

Clinical Medicine III, VETM*4870

Fall/Winter 2017-2018
0.25 Credits

Calendar Description

This course will contribute to students' achievement of selected elements of competency in the context of the hospital environment. This is an integrated course in which students will enhance a variety of clinical skills, including physical examination, history taking, problem-solving, and ancillary diagnostic tests and procedures. This course is primarily carried out in the OVC Health Sciences Center as well as the Primary Health Care Center where students will be exposed to case material, and/or client owned animals or teaching animals, from the Large and Small Animal Clinics or at the Central Animal Facility. The emphasis is directed towards enhancing the skills, knowledge and attitudes that will permit students to maximize the benefit to be derived from senior year courses. This course intends to build on the skills acquired during Clinical Medicine I and II as well as Art of Veterinary Medicine I and II and to focus on developing a problem list and diagnostic and therapeutic plans after completing a thorough evaluation of an animal. The graduating competencies can be found on the OVC website (http://ovc.uoguelph.ca/sites/default/files/users/ovcweb/files/PhaseLearningOutcomes_20150717.pdf). Department of Clinical Studies.

Course Coordinators

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Instructors

Clinical Faculty (Department of Clinical Studies)
Ruminant Field Service Faculty (Department of Population Medicine)
Graduate Students (Departments of Clinical Studies and Population Medicine)
Clinical Residents, Interns and AHT's (OVC-Health Sciences Centre)
Hill's Pet Nutrition Primary Healthcare Centre Faculty (Departments of Population Medicine and Clinical Studies) and hospital staff

Administrative Information

For questions regarding academic consideration, continuation of study, academic misconduct, safety, confidentiality, and experiential learning involving use of animals, please refer to the Phase 3 information on the OVC website.

Course Intended Learning Outcomes

The Clinical Medicine courses presented in Phases 1, 2 and 3 represent a continuum of learning intended to foster student mastery of seven main learning outcomes by the end of Phase 3 of the DVM program:

- Animal handling and restraint
- History taking
- Physical examination of common domestic species
- Diagnosis
- Clinical problem solving
- Treatment and planning
- Medical records

The overall objective of VETM*4870 Clinical Medicine III is to facilitate the integration of course material from all phases into a practical approach to case evaluation. This course is the third of three Clinical Medicine courses that veterinary students will complete throughout the DVM curriculum. Students are expected to view the course contents of the Clinical Medicine courses as life-long learning of skills that will be needed during their career in veterinary medicine. Therefore, information taught during Clinical Medicine I & II will also be examined as a component of Clinical Medicine III.

Graduates of VETM*4870 Clinical Medicine III must be able to:

- Obtain an appropriate, strategic, accurate, and organized case history on a variety of large and small animal patients.
- Perform a complete, technically sound, and efficient clinical evaluation on a variety of large and small animal patients and interpret their findings.

- Utilize a systematic and iterative Problem-Oriented Medical Approach to assess a variety of large and small animal patients including generating a Problem List, formulating realistic differential diagnoses, constructing an appropriate diagnostic and treatment plan, and evaluating and responding to case progression over time.
- Select, explain the utility of, and interpret results of diagnostic testing, and apply the results of such testing within the context of individual large and small animal cases.
- Develop an appropriate treatment plan that is case-specific, including generating precise instructions and incorporating patient monitoring for potential complications of the disease process or treatment interventions into the plan.
- Create a written medical record or other medical document that is complete, accurate, informative, written in professional language, demonstrates use of a systematic approach to case assessment, and is written in accordance with legislative guidelines.

*Note: All of the stated intended learning outcomes apply equally to dogs, cats, horses and ruminants.

Specific intended learning outcomes for each Module are posted on the course website and should guide students in their learning focus throughout each module. Although lectures, online learning materials, and laboratories will introduce the skills required to meet these intended learning outcomes, students will need to pursue considerable self-study practice of these skills in order to master them at a level that is required to pass this course.

Course Description

This course consists of 17 lectures; 13 clinically-oriented laboratories (of which 6 are focused on Diagnostic Imaging); 2 laboratories to practice Clinical Proficiency; and prescribed self-study material available on the Courselink website for this course.

