



VETM*3440 Clinical Medicine II

Fall 2020

Section(s): C01

Department of Clinical Studies

Credit Weight: 0.50

Version 2.00 - February 18, 2021

1 Course Details

1.1 Calendar Description

The course is a continuation of Clinical Medicine I. It will contribute to students' achievement of selected elements of graduating competency in the areas of clinical examination of specific organ systems of various species. Students will enhance and refine their clinical problem solving skills using case material from the Veterinary Teaching Hospital. They will continue to develop their verbal and written communication skills through case simulations and analyses. The course will be presented using lectures, laboratory classes and independent study.

Pre-Requisites: All Phase 1 courses.

Co-Requisites: All Phase 2 courses.

1.2 Course Description

This course consists of 43 lectures; 10 clinically-oriented laboratories; 2 review laboratories; 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
- Neurology

1.3 Timetable

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

1.4 Final Exam

Time and location subject to change. Please see EnCampus Portal for the latest information.

2 Instructional Support

Instructors

Clinical Faculty (Department of Clinical Studies)

Ruminant Field Service Faculty (Department of Population Medicine)

Small Mammal Faculty (Department of Pathobiology)

Graduate Students (Departments of Clinical Studies, Population Medicine and Pathobiology)

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)
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Telephone: +1-519-824-4120 x54423
Office: OVC Dean's Office, Room 2651
(Course Co-ordinator, Lead contact for the Clinical Medicine/POMA Large Animal components)

Course Co-ordinator: Alice Defarges DVM, MSC, DACVIM (SAIM)
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Office: OVCP, Room 2104
(Course Co-ordinator, Lead contact for the Clinical Medicine/POMA Small Animal components)

Course Co-ordinator: Deep Khosa BSc, BVMS, MANZCVS (SAM)
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Office: OVCS 2529
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Course Co-ordinator: Alex Zur Linden DVM, DACVR
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Course Co-ordinator: Luis Gaitero
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Office: OVCP 2101
(Lead contact for the Neurology 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 2 information on the OVC website.

3 Learning Resources

All notes and instructional videos are available on the VETM*3440 Clinical Medicine II 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

Additional Resources: General Clinical Skills (Textbook)

1. Coombes N and Silva-Fletcher A. Veterinary Clinical Skills Manual. CABI, 2018.

ADDITIONAL RESOURCES: SMALL ANIMAL MEDICINE (Textbook)

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 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 MEDICINE (Textbook)

1. Smith BP, Van Metre D, Pusterla N. Large Animal Internal Medicine, 6th Edition, Elsevier, 2019.

ADDITIONAL RESOURCES: DIAGNOSTIC IMAGING SECTION (Textbook)

1. Thrall DE. Textbook of Veterinary Diagnostic Radiology. 6th WB Saunders Ltd, 2013.
2. OVC teaching file system: mirc.ovc.uoguelph.ca **(Please see the Courselink site for this course for the login and password to access this resource)**
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 SECTION (Textbook)

1. Dewey CW & da Costa RC. Practical guide to canine and feline neurology. Wiley-Blackwell. 3rd 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 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

This course is the second of three Clinical Medicine courses that veterinary students will complete throughout the DVM curriculum. VETM*3440 Clinical Medicine II builds upon

aspects of the clinical evaluation as outlined below. Students are expected to view the course contents of Clinical Medicine courses as life-long learning of skills that will be needed during their career in veterinary medicine. Therefore, information and skills taught during VETM*3430 Clinical Medicine I will also be incorporated into assessments in this course, and VETM*3440 Clinical Medicine II will also be examined as a component of VETM*4870 Clinical Medicine III in Phase 3 of the DVM program.

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

Although lectures, online learning materials, and laboratories will introduce the skills required to achieve these 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. **Animal Handling and Restraint:**

- Safely and humanely handle and restrain common domestic large and small animal species, as well as small mammal species

2. **History Taking:**

- Develop, reinforce and utilize observational and inquiry skills
- Reinforce use of a standard process for obtaining a history in any species
- Identify abnormal history information

3. **Physical Examination:**

- Perform a basic physical exam at the animal level (360⁰ - in all species)
- Demonstrate an efficiency in performing a physical exam
- Demonstrate a sequential/logical approach
- Demonstrate efficiency in time to completion
- Describe abnormalities using the appropriate veterinary terminology at the physical and physiological levels in all species

4. **Diagnosis:** At the case level:

- Generate a problem list

- Generate differentials under broad categories
- Identify if further data is required

At the process level:

