VETM*4870 Clinical Medicine III

Fall 2020
Section(s): C01

Department of Clinical Studies
Credit Weight: 0.25
Version 3.00 - February 18, 2021

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1 Course Details

1.1 Calendar Description

This course will contribute to students' achievement of selected DVM Program 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. The emphasis is directed towards enhancing the skills, knowledge and attitudes that will permit the student to maximize the benefit to be derived from senior year courses.

Pre-Requisites: All Phase 2 courses.
Co-Requisites: All Phase 3 courses.

1.2 Course Description

This course consists of 19 lectures; 8 clinically-oriented laboratories; 5 laboratories to practice diagnostic imaging; and prescribed self-study material available on the Courselink website for this course. The course consists of the following main components:

- Clinical Medicine/Problem-Oriented Medical Approach (POMA)
- Diagnostic Imaging

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, with a focus on practicing the Problem-Oriented Medical Approach (POMA) on more complex but common presenting complaints.

1.3 Timetable

Timetable is subject to change. Please see EnCampus Portal for the latest information.

1.4 Final Exam

Exam time and location is subject to change. Please see EnCampus Portal for the latest information.

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2 Instructional Support

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 clinicians and hospital staff

2.1 Instructional Support Team

Course Co-ordinator: Joanne Hewson DVM, PhD, DACVIM (LA)
Email: jhewson@uoguelph.ca
Telephone: +1-519-824-4120 x54423
Office: Dean's Office, Room 2651
(Course Co-ordinator, Lead contact for the Large Animal components)

Course Co-ordinator: Chantale Pinard DVM, MSc, DACVO
Email: cpinard@uoguelph.ca
Telephone: +1-519-824-4120 x54148
Office: OVC Building 49, Room 2116
(Course Co-ordinator, Lead contact for the POMA - SA Ophthalmology / POMA - SA Skin Conditions components)

***on leave for the Fall 2020 semester; please direct any questions to J.Hewson during this time**

Course Co-ordinator: Stephanie Nykamp DVM, MSc, DACVR
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Office: OVC building 49, Room 1123A
(Course Co-ordinator, Lead contact for the Diagnostic Imaging components)

Lab Co-ordinator: Sonja Fonfara
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Telephone: +1-519-824-4120 x54061
Office: ANCC 2127
(Lead contact for the POMA - SA Cardiology component)

Lab Co-ordinator: Luis Gaitero
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Office: OVCP 2101
(Lead contact for the POMA - SA Neurology component)

Lab Co-ordinator: Anthony Abrams-Ogg
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Telephone: +1-519-824-4120 x54044
Office: OVCP 2113
(Lead contact for the POMA - SA Clinical Proficiency component)

Lab Co-ordinator: Daniel Kenney
Email: dkenney@uoguelph.ca
Telephone: +1-519-824-4120 x54030
Office: OVCHSC 1417
(Lead contact for the LA Neurology component)

Lab Co-ordinator: Jessica Gordon
Email: jgordo04@uoguelph.ca
Telephone: +1-519-824-4120 x58813
Office: OVCS 2538
(Lead contact for the POMA - LA Periparturient Cow component)

Lab Co-ordinator: Donald Trout
Email: dtrout@uoguelph.ca
Telephone: +1-519-824-4120 x54002
Office: OVCS 2521
(Lead contact for the POMA - LA Lameness component)

Lab Co-ordinator: Nathalie Cote
Email: ncote@uoguelph.ca
Telephone: +1-519-824-4120
Office: OVCS 2530
(Lead contact for the POMA - LA Nerve Blocks component)

2.2 Teaching Assistants

Teaching Assistant: Bahareh Ahmadi
Email: ahmadib@uoguelph.ca

2.3 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.

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3 Learning 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 – mirc.ovc.uoguelph.ca. Please refer to the course Courselink site for the login and password to access this library. You are encouraged to search this database for other images to assist your learning.

3.1 Additional Resources

Resources - Diagnostic Imaging (Other)

1. OVC teaching file system: mirc.ovc.uoguelph.ca (Please see the Courselink course site for the login and password to access this link)
2. Thrall DE. Textbook of Veterinary Diagnostic Radiology. 6th ed. WB Saunders Ltd, 2013.
3. Normal radiology site: http://vetmed.illinois.edu/courses/imaging_anatomy/
4. Equine limb radiology website of normal: http://apps.cvm.iastate.edu/limbanatomy/

Resources - Large Animal (Other)

1. Smith BP et al. Large Animal Internal Medicine, 6th Ed., Elsevier, 2019.
2. Ross & Dyson. Diagnosis and Management of Lameness in the Horse, 2nd Ed., Elsevier 2011.