The course consists of the following main components:

- Clinical Medicine (67%)
 - POMA Labs:
 - POMA Cases – LA Metabolic/Mammary
 - POMA Cases – SA Skin Conditions
 - POMA Cases – LA Lameness
 - POMA Cases – SA Cardiology
 - POMA Cases – LA Neurology
 - POMA Cases – SA Neurology

- POMA Cases – SA Ophthalmology
- Clinical Proficiency:
 - LA Clinical Proficiency / Diagnostic Nerve Blocks
 - SA Clinical Proficiency
- Diagnostic Imaging (33%)
 - Diagnostic Imaging Labs:
 - Rad Lab 1: Gastrointestinal conditions
 - Rad Lab 2: Urinary conditions
 - Rad Lab 3: Respiratory conditions
 - Rad Lab 4: Cardiac conditions
 - Rad Lab 5A: Musculoskeletal Part I
 - Rad Lab 5B: Musculoskeletal Part II

Regulations Pertaining to Student Safety and Due Diligence

Due Diligence: Safety in the clinic and barn is a priority at all times. In order to ensure safety of all participants, the safety procedures/guidelines provided by the instructor must be followed. It is the responsibility of each student to attend any safety orientation that is provided.

* NOTE: It is expected that students will conduct themselves in such a manner during this course that **neither personal, peer or instructor safety will be compromised, and animal safety and welfare will be optimized**. The expectation is that students will demonstrate confidence and common sense while working around and with domestic animals. Students are required to be able to recognize the common premonitory signs of aggressive or potentially aggressive behavior in all species encountered in this course, as well as situations that could precipitate such behavior. Students are expected to anticipate and take appropriate action to avoid human or animal injury at all times.

Client Confidentiality: At times in this course, students will work with client-owned animals. Please note that access to the clinical record is a **PRIVILEGE**, not a right, and must be protected. Students are reminded that all medical record information must be treated as **ABSOLUTELY CONFIDENTIAL and must NOT be discussed outside of the College**. In particular, the identity of clients and their animals must NEVER be divulged to anyone who does not have Medical Records privileges (see the OVC-HSC Policies and Procedures). Student postings of case pictures or descriptions of cases using social media are **strictly prohibited**.

Hygiene: Hand washing is the single most important procedure for preventing the spread of infections. Students are expected to incorporate this procedure as routine practice before and after patient contact or contact with animal bodily fluids, excretions/secretions or contaminated inanimate objects. Appropriate technique for effective hand washing as taught in Phase I Clinical Medicine I is the standard expected throughout the DVM program.

***When handling client-owned large animal species, the use of gloves is required. Please also wash hands following removal of gloves.**

Personal Attire when working with Large Animals:

Students are required to wear **clean protective coveralls** for all Large Animal Laboratories and during independent practice time with large animals. As well, students are required by the University of Guelph safety policy to wear **approved safety boots or shoes (steel-toed)** at all times when working with large animal species. Long hair (shoulder length) must be tied back. Any hand, wrist or neck jewelry must be removed prior to attending the Large Animal labs. Students will **NOT** be permitted to participate in scheduled activities involving large animals if they do not comply. Lab coats are not permitted in the Large Animal Laboratories. Students must also wear their University Access Card that displays the student's name and colour strip of Phase year as their form of identification/name badge at all times in the OVC-HSC.

Personal Attire when working with Small Animals:

Students are required to wear **clean, long blue lab coats and closed-toe shoes** for all Small Animal Laboratories and during independent practice time with small animals. Students must also wear their University Access Card that displays the student's name and colour strip of Phase year as their form of identification/name badge at all times in the OVC-HSC.

Personal Attire in the Hill's Pet Nutrition Primary Healthcare Centre:

Students are required to wear clean, presentable **"business casual" attire** (see the Dress Standard document under PHC Day One Core Protocols and SOPs in the OVC Phase - 3 Companion Animal Primary Care Courselink site for full details), their **long blue lab coat, closed-toe shoes** and a **name badge** that clearly displays their first and last name. It is preferable that students wear their University Access Card that displays the student's name and colour strip of Phase year as their form of identification/name badge at all times in the PHC.