- Suggest common tests to be used to acquire data
- Perform some of the common tests
- Interpret test results

5. Treatment:

- Learn how to perform methods of treatment including: hazards & risks, asepsis, methods of administration, waste disposal
- Identify broad categories of treatment components at the case level
- Calculate doses for different situations at the process level including: drugs and fluid therapy
- Generate a treatment plan
- Write a prescription

6. Problem Solving:

- Use problem solving strategies to deepen understanding of abnormalities at both the physical and physiological levels
- Identify further data required to refine assessment
- Be able to prioritize information required for further understanding versus managing the case
- Communicate the process involved as problem solving advances
- Conduct problem solving activities at the level of the problem

7. Medical Record:

- Create a complete medical record that reflects the physical exam findings and history and includes current assessment etc. at the level of the problem

8. In order to advance student skills in the diagnostic process, specific intended learning outcomes for the Diagnostic Imaging and Neurology components are further defined below.

Diagnostic Imaging Component

Graduates of VETM*3440 Clinical Medicine II must be able to:

- Systematically review a radiograph.
- Describe a radiographic study (normal and abnormal findings) using appropriate imaging terminology.
- Provide a radiographic diagnosis for a given study.

Neurology Component

Graduates of VETM*3440 Clinical Medicine II must be able to:

- Perform a detailed neurological examination.
- Recognize the neuroanatomical pathways involved in each test performed during the neurological examination.
- Be able to differentiate whether or not the patient suffers a disease affecting the nervous system (neurological disease).
- Interpret the neurological examination findings for the purposes of lesion localization.
- Localize a suspected neurological lesion to one or several of the main components of the nervous system:
 - Spinal cord (and to specific spinal cord functional segments: C1-C5, C6-T2, T3-L3, L4-S3).
 - Peripheral nervous system, neuromuscular junction, and muscle
 - Brain (and to specific areas of the brain: thalamocortex, brainstem, cerebellum).
 - Vestibular system (peripheral vs central)
- Recognize the neurological signs related to specific lesion localization in the nervous system.

5 Teaching and Learning Activities

The course emphasizes clinical problem solving, with a focus on 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. Students also extend their Phase I learning through modules focused on clinical nutrition and detailed neurological evaluation. This course is intimately tied to other Phase II courses, and students will be expected to know and apply content from those courses during their Clinical Medicine II learning. **Content from other Phase II courses may therefore be examined during the final examination (ie. Objective Standardized Clinical Examination (OSCE) and/or written exam) at the end of the Clinical Medicine II.**

MODULES:

Thematic modules are structured to provide content knowledge in advance of student practice of clinical problem-solving skills across the various domestic species. Each module may contain a combination of lectures, online learning materials, and laboratory practice sessions:

MODULE LECTURES

Lectures are scheduled throughout the course to strategically deliver preparatory knowledge in advance of practicing application of this knowledge in the laboratories. Lecture slides and/or accompanying detailed notes will be posted on the course website.

MODULE REQUIRED SELF-STUDY

Students are expected to study the additional course material posted on the course website (VETM3440 Clinical Medicine II site on Courselink) in advance of each module's associated laboratory session. These materials are intended to prepare students in order to optimize their evaluation of case material during the laboratory time.

MODULE LABORATORIES

1. This course involves a series of 10, clinically-oriented laboratories, plus 2 practical review laboratories prior to the final integrated OSCE. Each laboratory group consists of approximately $\frac{1}{4}$ of the class. Typically, each laboratory period will involve active practice of the skills outlined in the laboratory-specific intended learning outcomes.

2. **Students are expected to adequately prepare for each laboratory prior to attending, by thorough review of the online supporting material provided for each module's lab topic.** Students will also be expected to be familiar or become familiar with diagnostic testing and interpretation, using supporting materials posted on the course website (VETM3440 Clinical Medicine II site on Courouselink) and from other Phase 2 courses.
3. Students are expected to review the laboratory-specific intended learning outcomes (posted on the course website) prior to attending each laboratory session. For any in-person course activities, printed hardcopies of these will be provided at each laboratory, for reference to guide learning during the laboratory session.
4. Laboratories start promptly at the assigned time, therefore **students are expected to arrive on time** whether the activity is delivered virtually in a synchronous fashion, or in person.
5. 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,** unless the student directly swaps with a classmate from another lab session (in order to maintain consistent student numbers at each laboratory) and has received course coordinator approval to do so. There will be no opportunity to make-up any missed labs.
6. Students must bring a stethoscope, penlight, digital thermometer, pen, and watch to every live-animal (in-person) laboratory and to the final OSCE examination. Smart phones are not a suitable substitute for a watch.
7. Smart phone use for any purpose is prohibited during laboratory sessions.
8. No food or drink may be consumed in the animal use areas.
9. 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.**
10. 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 a review of the general physical examination, followed by 5 modules focused on clinical problem solving using a Problem-Oriented Medical Approach (POMA) to investigate common presenting complaints of large and small animal species. During the Physical Examination review laboratory sessions, live large animals will be available to practice the general physical examination in person. This is intended to provide time for students to review and refine their skills in the basic physical examination of large animals with feedback from instructors, and **students will get the most out of this session by thoroughly reviewing and practicing ahead of their lab in September.**