Resources - Small Animal (Other)

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.

Resources - Small Animal Cardiology (Other)

1. Fuentes, V. L., Johnston, L. R., & Dennis, S. (2010). BSAVA manual of canine and feline cardiorespiratory medicine (2nd ed.). Gloucester: British Small Animal Veterinary.

Resources - Neurology (Other)

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.

Resources - Ophthalmology (Other)

1. Cote. Clinical Veterinary Advisor Dogs and Cats 3rd ed. Elsevier. 2015.

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4 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.

***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.

4.1 Course Learning Outcomes

By the end of this course, you should be able to:

1. Obtain an appropriate, strategic, accurate, and organized case history on a variety of large and small animal patients.
2. Perform a complete, technically sound, and efficient clinical evaluation on a variety of large and small animal patients and interpret your findings.
3. 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.
4. 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.
5. 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.
6. 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.

7. **(Diagnostic Imaging Component)** •Systematically review a radiograph. •Describe a radiographic study (normal and abnormal findings) using appropriate imaging terminology. •Provide a radiographic diagnosis for a given study, plus a list of appropriate differentials.

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5 Teaching and Learning Activities

VETM*4870 Clinical Medicine III consists of the following main components:

- Clinical Medicine/POMA (67%)
  - POMA - Small Animal:
    - Skin Conditions
    - Arrhythmias
    - Neurological disorders
    - Ophthalmology
    - Small Animal Clinical Proficiency
  - POMA - Large Animal:
    - Periparturient Cow
    - Lameness
    - Diagnostic Nerve Blocks
    - Neurological disorders
    - Large Animal Clinical Proficiency
  - Primary Healthcare Topics:
    - Group presentations

- Diagnostic Imaging (33%)
  - Diagnostic Imaging Lectures and Labs
    - Gastrointestinal
    - Urinary
    - Respiratory
    - Cardiac
    - Musculoskeletal

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 (POMA) to evaluate both large and small animal case material, to allow for comparative medicine across 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 or seminar practice sessions.

Clinical Medicine Component – Problem-Oriented Medical Approach (POMA)

This component will present 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 or seminar discussions will include a combination of Phase 3 lectures in supporting courses, as well as 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/seminars.

I. **POMA MODULES: RELATED LECTURES**
   - The POMA 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. **POMA MODULES: REQUIRED SELF-STUDY**
   - In addition to the supporting lectures in concurrent Phase 3 courses, students are expected to study the POMA material posted on the course website **(VETM*4870 Clinical Medicine III site on Courselink)** for each module, in advance of the associated module laboratory/seminar. These materials are intended to prepare students in order to optimize their evaluation of case material during the laboratory/seminar time.

III. **POMA MODULE LABORATORIES**
   a. Each laboratory group consists of approximately ¼ of the class. Laboratory sections may be further subdivided into smaller groups to work through the cases and interact with the case materials.
   b. Typically, each laboratory period will involve active practice of the skills

outlined in the laboratory-specific intended learning outcomes. 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 in order to guide their learning.
d. Laboratories start promptly at the assigned time whether delivered virtual/synchronous, or in-person; therefore students are expected to arrive on time. For all in-person laboratory sessions, each lab group will be further divided so that delivery is to small groups at a time, for optimizing physical distancing wherever possible. Students must attend the particular time slot assigned to them for in-person sessions.
e. Due to the size of groups for each laboratory and COVID-19 restrictions/tracking, **we are not able to accommodate students attending any in-person laboratory other than the one to which they are assigned**. There will be no opportunity to make-up any missed labs.
f. 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.
g. Smart phone use for any purpose is prohibited during laboratory sessions.
h. No food or drink may be consumed in the animal use areas.
i. 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.
j. 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.
k. Each POMA module has an assessment tied to it. Please refer to the

VETM*4870 Clinical Medicine 3 CourseLink site for the details, format, and deadlines for these assessments. Any missed POMA lab assessments that do not have Academic Consideration granted will be assigned a grade of zero.