Biosecurity:

Coveralls and labcoats used in Systems Pathology laboratories or in the OVC-HSC on client-owned animals must be appropriately laundered prior to wearing these to handle any of the OVC teaching herd animals. Similarly,

coveralls and labcoats must be laundered following **each** Clinical Medicine laboratory and before using them for other courses.

Before exiting Barn 37 or the Clinical Skills Building, thoroughly wash your boots with the boot brush and disinfectant solution that is provided. Hands should then also be properly washed.

Case Access: You are encouraged to visit the OVC-HSC regularly to learn about the cases that are in hospital. However, you are NOT permitted to enter a stall (large animals) or remove an animal from its cage (small animal) and/or examine the patient **UNLESS YOU HAVE THE EXPRESS PERMISSION OF THE CLINICIAN IN CHARGE OF THE CASE.** This ruling is not designed to be restrictive, but is made in the best interests of the patient and of you, and is meant to address issues of safety/security and to optimize patient recovery. Where access is denied, it will always be for a sound clinical and/or safety/security reason. **Please ensure that you are appropriately dressed when in the hospital wards and wear your personal identification badge. Also, work in groups of 2-3 when examining patients in the Large Animal Clinic.**

Digital Recording: Digital recording and photography are not permitted during lectures and laboratories in this course, or during independent practice time with the OVC teaching animals. Digital imaging of any teaching animals, client-owned animals or medical records is strictly forbidden.

Teaching Strategies

As in Clinical Medicine II, Clinical Medicine III continues to emphasize clinical problem solving with a focus on additional common presenting complaints encountered in large and small animal species. Each presenting complaint is experienced through use of a Problem-Oriented Medical Approach to evaluate both large and small animal case material, to allow for comparative medicine among species. Diagnostic imaging instruction and practice is embedded within case modules, allowing students to directly apply these skills to case material. **This course is intimately tied to the other Phase III courses, and there is extensive integration of material learned in the other courses of Phase 3 with the cases that are presented in Clinical Medicine III. Students will be expected to know and apply content from those courses during their Clinical Medicine III learning.** Content from other Phase III courses will therefore be examined as it pertains to cases during the final integrated Objective Standardized Clinical Examination (OSCE) at the end of the Clinical Medicine III.

MODULES

Thematic modules are structured to provide content knowledge in advance of student practice of clinical problem-solving skills for each presenting complaint. Lectures from the Medicine & Surgery Phase 3 courses directly support each Clinical Medicine 3 module. Each module may also contain a combination of diagnostic imaging lectures, online learning materials, and laboratory practice sessions.

I. MODULE-RELATED LECTURES

Modules are aligned to be supported by lectures in the other courses of Phase 3, and are therefore scheduled throughout the course to strategically occur after this preparatory knowledge has been delivered whenever possible. Lecture slides and/or accompanying detailed notes will be posted on the website of the courses in which these lectures occur.

II. MODULE REQUIRED SELF-STUDY

Students are expected to study the additional course material posted on the course website (**VETM4870 Clinical Medicine III site on Courselink**) as prescribed in the **Calendar of Course Events**.

These materials are intended to prepare students in order to optimize their evaluation of case material during the laboratory time.

III. MODULE LABORATORIES

- a. This course involves a series of 7 clinically-oriented laboratories, 6 Diagnostic Imaging laboratories, and 2 practical review (Clinical Proficiency) laboratories prior to the final integrated OSCE. Each laboratory group consists of approximately $\frac{1}{4}$ of the class ($\frac{1}{2}$ of the class for Diagnostic Imaging laboratories). Typically, each laboratory period will involve active practice of the skills outlined in the laboratory-specific intended learning outcomes.
- b. Students are expected to adequately prepare for each laboratory prior to attending, by thorough review of their Phase 3 lecture content and the online supporting materials provided for each lab topic. Students will also be expected to further practice their skills in diagnostic testing and interpretation during each laboratory, using supporting materials posted on the course website (**VETM4870 Clinical Medicine III site on Courselink**) and from other Phase 3 courses.
- c. Students are expected to review the laboratory-specific intended learning outcomes (posted on the course website) prior to attending each laboratory session, and to bring a copy to the laboratory to guide their learning.
- d. Laboratories start promptly at the assigned time; therefore students are expected to arrive on time. **Due to the size of groups for each laboratory, we are not able to accommodate students attending a laboratory other than the one to which they are assigned. There will be no opportunity to make-up any missed labs.**