POMA laboratories addressing common presenting complaints will be delivered to ¼ of the class per session. Preparatory learning ahead of case-based laboratories will include a combination of lectures and online self-study material, intended to prepare students for full engagement in the practice of clinical problem-solving using case material in laboratories. Laboratory sections may be further subdivided into smaller groups to work through the cases and interact with the case materials.

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.

Supporting the clinical problem-solving POMA laboratories, students will receive specific learning opportunities focused on diagnostic imaging, neurology, small animal clinical nutrition, small mammal examination, and techniques for medicating or sampling animals. These are described below:

DIAGNOSTIC IMAGING COMPONENT

Seventeen lectures and two 2-hour laboratories will be held. 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.

NEUROLOGY COMPONENT

Ten lectures will be presented in this component of the course. The knowledge acquired from Phase 1 about performing a neurological examination will be reviewed and expanded to the next step of the neurological assessment. This involves interpreting results of a neurological examination to identify whether or not a patient is suffering a neurological condition, and to localize that lesion to a specific area of the nervous system. This process is denominated "lesion localization" or "neurolocalization". Clinical cases presented as videos will be extensively used during the lectures. Additional online material for independent study will further allow students to evaluate small animal patients with or without neurological conditions. Knowledge gained during this course will act as a baseline for Phase 3 courses,

where the most frequent neurological diseases in small and large animal species will be discussed.

SMALL ANIMAL CLINICAL NUTRITION COMPONENT

Seven lectures will be presented, applying principles of small animal nutrition to clinical contexts with a focus on life stages (gestation, lactation, growth, senior) and common issues such as obesity, allergies, osteoarthritis and dental problems. This content will be applied to clinical cases through the completion of a SA Clinical Nutrition Assignment.

SMALL MAMMAL COMPONENT

This course component includes one introductory lecture, followed by an applied discussion of restraint and common procedures for small mammal species.

MEDICATION AND SAMPLING TECHNIQUES COMPONENT

One lecture, online self-study materials, and one 2-hour laboratory period will be held focused on medication and sampling techniques. Students will practice these techniques on models or live animals during the in-person laboratory session. Opportunity for further practice will be provided during the in-person Review Laboratory. Students may not practice medication and sampling techniques on live animals outside of these two instructor-supervised scheduled course laboratories.

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 PHC requirements to successfully complete Clinical Medicine II (VETM 3440):

Working in your practice 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 OVC 2023 Phase-2 SA Primary Care 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 OVC 2023 Phase-2 SA Primary Care 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 II 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 PHC Nutrition and Radiology assignments for practice of their nutrition and radiology knowledge. Please see the Nutrition and Radiology Assignment Introductions on the OVC 2023 Phase-2 SA Primary Care site on Courselink for details on how to complete these assignments. All assignments will be submitted into Dropbox on the OVC 2023 Phase-2 SA Primary Care site. If submitted by the specified date and time, students will receive a numeric grade for their optional PHC Nutrition and Radiology assignments and this grade will contribute to extra credit towards the student's overall VETM 3440 Clinical Medicine II grade.

Any completed optional assignments must be received by no later than 4pm on April 1st, 2021.

For all questions about PHC assignments and learning activities, please contact Dr. Deep Khosa (dkhosa@uoguelph.ca).

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 2 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 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**

6 Assessments

CALCULATION OF THE FINAL COURSE GRADE: VETM*3440 CLINICAL MEDICINE II

Final Grade Calculation:

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 (50%)**
 - Physical examination (LA/SA)
 - Clinical problem-solving (POMA: Problem-Oriented Medical Approach)
 - Primary healthcare topic reviews
 - Handling and examination of small mammal species

- SA Clinical nutrition
- Medication/Sampling techniques
- **Diagnostic Imaging Component (25%)**
- **Neurology Component (25%)**

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 Physical Examination Review Lab. This training is a mandatory component of VETM*3440 Clinical Medicine 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.

