences

Course Number

4301

Academic Unit

Veterinary Clinical Sciences (VCS)

College/School

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

Course Duration

One Semester

Credit Units

5

Level

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

Medium of Instruction

English

Medium of Assessment

English

Prerequisites

Completion of Year 4 and Year 5 courses (except for VM4301 Clinical Rotations: Part 1) with C grade or above

Precursors

Nil

Equivalent Courses

Nil

Exclusive Courses

Nil

Part II Course Details

Abstract

Clinical rotations I, II and III are an integrated program comprising of 27-weeks of core clinical veterinary education.

This will be an opportunity to combine all the skills sets obtained and apply them to a realistic clinical setting, whilst still under the observation of an academic institution. The clinical rotations will involve application of skills in clinical examination and diagnosis, clinical medicine, clinical pathology, therapeutics, pharmacy, anaesthesia, diagnostic imaging, surgery, clinical pathology, pathology, preventative vet medicine and health monitoring, and veterinary certification relevant to the particular class of animal.

The program is comprised of a 2-week pathology rotation, 2-week diagnostic imaging rotation, 2-week referral medicine rotation, 2-week surgery rotation, 2-week anaesthesia rotation, 4-week general practice rotation, 2-week emergency and critical care rotation, 1-week exotic rotation, 3-week equine rotation, 1-week aquatics rotation, 1-week swine rotation, 1-week poultry rotation, 2-week and 3-day ruminant rotation (cattle & small ruminants), and 1-week slaughterhouse rotation. The majority of the clinical rotations will be intramural at CityU's Veterinary Medical Centre (VMC) and Veterinary Diagnostic Laboratory (VDL). The swine, poultry, small ruminant and aquatics rotations will be hosted by the Jockey Club College of Veterinary Medicine and Life Science's Ambulatory Veterinary Services Team.

The equine and ruminant rotations will be arranged in in-house veterinary departments of large livestock industry establishments.

The clinical rotations make a major contribution towards the development of the competencies, skills and attributes required by the Australasian Veterinary Boards Council Inc (AVBC) of veterinary graduates. It also contributes to the development of the general professional skills and attributes, practical and clinical competencies expected by the Royal College of Veterinary Surgeons (RCVS) of newly qualified graduates, except that the student may not happen to experience situations in which competencies 38 (reporting of notifiable diseases) or 8 (reporting of suspected adverse reactions) apply. The clinical rotations will also contribute to the underpinning knowledge and understanding required by RCVS in relation to the development of effective interpersonal skills and an ethical approach to animals and veterinary practice.

Course Intended Learning Outcomes (CILOs)

CILOs		Weighting (if DEC-A1 app.)	DEC-A1	DEC-A2	DEC-A3
1	Develop a sound understanding of the organization, management and legislation related to the veterinary placement, including standard operating procedures, biosecurity protocols and safety measures.		x	x	x
2	Demonstrate an ability to take a thorough patient history including all relevant background information and history specific to the presenting complaint.		x	x	x
3	Be able to perform a complete clinical examination and assess the physical condition, welfare and nutritional status of an animal or group of animals.		x	x	x
4	Identify and assess problems from a patient's history, clinical examination and laboratory test results and synthesize a list of ranked differential diagnoses to inform the diagnostic plan.		x	x	x
5	Develop diagnostic, preventative and therapeutic plans and apply these for the health and wellbeing of animals appropriate to the context.		x	x	x
6	Participate in the acquisition of diagnostic test data using a range of diagnostic techniques.		x	x	x
7	Collect, preserve and transport samples, select appropriate diagnostic tests, interpret and understand the limitations of the test results.		x	x	x