- e. Students must bring a stethoscope, penlight, digital thermometer, pen, and watch to every laboratory and to the final OSCE examination. Smart phones are not a suitable substitute for a watch.
- f. Smart phone use for any purpose is prohibited during laboratory sessions.
- g. No food or drink may be consumed in the animal use areas.
- h. Obtaining a patient history, safe and humane animal handling, and routine physical examination are foundation skills that are required to conduct clinical problem solving. Students are expected to review their Phase I materials as needed to be proficient in these skills, and to regularly practice these skills on live animals during independent time outside of the scheduled course activities.
- i. Students will be expected to resolve any learning issues that arise by discussion with laboratory instructors, classmates, or by consulting reference texts or other learning resources.

Clinical Medicine Component - POMA Laboratories

This component will present 7 modules focused on clinical problem solving using a Problem-Oriented Medical Approach (POMA) to investigate common presenting complaints of large and small animal species. Preparatory learning ahead of case-based laboratories will include a combination of Phase 3 lectures and online self-study material, intended to prepare students for full engagement in the practice of clinical problem-solving of each presenting complaint using case material in laboratories. Laboratories will be delivered to $\frac{1}{4}$ of the class per session. Laboratory sections may be further subdivided into smaller groups to work through the cases and interact with the case materials. Students are expected to bring their own computer to all POMA laboratory sessions in order to work with the case material. As well during several of the Large Animal laboratory sessions, live animals will be available to practice the general physical examination. This is intended to provide additional time for students to further refine their skills in the basic physical examination of large animals.

Diagnostic Imaging Component - Lectures and Laboratories

Supporting the clinical problem-solving POMA laboratories, students will receive specific learning opportunities focused on diagnostic imaging. Fifteen lectures and six 2-hour laboratories will be held. The lectures on diagnostic imaging will follow most body system units in the Medicine and Surgery courses of Phase 3. These diagnostic imaging lectures will use cases to illustrate the interpretive principles associated with each body system. A working understanding of the material presented in Clinical Medicine II (VETM *3440) in Phase 2 will also be required. The images for the laboratories will be available in electronic format for review prior to the class. For each laboratory session, the cases will be assigned to a group ahead of the laboratory session. The group will prepare a written report for the radiographic study to submit by the start of the lab slot, and will present the case to the class during the lab. Although the final diagnosis will be considered, emphasis will be placed on developing a systematic approach to review a radiograph, differentiating normal from abnormal, and providing a

radiographic diagnosis and an appropriate list of differential diagnoses, and having an plan for next steps in the case.

EXPERIENTIAL LEARNING

Experiential learning is also built into this course to support the skills learned in the course lectures and laboratories. Specifically, experiential learning will include mandatory rotation through the Hill's Pet Nutrition Primary Healthcare Centre at OVC.

I. ROTATION THROUGH THE HILL'S PET NUTRITION PRIMARY HEALTHCARE CENTRE

The Hill's Pet Nutrition Primary Healthcare Centre (PHC) contains the Smith Lane Animal Hospital (SLAH), which is a fully functional primary care veterinary hospital. This rotation provides students with an experiential learning opportunity to clinically apply, reinforce and build upon their overall learning in the DVM curriculum. In assigned rotation times (as per the DVM schedule) at the PHC, students will be expected to actively observe and/or participate in clinical activities occurring at the PHC, and specifically watch and learn from two clinical skills demonstrated by Phase 4 students on rotation at the PHC (Clinical Skills Shadowing document on Courselink). There are also assignments linked to this PHC experience that help you to put your radiology and nutrition knowledge into clinically relevant practice, however, these are not intended to detract from the experiential clinical learning that takes place during your PHC rotation shifts. Given that the SLAH is a fully functional companion animal primary care practice that caters to the public, there is little control over what students may or may not experience in terms of watching appointments or helping with cases. If students are present at times when there are appointments to watch and/or help with, it is encouraged that this takes priority. At times when there are less appointment bookings and therefore less opportunity to watch or help with appointments, students are encouraged to complete their assignments. Students are therefore encouraged to access and utilize the relevant and necessary resources at the PHC to complete their PHC Assignments **either during or outside of their scheduled shifts.** Submitted assignments will be graded and will form a part of the overall mark for Clinical Medicine III. Specific learning outcomes are outlined within the individual assignments. Complete information about the assignments and learning at the PHC is available on the OVC Phase – 3 Companion Animal Primary Care site on CourseLink. Opening times for the PHC and SLAH can be found on the PHC website.