Diagnostic Imaging Component – Lectures and Laboratories

Supporting the clinical problem-solving POMA laboratories, students will receive specific learning opportunities focused on diagnostic imaging. 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 Diagnostic Imaging material presented in Clinical Medicine II (VETM *3440) in Phase 2 will also be required. Content will be delivered online through synchronous and/or asynchronous classes as 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. A written report on the case will be required to be submitted in advance of the lab. Details of this assignment will be provided in advance of 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, providing a radiographic diagnosis and an appropriate list of differential diagnoses, and having a plan for next steps in the case.

PRIMARY HEALTHCARE GROUP PRESENTATION SESSIONS & OPTIONAL ASSIGNMENTS

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. While we would ordinarily have you all physically present at the PHC over the course of the Fall and Winter semesters, this year things are going to work a little differently.

There are **MANDATORY** and **OPTIONAL** components to the primary healthcare learning experience:

Mandatory requirements to successfully complete Clinical Medicine III (VETM 4870)**:**

Working in your surgery groups, your group will be assigned a primary healthcare medical topic to research, create a Powerpoint presentation and present virtually to your instructors and class. Each topic discussion will be recorded and placed on the VETM*4870 Clinical Medicine 3 Courselink site. All students will be expected to either watch the group presentations live or watch the recorded versions. Full details of what to include in your group presentations will be available on the course Courselink site. Presentations will happen in both the Fall and Winter semesters and your team's presentation date and time will be assigned to you. This course requirement will be assessed in your final Clinical Medicine III exam. Exam questions will relate directly to content from the presentations and each student will receive their own mark for the exam questions (vs. a group mark).

Optional for your learning experience:

Students also have the option to complete up to two **PHC Nutrition Assignments** for practice of their nutrition knowledge. Please see the Nutrition Assignment information on Courselink for details on how to complete these assignments. Any completed (optional) assignments must be received **by no later than 4pm on April 1, 2021**. Assignments submitted after this time will not be accepted. All assignments will be submitted into Dropbox on the VETM*4870 Clinical Medicine 3 Courselink site. If submitted by the specified date and time, students will receive a numeric grade for their optional PHC Nutrition assignments and **this grade will contribute to extra credit towards the student's overall VETM 4870 Clinical Medicine III grade**.

Students must attend all assigned group presentation sessions.

For all questions about the primary healthcare topic presentations or the PHC optional nutrition assignments please contact Dr. Deep Khosa (dkhosa@uoguelph.ca).

II. 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 also 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 3:30pm), provided that other courses are not using the animals or facility. Prior to large animal use for practice, permission must be obtained from through our Agricultural Assistants (labooking@uoguelph.ca), who will specify which animal(s) you may use. Please allow at least 2 business days in advance of your desired practice session when submitting animal use requests.
- Once you have booked an animal for practice, we assume you have followed through and the assigned animal was indeed used, resulting in that particular animal being ineligible for other uses in accordance with our frequency-of-use guidelines. 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. You are also expected to fully adhere to the same COVID-19 lab safety plan (as used throughout the course) when you are practicing in your small groups outside of scheduled lab times.
- Some of the dogs used in this course are from the University of Guelph Central Animal Facility (CAF). These dogs (if available) can be booked for practice outside of laboratory time during regular business hours. Please contact Annette Morrison at CAF (amorriso@uoguelph.ca) to arrange practice times for the dogs to be brought over to LLC 1701.
- **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:**
    - **March 1 - 5**
    - **March 22 - 26**
    - **April 5 - 9**

5.1 Lab

Topics:	POMA LA - Periparturient Cow
Topics:	POMA LA - Lameness
Topics:	POMA LA - Diagnostic Nerve Blocks
Topics:	POMA LA - Neurological disorders
Topics:	POMA SA - Skin Conditions
Topics:	POMA SA - Arrhythmias
Topics:	POMA SA - Neurological disorders
Topics:	POMA SA - Ophthalmology disorders
Topics:	POMA LA/SA - Clinical Proficiency Cases/Medical Record Assignment
Topics:	Diagnostic Imaging Labs: Rad Lab 1: Gastrointestinal conditions
Topics:	Diagnostic Imaging Labs: Rad Lab 2: Urinary conditions
Topics:	Diagnostic Imaging Labs: Rad Lab 3: Respiratory conditions
Topics:	Diagnostic Imaging Labs: Rad Lab 4: Cardiac conditions
Topics:	Diagnostic Imaging Labs: Rad Lab 5A: Musculoskeletal Part I
Topics:	Diagnostic Imaging Labs: Rad Lab 5B: Musculoskeletal Part II