8	Apply knowledge and understanding of the principles of anaesthesia, analgesia and aseptic surgery to be able to observe and assist with veterinary procedures under the direct supervision of a registered veterinarian, where appropriate to the context.		x	x	x
9	Be fully conversant with and follow the RCVS Code of Professional Conduct.		x	x	x
10	Communicate effectively with clients, the public, professional colleagues and responsible authorities using language appropriate to the audience concerned.		x	x	x
11	Apply a knowledge and understanding of the RCVS ten principles of certification to veterinary practice.		x	x	x
12	Demonstrate an understanding of the legislation and current guidelines in relating to correctly prescribing and dispensing veterinary medicines.		x	x	x
13	Demonstrate a sound knowledge of the mechanisms for reporting suspected adverse reactions and notifiable zoonotic diseases as appropriate to the context.		x	x	x
14	Engage in reflective practice, professional development and self-regulation to attend to personal wellbeing.		x	x	x
15	Demonstrate appropriate selection of antimicrobial drugs based on the knowledge of antimicrobial stewardship, antimicrobial resistance, and health consequences related to antimicrobial drug use in animals and humans.		x	x	x
16	Demonstrate an understanding of a range of contextual factors that are unique to each individual case and the client in practising across the spectrum of care (SOC).		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	Clinical rounds	Students will present cases and discuss with supervising clinicians on clinical rounds. Presentations should include a brief synopsis of the presenting history, clinical findings, assessment, differential diagnoses, diagnostic investigation results, overall diagnosis, treatment and prognosis.	1, 2, 4, 5, 9, 10, 11, 12, 13, 14, 15, 16 Typically, 40 hr/wk
2	Communication tasks	Students will communicate with clients, the public and professional colleagues under supervision of clinicians, and will present a communication task to their peer-group and supervising clinician	1, 2, 4, 5, 6, 9, 10, 11, 13, 14, 16 Typically, 40 hr/wk
3	Diagnostic procedures/ tests	Students will participate in diagnostic procedures/ tests and interpretation of results under supervision of clinicians.	1, 4, 5, 6, 7, 9, 10, 16 Typically, 40 hr/wk
4	Diagnostic imaging	Students will participate in positioning of animals for radiographs and ultrasound examination, acquisition of images and interpretation of images under supervision of clinicians and imaging technicians. Students will assist with advanced imaging procedures, e.g. CT/MRI	1, 4, 5, 6, 9 Typically, 40 hr/wk
5	Clinical procedures	Students will perform common clinical procedures under supervision of clinicians.	1, 3, 4, 5, 6, 7, 9 Typically, 40 hr/wk
6	Medical treatments	Students will formulate treatment plans and give treatments to patients under supervision of technicians and clinicians.	1, 3, 4, 5, 9, 12, 13, 15, 16 Typically, 40 hr/wk

7	Surgery	Students will participate in surgical treatment of animals under supervision of clinicians and surgeons.	1, 2, 3, 4, 5, 8, 9	Typically, 40 hr/wk
8	Anaesthesia	Students will participate in veterinary anaesthesia and analgesia under the supervision of clinicians and anaesthetists.	1, 2, 3, 4, 5, 8, 9	Typically, 40 hr/wk
9	Production animal practice	Students will call on large animal and aquatic animal farms with clinicians to learn about production systems, herd health, disease control and diagnosis, and treatment of sick animals.	1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16	Typically, 40 hr/wk
10	Anatomical pathology	Students will perform necropsies under supervision of clinicians and pathologists.	1, 4, 7, 9, 10, 13, 14, 15, 16	Typically, 40 hr/wk
11	Clinical pathology	Students will examine clinical specimens and interpret the results under supervision of clinicians and pathologists.	1, 4, 7, 9, 10, 15, 16	Typically, 40 hr/wk
12	Animal handling and restraint	Students will practice animal handling and restraint skills under supervision of clinicians.	1, 9, 10, 14	Typically, 40 hr/wk
13	Food Safety	Students will participate in slaughterhouse operations and inspection of animal products.	1, 5, 9, 11, 14	Typically, 40 hr/wk

Additional Information for LTAs

Rotation Requirement

Rotation: Anaesthesia

Location: Veterinary Medical Centre (VMC), CityU

Duration: 2 weeks

Year of Program: 5 & 6

Rotation: Aquatic

Location: JCC Ambulatory Veterinary Service

Duration: 1 week

Year of Program: 5 & 6

Rotation: Diagnostic imaging

Location: VMC, CityU

Duration: 2 weeks

Year of Program: 5 & 6

Rotation: Emergency and critical care

Location: VMC, CityU

Duration: 2 weeks

Year of Program: 5 & 6

Rotation: Equine

Location: Hong Kong Jockey Club (HKJC)

Duration: 3 weeks

Year of Program: 5 & 6

Rotation: Exotics

Location: Zodiac Pet & Exotic Hospital

Duration: 1 week

Year of Program: 5 & 6

Rotation: General Practice

Location: VMC, CityU

Duration: 4 weeks

Year of Program: 5 & 6

Rotation: Pathology

Location: Veterinary Diagnostic Laboratory, City University and JCC necropsy facilities