While participating in the assigned rotation times, it is expected that students will conduct themselves as a member of the PHC healthcare team. Students must attend all assigned rotation times at the PHC and submit their PHC assignments by **4pm on April 2, 2018**. Unless academic consideration has been granted, assignments submitted after this time will not be marked. For all questions about PHC assignments and learning activities please contact Dr. Deep Khosa (dkhosa@uoguelph.ca). All rotation-scheduling questions should also be sent to dkhosa@uoguelph.ca.

PRACTICE OF ACQUIRED KNOWLEDGE AND SKILLS

- a. **Self-Study & Access to Animals for Practice:** To achieve a satisfactory skill level for successful completion of this course, students must take advantage of opportunities outside of scheduled laboratory time in order to practice performing physical examinations and to evaluate clinical material:
- Students may book time to independently practice in small groups outside of the Phase 3 schedule. Large animal species (cattle, horses, sheep) housed in Barn 37 will be accessible for practice outside of scheduled times only during regular working hours (Monday to Friday, 8am to 4pm), provided that other courses are not using the animals or facility. Prior to large animal use for practice, permission must be obtained from Rob Leighton (rleight@uoguelph.ca), who will specify which animal(s) you may use.
 - Instructions for recording animal use after you have finished are posted in Barn 37 near each species. Diligent recording of animal use in this manner is essential in order to avoid inadvertent overuse of individual animals, as they are shared between multiple courses.
 - For safety reasons, you must work together in groups of 3 or more students when practicing with the large animal species. Coveralls and steel-toed footwear are required.
 - Some of the dogs used in this course are from the University of Guelph Central Animal Facility (CAF). These dogs are accessible for practice outside of laboratory time during CAF regular business hours. Please contact Annette Morrison at CAF (amorriso@uoguelph.ca) to arrange practice times.
 - **NOTE THAT THE CLINICAL SKILLS BUILDING, BARN 37, AND ALL TEACHING HORSES/COWS/SHEEP WILL NOT BE AVAILABLE FOR PRACTICE OUTSIDE OF REGULARLY SCHEDULED LAB TIMES ON THE FOLLOWING DATES:**
 - **February 26 - March 2**
 - **Friday, March 9**
 - **March 12 - 16**
 - **April 5 & 6**
- b. The Neurology Service offers an optional, first-come-first-serve, clinical shadowing opportunity throughout the Fall and Winter semesters. The

sign-up sheet will be posted outside the Neurology Service room (1282) in the Companion Animal Hospital. As spaces are limited, students are asked to remove themselves from the list if they choose not to attend the time slot that they have reserved (and/or let their classmates know).

- c. The Diagnostic Imaging Service offers an optional, first-come-first-serve, clinical shadowing opportunity throughout the Fall and Winter semesters. This can be for just a few hours during the day depending on your schedule, and you will be working closely with a Phase 4 student. The sign-up sheet will be posted outside the Diagnostic Imaging room (1208) in the Companion Animal Hospital. As spaces are limited, students are asked to remove themselves from the list if they choose not to attend the time slot that they have reserved (and/or let their classmates know).
- d. The Ophthalmology Service offers an optional, first-come-first-serve, clinical shadowing opportunity throughout the Fall and Winter semesters. The sign-up sheet will be posted outside the Ophthalmology Service room (1249) in the Companion Animal Hospital. As spaces are limited, students are asked to remove themselves from the list if they choose not to attend the time slot that they have reserved (and/or let their classmates know).