Clinical Medicine/POMA Component Assessments (50%)

This section will be assessed through medical record assignments, an online quiz, as well as a final OSCE (includes both practical and applied written components).

1) Medical Record Assignments (4%): Students will generate three written medical records based on their diagnostic work-up of the various POMA laboratory cases, receiving formative feedback on the first two before submitting their third medical record for grading. Additional instructions will be provided on the course website. The records are to be completed outside of laboratory hours and submitted prior to the listed deadlines on the VETM*3440 Clinical Medicine II CourseLink site. One record will be written as a group (5 students), in order to receive formative feedback from a course instructor; the second record will be individually written and peer-reviewed for formative feedback, and the final record will be written 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. **Students must have completed both formative case records by the posted deadlines in order to be eligible to receive a grade on their third medical record submission.** Any students that miss a POMA lab (where the cases for the medical record assignments are introduced) for a valid reason are expected to review the case material with classmates in order to still complete the assignment(s).

2) POMA Online Quiz (4%): This quiz will evaluate student application of content within the five POMA modules, including all associated lectures, online preparatory material, and cases discussed in the POMA laboratory sessions. The online quiz is to be completed prior to the listed deadline posted on the VETM*3440 Clinical Medicine II CourseLink site, and will contribute to the final course grade. During the period when the quiz is open, the student can complete the quiz at any time. However, once starting the quiz, they must complete and submit it within the stated time limit of the quiz. Students that miss or fail the quiz will not be given the opportunity to take a supplemental quiz. Students that are unable to complete and submit the online quiz by the closing date will require documentation of academic consideration from the Associate Dean-Students and Academic (ovc.dvmacademics@uoguelph.ca), PRIOR TO missing the posted closing date, in order to redistribute the missed grade towards their final OSCE examination score, otherwise a mark of 0% will be assigned to the missed online quiz. Please note that students that initiate the quiz cannot then seek academic consideration for the quiz.

3) Final OSCE (42%): The Objective Structured Clinical Examination (OSCE) will be composed of both in-person practical stations as well as a written online component in CourseLink using the Respondus/LockDown Browser feature for exam integrity. All material from the Clinical Medicine/POMA Component of the course will also be assessed on the final OSCE.

The specific breakdown of grades for the final OSCE will be:

Practical Component*:

SA Physical Examination (12%)

LA Physical Examination** (12%)

LA Medications/sampling Techniques*** (1%)

Written Component:

Primary Healthcare Topic Reviews (4%)

LA POMA/principles of medication/sampling techniques (3%)

SA POMA/medical records (3%)

SA Clinical Nutrition (4%)

Small mammals (3%)

**In the event that Public Health restrictions necessitate fully canceling the practical component as scheduled, this weighting will be redistributed towards the written component (if early completion of this OSCE station was not done by the student as described below).*

***Student completion of the LA physical examination ahead of your scheduled OSCE date may be done by requesting early assessment, to be scheduled for either during the "POMA Cases Lab 2 - LA" in-person lab or the "LA Review lab".*

****Student completion of the LA Medications/Sampling Techniques OSCE station ahead of your scheduled OSCE date may be done by requesting early assessment, to be scheduled for during the "LA Review lab".*

Diagnostic Imaging Component (25%):

This component of the course will be assessed through lab assignments (2 x 1.25%), in-class quizzes (2 x 2.5%) and a final summative examination (17.5%).

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.

Following each section (thorax, abdomen) there will be an in-class quiz (please see the Phase 2 schedule for the time and dates of these quizzes). **Missed quizzes will not be rescheduled, therefore, students that do not attend the synchronously scheduled Diagnostic Imaging quizzes will require documentation of academic consideration from the Associate Dean-Students and Academic (ovc.dvmacademics@uoguelph.ca) in order to redistribute the missed grade towards their Summative Written Diagnostic Imaging examination score, otherwise a mark of 0% will be assigned to any missed Diagnostic Imaging quizzes.**

There will also be a Summative Written Diagnostic Imaging Examination that will include all material taught in the course at the completion of all of the lectures and labs (please see the Phase 2 schedule for the time and date of this examination).

All Diagnostic Imaging quizzes, as well as the Summative Written Examination in Diagnostic Imaging, are computer-based exams.