Duration: 2 weeks

Year of Program: 5 & 6

Rotation: Poultry

Location: JCC Ambulatory Veterinary Service

Duration: 1 week

Year of Program: 5 & 6

Rotation: Ruminant (small ruminant)

Location: JCC Ambulatory Veterinary Service

Duration: 3 days

Year of Program: 5 & 6

Rotation: Referral Medicine

Location: VMC, CityU

Duration: 2 weeks

Year of Program: 5 & 6

Rotation: Ruminant (cattle)

Location: Tableland Veterinary Service

Duration: 2 weeks

Year of Program: 5 & 6

Rotation: Slaughterhouse

Location: Sheung Shui Slaughterhouse

Duration: 1 week

Year of Program: 5 & 6

Rotation: Surgery

Location: VMC, CityU

Duration: 2 weeks

Year of Program: 5 & 6

Rotation: Swine

Location: JCC Ambulatory Veterinary Service

Duration: 1 week

Year of Program: 5 & 6

Assessment Tasks / Activities (ATs)

ATs		CILO No.	Weighting (%)	Remarks (e.g. Parameter for GenAI use)
1	In training evaluation report (ITER)	1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16	60	
2	Activity logs	2, 3, 4, 5, 6, 7, 8, 9, 10, 12, 13, 15, 16	10	
3	Mini clinical evaluation exercise (mini-CEX)	2, 3, 4, 5, 6, 7, 8, 9, 10, 12, 13, 15, 16	10	

4	Communication Tasks (oral or written) to be determined by rotation supervisor	1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 16	10	
5	Clinical Skills Log	2, 3, 4, 5, 6, 7, 8, 10	10	

Continuous Assessment (%)

100

Examination (%)

0

Additional Information for ATs

· Attendance Requirement

Students are required to attend each 2-week rotation for a minimum of 9 days, each 3-week rotation for a minimum of 13.5 days, and each 4-week rotation for a minimum of 18 days. Full attendance is required for rotations that last 1 week or less. If students fail to meet the minimum attendance requirement, they are required to make up the days of absence at the rotation practice.

· Assessment Schedule

Students will submit an activity log of the cases they have participated in provision of veterinary care, including for example health checks, case diagnostic investigations, treatments etc. Students will also submit a clinical skills log of each rotation with all clinical skills performed and signed off by rotation supervisors. Further, students will also complete a communication task and mini-CEX designed by the rotation supervisor.

The rotation supervisor will coordinate the assessment of each student's performance using an in-training evaluation report (ITER). For rotations at least 2-weeks long, one will be administered at the mid-point and one at the end of the rotation. Students identified at risk, at the end of the first week of the rotation will be given opportunities to remediate during the rotation to improve their performance. For rotations shorter than two weeks, students will be given formative feedback during the rotation where possible.

Students must achieve a satisfactory performance in the ITER administered at the end of the rotation, activity log, mini-CEX, communication task, and clinical skills log and attend each rotation for the minimum required days to pass each rotation.

· Failing an individual rotation:

Should a student fail to achieve a passing grade in any given rotation, the student shall be afforded a maximum of one additional attempt by repeating that rotation, to attain a satisfactory outcome. Failure to pass that rotation on the second attempt will result in the student repeating the entire clinical rotations (I, II and III) including the final examination.

A repeat of individual rotations will be capped at no more than three (3) for any student over the entirety of rotations (I, II and III). If a student fails more than three individual rotations, then an overall fail is achieved and the student will be required to repeat the entire clinical rotations (I, II and III) including the final examination.

· Final Examination

At the end of the VM4303 Clinical Rotations Part III, students will sit for a Final Qualifying Examination that assesses student's clinical knowledge and competencies.

Students who have fulfilled all rotation requirements and have achieved a passing score on the final examination shall be eligible for graduation on the date set by the Academic Regulations and Records Office (likely in June).

If a student fails the final examination, a supplementary examination will be granted one (1) month after the initial assessment.

A student who passes the supplementary examination shall be conferred eligibility to graduate on the next available date set by the Academic Regulations and Records Office (likely in October).

A student who fails the supplementary examination will constitute a failure for the entire rotations (I, II and III), and will be required to repeat the entire clinical rotations and resit the end of rotation final examination.

· Fitness to practice

Students who receive three unsatisfactory for professionalism at the end of each individual rotation, over the entire rotations (I, II and III) will be referred to the Fitness to Practice representative and/or committee.