Evaluation

METHOD OF ASSESSMENT:

Clinical Medicine/POMA Component

Quizzes or assignments associated with each POMA laboratory session will evaluate student application of content within the POMA modules, including associated lectures, online preparatory material, and cases discussed in laboratory sessions. **Students will not be given the opportunity to take a supplemental quiz or complete missed assignments. Missed assessments will require documentation of academic consideration from the Office of the Associate Dean-Students prior to the date of the missed assessment, in order to redistribute the student's missed grade towards the appropriate section of the final OSCE examination score, otherwise a mark of 0% will be assigned to the missed assessment.**

Students will also generate a medical record based on following a case over time. In addition to making an initial assessment based on history and physical examination findings, diagnostic and therapeutic plans are formulated and estimates of the cost of work-up are calculated. Students will update the medical record daily over the case duration, including daily assessments based upon results of the diagnostic evaluation and response to treatment that occurs. Additional instructions for the Medical Record Assignment will be provided on the course website. The record is to be completed outside of laboratory hours and submitted prior to the listed deadline in the **Calendar of Course Events**. The Medical Record Assignment will be completed as a group (5 students) and submitted for grading. Only those members of the group that participate in the assignment are to have their names on the assignment.

All materials from the Clinical Medicine/POMA component of this course will also be examined on the final OSCE within the context of clinical case material.

Diagnostic Imaging Component

Groups will be assigned to present cases in the imaging labs. The groups will be required to submit a single written report for the assigned case at the start of each lab and give an oral presentation of the case. The written report and oral presentation will contribute to the final grade. Only those members of the group that participate in the assignment are to have their names on the assignment. Any students that miss the lab for a valid reason may have the opportunity to make-up the assignment if they contact the instructor prior to the missed laboratory time. If the instructor is not notified prior to the lab session or there is no approved absence, the grade will be zero.

Three Diagnostic Imaging midterms will be given, delivered as in-class midterms (refer to the Phase 3 schedule for dates and times). **Missed midterms will not be rescheduled**, therefore, students that do not attend their Diagnostic Imaging midterms will require documentation of academic consideration from the Office of the Associate Dean-Students in order to redistribute the missed grade towards their final Summative Written Diagnostic Imaging Examination score, otherwise a mark of 0% will be assigned to any missed Diagnostic Imaging midterms. Midterm exams may be reviewed within three weeks after marks are posted for each midterm. **There will not be an opportunity to review the midterm examinations outside of this period.** To arrange a time to review the midterm examinations, please contact the Administrative Assistant to the Faculty and Chair in the Department of Clinical Studies, Linda Wing (lwing@uoguelph.ca).

A final Summative Written Diagnostic Imaging Examination will be given as a 1.5 hour examination.

All Diagnostic Imaging midterms, as well as the final summative written examination in Diagnostic Imaging, are computer-based exams. Therefore, students will need to bring a laptop to the examination room. If you do not have access to a computer please contact Dr. Nykamp in advance of the examination and arrangements will be made to provide you with a computer or to take the examination in the computer lab.

All materials from the Diagnostic Imaging component of this course will also be examined on the final OSCE within the context of clinical case material.

FINAL INTEGRATED OBJECTIVE STANDARDIZED CLINICAL EXAMINATION (OSCE):

This OSCE examination will incorporate ALL course content from Clinical Medicine III, including all materials associated with course lectures, lectures in other Phase 3 supporting courses, online materials on the VETM 4870 Clinical Medicine III course Courselink website, laboratories, and other course-related assignments/activities. Related concepts from other Phase III courses may also be incorporated into the OSCE questions, as practiced throughout the POMA laboratories. The exam format will be a multi-station rotation, of which some stations will be written responses requiring application of knowledge to practical scenarios, and others will require one-on-one demonstration of skills in the presence of an examiner. The student will need to come prepared to work with all of the common domestic species encountered throughout the course (dog/horse/cow/sheep). As such, proper attire and equipment is required as outlined for the laboratory sessions. An OSCE orientation session to provide further information will be given in class prior to the examination date (refer to the Phase 3 schedule).