6 Assessments

METHODS OF ASSESSMENT:

The course consists of the following main components:

- **"COVID-19 Infection Prevention and Control Awareness" training module (Required completion)**
- **HSC Confidentiality Statement (Required completion)**
- **Clinical Medicine/POMA Component (67%)**
- **Diagnostic Imaging Component (33%)**

Some examinations in this course may use the Respondus Lockdown Browser + Webcam. **Students who feel they have a human rights issue with Respondus** related to race, gender identification or disability, should consult with either their program counsellor (ovc.dvmacademics@uoguelph.ca), **or preferably** the University of Guelph Cultural Diversity Advisor (Tameera Mohamed tameera@uoguelph.ca), the Sexual and Gender Diversity Advisor (Jarred Sanchez-Cacnio cacnioj@uoguelph.ca), and/or those in Student Accessibility Services (accessibility@uoguelph.ca) for support in this process. After this consultation, the student should submit a request to ovc.dvmacademics@uoguelph.ca to have alternate invigilation put into place. This would include either a Zoom or Teams invigilation of that student as they complete the examination online. **This request must be submitted no later than three (3) business days prior to the examination.**

COVID-19 Infection Prevention and Control Awareness Training Module:

Students must complete this training module (available in Courselink) prior to attending any in-person course activities in this course. Therefore, documentation showing completion of the module must be uploaded in to Dropbox prior to your first in-person lab session. This training is a mandatory component of VETM*4870 Clinical Medicine 3 in order to successfully pass this course. Students should use the "self-registration" feature on the CourseLink home page to enrol in the module, after which time access will be granted. Upon completion of the module and answering the quiz, you will receive an email confirmation that you have successfully completed the safety module. Please upload a screen shot of this email into the Dropbox folder in this course. Be sure your screenshot shows both your name as well as the module title!

HSC Confidentiality Statement:

Students in the DVM Program are frequently exposed to case materials and patient

information from the Health Sciences Centre (HSC) at OVC. In order to engage in this case based learning across the curriculum, annual signing of the HSC Confidentiality Statement is required within the Clinical Medicine courses. Please upload your signed form into the Dropbox folder in this course.

Academic consideration is required for any of the following missed course components, otherwise a grade of 0 will be assigned. For Academic Consideration, please contact the Associate Dean, Students and Academic (ovc.dvmacademics@uoguelph.ca).

Clinical Medicine/POMA Component

Quizzes or assignments associated with each POMA laboratory/seminar session will evaluate student application of content within the POMA modules, including associated lectures, online preparatory material, and cases discussed in laboratory/seminar sessions. Details for each POMA assessment, including format for the assessment and any deadlines, are posted on Courselink within the lab/seminar introductory document, found within the module folders.

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 Associate Dean-Students and Academic 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.

Laboratory/seminar assessments may be reviewed within three weeks after marks are posted for each assessment. **There will not be an opportunity to review the laboratory/seminar assessments outside of this period.** To arrange a time to review these assessments, please contact the lead contact for the POMA section you wish to review.

Clinical Proficiency/Medical Record:

Students will also generate a medical record in the POMA LA/SA Clinical Proficiency Laboratory. Instructions for the Medical Record Assignment will be provided on the course website. The Medical Record Assignment will be completed as a group (5 students) and be submitted for grading. Only those members of the group that actively participate in the assignment are to have their names on the assignment. The record is to be completed outside of laboratory hours and be submitted prior to the listed deadline posted on Courselink for this assignment. Late submission of assignments will not be accepted.

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 online synchronous midterms in CourseLink (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 Associate Dean, Students and Academic 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 (ovcsas.clin@uoguelph.ca).

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

All Diagnostic Imaging midterms, as well as the final summative written examination in Diagnostic Imaging, are computer-based exams. These exams will be administered through Courselink with the Respondus browser lockdown. 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.

FINAL INTEGRATED OBJECTIVE STANDARDIZED CLINICAL EXAMINATION (OSCE):

This OSCE examination will incorporate ALL course content from Clinical Medicine/POMA component of VETM*4870 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/seminars, 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/seminars.