Quizzes and the Summative Written Diagnostic Imaging Examination may be reviewed within three weeks after marks are posted for each. **There will not be an opportunity to review the quizzes or summative examination outside of this period.** To arrange a time to review the quizzes/summative examination, please contact the Administrative Assistant to the Faculty and Chair in the Department of Clinical Studies (ovcsas.clin@uoguelph.ca).

Neurology component (25%):

Evaluation for this course component will be based on a one-hour Summative Written Neurology Examination (12.5%) as well as examination of neurology content during the final OSCE (12.5%).

The Summative Written Neurology Examination will include a series of videos and images of neurological patients to be reviewed. Please see the Phase 2 schedule for the time and date of this examination.

The Summative Written Neurology Examination may be reviewed within three weeks after the marks are posted for this examination. **There will not be an opportunity to review the summative examination outside of this period.** To arrange a time to review the summative examination, please contact the Administrative Assistant to the Faculty and Chair in the Department of Clinical Studies (ovcsas.clin@uoguelph.ca).

Small Animal Clinical Nutrition component

Evaluation will be based on completion of a written assignment. Details regarding the assignment and deadline will be posted on the VETM*3440 Clinical Medicine 2 Courselink site.

All materials from the Small Animal Clinical Nutrition component of this course will also be examined on the final OSCE.

Small Mammal and Medicating/Sampling Techniques components

Worksheets representing key learning outcomes will be completed within the relevant laboratory sessions. All materials from the Small Mammal and Medicating/Sampling Techniques components of this course will also be examined on the final OSCE.

FINAL INTEGRATED OBJECTIVE STANDARDIZED CLINICAL EXAMINATION (OSCE):

This OSCE examination will incorporate ALL course content from Clinical Medicine II, including all materials associated with course lectures, online

materials on the course Courselink website, laboratories, and other course-related assignments/activities. Related concepts from other Phase II courses may also be incorporated into the OSCE questions, as practiced throughout the POMA laboratories. The exam format will include an online written portion requiring students to apply course content knowledge to practical scenarios (to be completed in CourseLink using Respondus/Lockdown browser), and an in-person component where students will be required to demonstrate skills on live animals 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). As such, proper attire and equipment is required as outlined for the laboratory sessions.

If evolving Public Health requirements necessitate cancellation of the in-person course activities, the online written portion of the OSCE will be expanded to further test knowledge of clinical skills. In this case, the demonstration of skills may be rescheduled to occur later in the academic year, or carried over into VETM*4870 Clinical Medicine III for subsequent testing. This will be determined by the course coordinators based on current circumstances and restrictions at the time, and will be communicated to the class using the VETM*3440 Clinical Medicine II CourseLink announcements page.

***NOTE: In order to achieve a passing overall grade for VETM3440: Clinical Medicine II, students must achieve ALL 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% cumulative grade within each of the Clinical Medicine/POMA, Diagnostic Imaging, and Neurology components of this course.
 - Students that achieve less than 50% in one component will automatically be assigned a failing grade (49%, or their original course grade if lower than 49%) for the entire Clinical Medicine II course.
 - Students that achieve between 50-59% in one or more components of the course will be required to remediate and then complete a conditional repeat examination of the component(s) 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 II instructors coordinating that component of the course. The format 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 achieved on the conditional repeat examination, then the original grade for that component will be used in calculating the student's overall course grade. Failure to achieve a passing grade (60%) on the conditional repeat examination of any 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 II course.

- A grade of 60% or greater on each of the Large Animal and Small Animal Physical Examination stations of the final integrated OSCE:
 - Students who achieve less than 60% on either the LA or SA Physical Examination station of the final integrated OSCE exam but still have at least 30/50 (60%) cumulative grade within the Clinical Medicine/POMA component of the course will be required to take a conditional repeat exam of that failed OSCE subsection. **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 II 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. If a passing grade (60% or higher) is obtained on the conditional repeat examination, the student will be assigned their original OSCE Physical Examination grade on that station for the purpose of calculating the final course grade. Any student that does not achieve 60% 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 II course.

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.

Marks from the optional PHC Nutrition and Radiology assignments will constitute extra credit marks towards the student's overall Clinical Medicine II 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.

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 learn using medical records derived from 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 and patient 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 is **strictly prohibited**.

7.4 Hygiene

Handwashing 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 handwashing as taught in Phase I VETM*3430 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. Coveralls and labcoats used in Principle of Disease laboratories or in the OVC-HSC on client-owned animals must therefore 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 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 Synchronous 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 during Independent Practice and Laboratories

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*3440 Clinical Medicine II 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

For Academic Consideration, please contact the Associate Dean, Students and Academic (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.