VETM 4870 Clinical Medicine III Method of Assessment	% of Final Course Grade*
Clinical Medicine/POMA Component:	(67)
- Written Medical Record Assignment	4
- POMA Lab Assessments (Quiz/assignment x 7, 3% each)	21
- SA POMA Labs (Skin, Cardiology, SA Neurology, Ophthalmology)	(12)
- LA POMA Labs (Metabolic/Mammary, Lameness, LA Neurology)	(9)
- Primary Healthcare Centre Assignments x 2 (2% each)	4
- OSCE Examination	38

- SA Stations	(20)
- LA Stations	(18)
Diagnostic Imaging Component:	(33)
- DI Midterm 1	3.3
- DI Midterm 2	3.3
- DI Midterm 3	3.3
- DI Lab Assignments x 6	4.0
- Summative Written Diagnostic Imaging Examination	15.0
- OSCE examination	4.1

***NOTE: In order to achieve a passing overall grade for VETM4870: Clinical Medicine III, students must achieve ALL of the following:**

- At least 60% (22.8/38) overall on the Clinical Medicine/POMA component of the final integrated OSCE.
 - Students that achieve less than 50% cumulative grade within the overall Clinical Medicine/POMA component of the course will automatically be assigned a failing grade (49%, or their original course grade if lower than 49%) for the entire Clinical Medicine III course.
 - Students who achieve less than 60% (22.8/38) overall on the Clinical Medicine/POMA component of the **final integrated OSCE exam** will be required to take a conditional repeat exam. The format of the conditional repeat examination is the responsibility of the Clinical Medicine III course coordinators, and will be communicated to the student via email two weeks prior to the conditional repeat examination date. Students are responsible for their own remediation in preparation for the conditional repeat examination, and are expected to seek instructor feedback as part of this process. The conditional repeat examination will occur during the deferred examination period in May. If a passing grade (60% or higher) is obtained on the conditional repeat examination, the student will be assigned their original Clinical Medicine/POMA OSCE grade for the purpose of calculating the final course grade. Any student that does not achieve 60% or higher on the conditional repeat examination will be assigned a failing grade (49%, or their original course grade if lower than 49%) for the entire Clinical Medicine III course.
- At least 60% on each of the following POMA topics [calculated by combining the laboratory assessment (50% of the grade) with the OSCE stations (50% of the grade) for that topic] within the course:
 - Cardiology
 - SA Neurology
 - Ophthalmology

***Note that it is not possible to achieve at least 60% in these topics without completing the lab assessment portion for the topic.**

- Students who achieve less than 60% as a combined grade (POMA lab and OSCE stations) for either Cardiology, SA Neurology or Ophthalmology will be required to remediate and then take a conditional repeat exam of that overall topic material. The conditional repeat examination will occur during the deferred examination period in May. The format of the conditional repeat examination is the responsibility of the Clinical Medicine III instructor teaching that section, and will be communicated to the student via email two weeks prior to the conditional repeat examination date. Students are responsible for their own remediation in preparation for the conditional repeat examination, and are expected to seek instructor feedback as part of this process. If a passing grade (60%) is obtained on the conditional repeat examination, the student will be assigned their original grades for the POMA lab and OSCE stations for the purpose of calculating the final course grade. Failure to achieve a passing grade (60%) on the conditional repeat examination for the Cardiology, SA Neurology or Ophthalmology material will result in the student automatically being assigned a failing grade (49%, or their original course grade if lower than 49%) for the entire Clinical Medicine III course.
- At least 60% (19.8/33) cumulative grade within the Diagnostic Imaging component of the course.
 - Students that achieve less than 50% cumulative grade within the Diagnostic Imaging component of the course will automatically be assigned a failing grade (49%, or their original course grade if lower than 49%) for the entire Clinical Medicine III course.
 - Students who achieve between 50-59% cumulative grade within the Diagnostic Imaging component of the course will be required to remediate and then take a conditional repeat exam of that overall material. The conditional repeat examination will occur during the deferred examination period in May. The format of the conditional repeat examination is the responsibility of the Clinical Medicine III instructor coordinating that section, and will be communicated to the student via email two weeks prior to the conditional repeat examination date. Students are responsible for their own remediation in preparation for the conditional repeat examination, and are expected to seek instructor feedback as part of this process. If a passing grade (60% or higher) is obtained on the conditional repeat examination, then the student will be assigned their original grade for the Diagnostic Imaging component of the course for the purpose of

calculating the final course grade. Failure to achieve a passing grade (60%) on the conditional repeat examination for the Diagnostic Imaging component will result in the student automatically being assigned a failing grade (49%, or their original course grade if lower than 49%) for the entire Clinical Medicine III course.