The exam format will be an online written exam requiring students to apply course content knowledge to practical scenarios (to be completed in CourseLink using Respondus/Lockdown browser + Webcam). An OSCE orientation session to provide further information will be given in class prior to the examination date (refer to the Phase 3 schedule).

CALCULATION OF THE FINAL COURSE GRADE: VETM 4870 CLINICAL MEDICINE III

- Clinical Medicine/POMA Component: 67%
- Diagnostic Imaging Component: 33%

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

- Documentation of completion of the "COVID-19 Infection Prevention and Control Awareness" training module
- Uploaded the signed HSC Confidentiality Statement
- At least 60% (24/40) 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 final integrated OSCE 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% 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/seminar assessment (40% of the grade) with the OSCE stations (60% of the grade) for that topic] within the course:
    1. SA Arrhythmias
    2. SA Neurological disorders
    3. SA Ophthalmology disorders

Students who achieve less than 60% as a combined grade (POMA lab and OSCE stations) for either SA Arrhythmias, SA Neurological Disorders or SA Ophthalmology disorders will be required to remediate and then take a conditional repeat exam of that overall topic material. 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. The conditional repeat examination will occur during the deferred examination period in May. 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 SA Arrhythmias, SA Neurological Disorders or SA Ophthalmology disorders 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 group primary healthcare topic presentation.

  - Each surgery group will be assigned a primary healthcare topic and must create and present their topic on their assigned date. Each member of any group that does not complete a presentation will receive a final grade of 49% (or their original course grade, if lower) for VETM*4870 Clinical Medicine 3.

  - Marks from the optional Primary Healthcare Nutrition assignments submitted to Dropbox as above prior to 4pm on April 1, 2021, will constitute

extra credit marks towards the student's overall VETM*4870 Clinical Medicine 3 course grade, provided that the student has successfully passed all of the course requirements prior to applying this extra credit. The extra credit will be applied as the final step in calculating the overall course grade. Students cannot receive greater than 100% for the course regardless of this extra credit.

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.

6.1 Assessment Details

POMA LA - Lameness & Limb Anatomy (3%)
Clinical Medicine/POMA Component

POMA LA - Diagnostic Nerve Blocks Pre-lab Quiz (3%)
Clinical Medicine/POMA Component

POMA LA - Periparturient Cow (3%)
Clinical Medicine/POMA Component

POMA LA - Neurological disorders (3%)
Clinical Medicine/POMA Component

POMA SA - Skin Conditions (3%)
Clinical Medicine/POMA Component

POMA SA - Arrhythmias (3%)
Clinical Medicine/POMA Component

POMA SA - Neurological disorders (3%)

POMA SA - Ophthalmology disorders (3%)

Should closure of the university due to COVID concerns arise and that the ocular laboratories are cancelled, the students are expected to review the online material in order to complete an online Respondus activated quiz in substitution to the quiz that would have occurred during the laboratory.

POMA LA/SA - Clinical Proficiency Medical Record Assignment (3%)
Clinical Medicine/POMA Component

POMA LA/SA Clinical Proficiency Cases (0%)

Students must successfully complete at least three POMA Clinical Proficiency Cases prior to April 1, 2021. This mandatory course requirement is graded as Complete/Incomplete.

OSCE Examination (40%)
Clinical Medicine/POMA Component

- SA Stations (20%)
- LA Stations (20%)

DI Midterm 1 (3.3%)
10 % of the Diagnostic Imaging Component

DI Midterm 2 (3.3%)
10 % of the Diagnostic Imaging Component

DI Midterm 3 (3.3%)
10 % of the Diagnostic Imaging Component

DI Lab Assignments x 6 (3.3%)
10% of the Diagnostic Imaging Component

DI formative assessment (6.6%)
20% of the Diagnostic Imaging Component

Summative Written Diagnostic Imaging Examination (13.3%)
40% of the Diagnostic Imaging Component

OPTIONAL PHC Nutrition Assignments - Extra Credit (0%)
Optional PHC Nutrition Assignments submitted by the posted deadline will be graded, with this grade representing extra credit towards the student's overall final course grade. Each assignment can count for up to 1.5% extra credit towards the course final grade.

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7 Course Statements

7.1 Required Safety Training

It is the responsibility of each student to also fully review the COVID-19 safety plan on CourseLink for each in-person course activity in this course, and to adhere to all safety protocols that have been prescribed. As well, students **must** follow the steps below before coming to campus:

1. Complete the COVID-19 Infection Prevention and Control Awareness Training course via CourseLink.
2. **For every day that you have an in-person course activity**, before you come to campus, complete U of G's COVID-19 Screening Form. **Do not come to campus if**

the form indicates you should stay home.