An overall PASS grade will appear on a student's transcript if the student fulfills all of the followings:

- a. Achieves a satisfactory performance on the in-training evaluation report (ITER) of each rotation in this course
- b. Achieves a satisfactory performance for the Activity Logs of each rotation in this course
- c. Achieves a satisfactory performance in the mini-clinical evaluation exercise (mini-CEX) task
- d. Achieves a satisfactory performance for the Communication Tasks of each rotation in this course
- e. Achieves a satisfactory performance for the Clinical Skills Log of each rotation in this course
- f. Attends each rotation for the minimum required number of days
- g. Passes the Final Qualifying Examination.

Assessment Rubrics (AR)

Assessment Task

In training evaluation report (ITER)

Criterion

Attain the expected level of progress for achieving competence in the following criteria by the end of each placement: Understanding and Application of Knowledge, Data Collection, Clinical Reasoning and Problem Solving, Skill Competency, and Professionalism, Interpersonal Skills and Communication Skills.

Pass (P)

Received an overall proficient or satisfactory grade in the ITER administered at the end of the rotation.

Failure (F)

Received an overall unsatisfactory grade in the ITER administered at the end of the rotation.

Assessment Task

Activity Log

Criterion

Demonstrate ability to describe the signalment of the patient

Pass (P)

Clearly describe the signalment of the patient seen, and consistently includes the species, breed, age, gender and neuter status.

Failure (F)

The signalment of the patient is not consistently complete.

Assessment Task

Activity Log

Criterion

Demonstrate ability to define the problems of patients from the history and physical examination.

Pass (P)

Consistently lists the presenting problems of the patients from the history and physical examination.

Failure (F)

Does not consistently list or identify the presenting problems of the patients from the history and physical examination.

Assessment Task

Activity Log

Criterion

Demonstrate ability to comprehend diagnostic investigations.

Pass (P)

Consistently lists the diagnostic tests performed to investigate the problems identified from the history and physical examination and describes, briefly, the major findings from those tests.

Failure (F)

Does not consistently list the diagnostic tests performed to investigate the problems identified from the history and physical examination and describes, briefly, the major findings from those tests.

Assessment Task

Activity Log

Criterion

Demonstrate ability to understand the diagnoses.

Pass (P)

Consistently lists the diagnosis of the problems of patients in the activity log.

Failure (F)

Does not consistently or accurately list the diagnosis of the problems of patients in the activity log.

Assessment Task

Activity Log

Criterion

Demonstrate ability to understand therapeutic approaches to cases.

Pass (P)

Consistently lists the therapy given for patients in the activity log, including drugs prescribed, surgical and other therapy.

Failure (F)

Does not consistently list the therapy given for patients in the activity log, including drugs prescribed, surgical and other therapy.

Assessment Task

Activity Log

Criterion

Outcome (followed until the end of rotation)

Pass (P)

Consistently lists the outcome of patients seen, followed until the end of the rotation.

Failure (F)

Does not consistently list the outcome of patients seen, followed until the end of the rotation.

Assessment Task

Mini clinical evaluation exercise (mini-CEX)

Criterion

Demonstrate ability to work through a clinical case within a clinical setting.

Pass (P)

Competently works through a clinical case within a clinical setting.

Failure (F)

Unable to work through a clinical case within a clinical setting.

Assessment Task

Communication Task

Criterion

Demonstrate ability to communicate effectively with clients, the public and colleagues in a professional manner.

Pass (P)

Consistently practice effective communication with clients, the public and colleagues in a professional manner.

Failure (F)

Does not consistently practice effective communication with clients, the public and colleagues in a professional manner.

Assessment Task

Clinical Skills Log

Criterion

Demonstrate ability to perform the assigned clinical skills accurately and effectively.

Pass (P)

Consistently perform the assigned clinical skills accurately and effectively.

Failure (F)

Does not consistently perform the assigned clinical skills in accurately and effectively.

Part III Other Information

Keyword Syllabus

Clinical rotation, pathology, diagnostic imaging, referral medicine, general practice, small animal, ruminant (cattle and small ruminant), equine, livestock practice, aquatics, pig, poultry, sheep, goat, exotic animal, slaughterhouse, surgery, anaesthesia, emergency and critical care.

Reading List

Compulsory Readings

Title	
1	Nil

Additional Readings

Title	
1	Nil