- Successful completion of the Primary Healthcare Centre course requirements:
 - Students must attend all assigned rotation shifts at the PHC to successfully complete course requirements for Clinical Medicine III. If all PHC rotation shifts are not completed, a grade of 49% (or their original course grade if lower than 49%) will be assigned in Clinical Medicine III. In order to receive a numeric grade for this component of Clinical Medicine III, the PHC assignments must be submitted for marking by **4pm on April 2, 2018**. Unless academic consideration has been granted, assignments submitted after this time will not be marked.

Failure to achieve all of these requirements will result in a final overall course grade of 49% (or their original course grade if lower than 49%) being assigned regardless of marks attained in other sections of the course, and the student will fail the course.

Resources

All course lecture notes and supporting materials are available on the VETM*4870 Clinical Medicine III course website on Courselink. Printed course notes will not be provided.

All lab material and self-study modules for the Diagnostic Imaging component of this course are available through the OVC Digital Image Library - www.webaims.ovc.uoguelph.ca.

You are encouraged to search this database for other images to assist your learning.

ADDITIONAL RESOURCES: SMALL ANIMAL

1. Allen DG, Kruth SA, Garvey MS (eds). Small Animal Medicine. Lippincott, 1991. (See pages 3-11)
2. Ettinger SJ, Feldman ED (eds). Textbook of Veterinary Internal Medicine. 7th ed. Saunders, 2010.
3. Nelson RW Couto CG. Small Animal Internal Medicine. 5th ed. Elsevier, 2014.
4. Tilley LP, Smith FWK. The 5 minute Veterinary Consult: Canine and Feline. 5th ed. Wiley-Blackwell, 2011.

ADDITIONAL RESOURCES: LARGE ANIMAL

1. Smith BP et al. Large Animal Internal Medicine, 5th Ed., Elsevier, 2015.
2. Radostits OM et al. Veterinary Medicine: A Textbook of the Diseases of Cattle, Sheep, Pigs, Goats and Horses, 10th Ed., WB Saunders Ltd, 2007.
3. Ross & Dyson. Diagnosis and Management of Lameness in the Horse, 2nd Ed., Elsevier 2011.

ADDITIONAL RESOURCES: DIAGNOSTIC IMAGING

1. Thrall DE. Textbook of Veterinary Diagnostic Radiology. 6th ed. WB Saunders Ltd, 2013.
2. OVC teaching file system: mirc.ovc.uoguelph.ca
Login: ovc2019, password: kracken
3. Equine limb radiology site of normal:
<http://apps.cvm.iastate.edu/limbanatomy/>
4. Normal radiology site:
http://vetmed.illinois.edu/courses/imaging_anatomy/

ADDITIONAL RESOURCES: NEUROLOGY

1. Dewey CW & da Costa RC. Practical guide to canine and feline neurology. Wiley-Blackwell. 3rd ed. 2015.
2. Platt SR, Olby NJ. BSAVA Manual of canine and feline neurology. 4th ed. 2013.
3. De LaHunta A, Glass EN. Veterinary neuroanatomy and clinical neurology. Saunders Elsevier. 2009.
4. Parent J. The Canine and Feline Neurological Examination CD-ROM.
5. Mayhew I. Large Animal Neurology, 1st Ed. Lea and Febirger, 1989.

ADDITIONAL RESOURCES: OPHTHALMOLOGY

1. Maggs, Miller, Ofri. Slatter`s Fundamentals of Veterinary Ophthalmology 4th and 5th ed. Elsevier. 2008, 2013.
2. Cote. Clinical Veterinary Advisor Dogs and Cats 3rd ed. Elsevier. 2015.