7.2 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.

7.3 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**.

7.4 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. Examination gloves used during in-person laboratory sessions are not a substitute for hand hygiene; thorough hand washing must still be performed upon removal of examination gloves.

7.5 Biosecurity

The teaching animals are maintained in a closed-herd with strict biosecurity measures in place to prevent disease exposure. Therefore, 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.

Protective clothing (labcoats, scrubs, coveralls) used in laboratories are not to be worn outside of OVC.

7.6 Personal Attire when working with Large Animals

Students are required to wear **clean protective coveralls** for all in-person Large Animal Laboratories and during independent practice time with large animals. Lab coats are not permitted in the Large Animal Laboratories. 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 in-person Large Animal labs. Additional COVID-19 safety measures include a requirement for safety glasses and examination gloves to be used during all in-person laboratory activities. These will be provided at the laboratory. Students will NOT be permitted to participate in scheduled activities involving large animals if they do not comply. Students will require their University of Guelph student ID card in order to gain access to the Clinical Skills Building and barn for both scheduled course activities as well as when they have booked independent practice time.

7.7 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. Additional COVID-19 safety measures include a requirement for safety glasses and examination gloves to be used during all in-person laboratory activities. These will be provided at the laboratory.

7.8 Statement on Session Recordings:

By enrolling in a course, unless explicitly stated and brought forward to their instructor, it is assumed that students agree to the possibility of being recorded during lecture, seminar or other “live” course activities, whether delivery is in-class or online/remote.

If a student prefers not to be distinguishable during a recording, they may:

1. turn off their camera
2. mute their microphone
3. edit their name (e.g., initials only) upon entry to each session
4. use the chat function to pose questions

Students who express to their instructor that they, or a reference to their name or person, do not wish to be recorded may discuss possible alternatives or accommodations with their instructor.

7.9 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 client-owned animals, medical records, or cadaver specimens is strictly forbidden.

7.10 Netiquette Statement Regarding Online Behaviour:

Inappropriate online behaviour will not be tolerated. Examples of inappropriate online behaviour include:

- Posting inflammatory messages about your instructor or fellow students
- Using obscene or offensive language online
- Copying or presenting someone else's work as your own
- Adapting information from the Internet without using proper citations or references
- Buying or selling term papers or assignments
- Posting or selling course materials to course notes websites
- Having someone else complete your quiz or completing a quiz for/with another student
- Stating false claims about lost quiz answers or other assignment submissions
- Threatening or harassing a student or instructor online
- Discriminating against fellow students, instructors and/or TAs
- Using the course website to promote profit-driven products or services
- Attempting to compromise the security or functionality of the learning management system
- Sharing your user name and password
- Recording lectures without the permission of the instructor

7.11 Course Communication

The Courselink site for VETM 4870 Clinical Medicine III is the official method of communication between course co-ordinators/instructors and the class as a whole regarding all course-related matters. Students are therefore expected to check the course website regularly for bulletin postings. Students wishing to discuss general course matters with the course co-ordinators/instructors should direct their queries through their class course

representative. Individual communications should be sent directly by email to the appropriate course instructor/co-ordinator. Please note that instructors/co-ordinators have other competing commitments, so delays in responding may occur: responses may take up to 5 business days and students should not expect answers to emails on weekends or holidays.

7.12 Inability to Meet a Course Requirement

When you find yourself unable to meet an in-course requirement because of illness or compassionate reasons, please contact the Associate Dean - Students and Academic (ADSA) by email (ovc.dvmacademics@uoguelph.ca). No exceptions to the course deadlines or examinations will be made without academic consideration being granted by the ADSA. This course statement supercedes the University Statement 8.2 noted below.

8 University Statements

8.1 Email Communication

As per university regulations, all students are required to check their e-mail account regularly: e-mail is the official route of communication between the University and its students.

8.2 When You Cannot Meet a Course Requirement

When you find yourself unable to meet an in-course requirement because of illness or compassionate reasons please advise the course instructor (or designated person, such as a teaching assistant) in writing, with your name, id#, and e-mail contact. The grounds for Academic Consideration are detailed in the Undergraduate and Graduate Calendars.

Undergraduate Calendar - Academic Consideration and Appeals
https://www.uoguelph.ca/registrar/calendars/undergraduate/current/c08/c08-ac.shtml

Graduate Calendar - Grounds for Academic Consideration
https://www.uoguelph.ca/registrar/calendars/graduate/current/genreg/index.shtml

Associate Diploma Calendar - Academic Consideration, Appeals and Petitions
https://www.uoguelph.ca/registrar/calendars/diploma/current/index.shtml

8.3 Drop Date

Students will have until the last day of classes to drop courses without academic penalty. The deadline to drop two-semester courses will be the last day of classes in the second semester. This applies to all students (undergraduate, graduate and diploma) except for Doctor of Veterinary Medicine and Associate Diploma in Veterinary Technology (conventional and alternative delivery) students. The regulations and procedures for course registration are available in their respective Academic Calendars.

Undergraduate Calendar - Dropping Courses
https://www.uoguelph.ca/registrar/calendars/undergraduate/current/c08/c08-drop.shtml

Graduate Calendar - Registration Changes

https://www.uoguelph.ca/registrar/calendars/graduate/current/genreg/genreg-reg-regchg.shtml

Associate Diploma Calendar - Dropping Courses
https://www.uoguelph.ca/registrar/calendars/diploma/current/c08/c08-drop.shtml

8.4 Copies of Out-of-class Assignments

Keep paper and/or other reliable back-up copies of all out-of-class assignments: you may be asked to resubmit work at any time.

8.5 Accessibility

The University promotes the full participation of students who experience disabilities in their academic programs. To that end, the provision of academic accommodation is a shared responsibility between the University and the student.

When accommodations are needed, the student is required to first register with Student Accessibility Services (SAS). Documentation to substantiate the existence of a disability is required; however, interim accommodations may be possible while that process is underway.

Accommodations are available for both permanent and temporary disabilities. It should be noted that common illnesses such as a cold or the flu do not constitute a disability.

Use of the SAS Exam Centre requires students to book their exams at least 7 days in advance and not later than the 40th Class Day.

For Guelph students, information can be found on the SAS website
https://www.uoguelph.ca/sas

For Ridgetown students, information can be found on the Ridgetown SAS website
https://www.ridgetownc.com/services/accessibilityservices.cfm

8.6 Academic Integrity

The University of Guelph is committed to upholding the highest standards of academic integrity, and it is the responsibility of all members of the University community-faculty, staff, and students-to be aware of what constitutes academic misconduct and to do as much as possible to prevent academic offences from occurring. University of Guelph students have the responsibility of abiding by the University's policy on academic misconduct regardless of their location of study; faculty, staff, and students have the responsibility of supporting an environment that encourages academic integrity. Students need to remain aware that instructors have access to and the right to use electronic and other means of detection.

Please note: Whether or not a student intended to commit academic misconduct is not relevant for a finding of guilt. Hurried or careless submission of assignments does not excuse students from responsibility for verifying the academic integrity of their work before submitting it. Students who are in any doubt as to whether an action on their part could be construed as an academic offence should consult with a faculty member or faculty advisor.

Undergraduate Calendar - Academic Misconduct
https://www.uoguelph.ca/registrar/calendars/undergraduate/current/c08/c08-amisconduct.shtml

Graduate Calendar - Academic Misconduct
https://www.uoguelph.ca/registrar/calendars/graduate/current/genreg/index.shtml

8.7 Recording of Materials

Presentations that are made in relation to course work - including lectures - cannot be recorded or copied without the permission of the presenter, whether the instructor, a student, or guest lecturer. Material recorded with permission is restricted to use for that course unless further permission is granted.

8.8 Resources

The Academic Calendars are the source of information about the University of Guelph's procedures, policies, and regulations that apply to undergraduate, graduate, and diploma programs.

Academic Calendars
https://www.uoguelph.ca/academics/calendars

8.9 Disclaimer

Please note that the ongoing COVID-19 pandemic may necessitate a revision of the format of course offerings and academic schedules. Any such changes will be announced via CourseLink and/or class email. All University-wide decisions will be posted on the COVID-19 website (https://news.uoguelph.ca/2019-novel-coronavirus-information/) and circulated by email.

8.10 Illness

The University will not normally require verification of illness (doctor's notes) for fall 2020 or winter 2021 semester courses. However, requests for Academic Consideration may still require medical documentation as appropriate.
