

# VEM5154 Large Animal Parasitology

SEMESTER: FALL 2021

CREDIT HOURS: 2 CREDIT HOURS

GRADING SYSTEM: A-E GRADING

PHASE: III

## Course Coordinator

Name: Heather D S Walden, MS, PhD

Phone: 352-294-4125

Email: [hdstockdale@ufl.edu](mailto:hdstockdale@ufl.edu)

Office Hours: by appointment

## Course Description

Large Animal Parasitology provides students with a foundation in parasitology and expand on the fundamentals taught in the core course. This course is focused on practical use in clinical sciences and for diagnosis, treatment (if any) and control of parasitic infections or diseases caused by helminths (trematodes, cestodes and nematodes), arthropods and protozoan parasites that infect or infest horses, cattle, sheep, goats, pigs and chickens. Life cycles will be used as a basis of knowledge regarding hosts, sites of infection, and determination of how and when to diagnose. Clinical cases and examples of disease, treatment and diagnosis will be highlighted from the most current literature, when available.

## Student Learning Outcomes

After successful completion of this course, students will:

1. Define terms and phrases commonly used in veterinary parasitology.
2. Identify common helminth, protozoan and arthropod parasites of domesticated large animals.
3. Explain clinical indications for common chemotherapeutic agents.
4. Describe, compare and contrast developmental life cycles of common helminth, protozoan and arthropod parasites of domesticated large animals.
5. Identify zoonotic parasites and describe potential food safety issues concerning large animal parasites.
6. Apply aspects of structure, life cycles, and chemotherapy to diagnosis, treatment and control of helminth parasites. Describe the biology of large animal parasites that underpins their treatment, prevention and control.
7. Perform routine diagnostic procedures in parasitology – comprehensive patient diagnosis, appropriate use of clinical laboratory testing.

## Course Schedule

<i>Date and Time</i>	<i>Location</i>	<i>Topic/Module/Unit</i>	<i>Faculty</i>	<i>SLO # Above</i>	<i>Contact Hours</i>
Oct 5 1:00 – 2:50pm	Lecture Hall B	Introduction, General Parasitology Review	Walden	1-2	2.0
Oct 6 1:00 – 2:50pm	Lecture Hall B	Equine helminths; QUIZ 1 - Canvas	Lee	3-4;6	2.0
Oct 7 1:00 – 2:50pm	Lecture Hall B	Equine helminths; QUIZ 2 - Canvas	Lee	3-4;6	2.0
Oct 12 10:30am – 12:20pm	Lecture Hall B	Ruminant helminths; QUIZ 3 - Canvas	Walden	3-6	2.0
Oct 13 1:00 – 2:50pm	Lecture Hall B	Ruminant helminths; QUIZ 4 - Canvas	Walden	3-4;6	2.0
Oct 15 1:00 – 2:50pm	Lecture Hall B	Ruminant helminths; QUIZ 5 - Canvas	Walden	3-4;6	2.0
Oct 18 1:00 – 1:50pm	Lecture Hall B	Swine helminths; Quiz 6 - Canvas	Walden	3-4;6	1.0
Oct 18 2:00 – 2:50pm	Lecture Hall B	Parasites of Poultry	Roberts	3-4;6	1.0
Oct 19 1:00 – 2:50pm	Lecture Hall B	Diagnostic procedures; QUIZ 7 - Canvas	Walden	7	2.0
Oct 21 10:30am – 12:20pm	Lecture Hall B	McMasters EPG/FECRT exercises	Walden	6-7	2.0
<b>Oct 22 10:30am – 12:20pm</b>	<b>Clinical Skills lab</b>	<b>LAB 1: Helminths, diagnostics</b>	Walden/Lee	7	2.0
Oct 25 10:30am – 12:20pm	Lecture Hall B	Protozoans; QUIZ 8 - Canvas	Walden	3-6	2.0
Oct 27 10:30am – 12:20pm	Lecture Hall B	Protozoans; QUIZ 9 - Canvas	Walden	3-6	2.0
Oct 28 10:30am – 12:20pm	Lecture Hall B	Arthropods; QUIZ 10 - Canvas	Lee	3-4;6	2.0
<b>Oct 29 10:30am – 12:20pm</b>	<b>Clinical Skills lab</b>	<b>LAB 2: Protozoans/ arthropods, diagnostics</b>	Walden/Lee	7	2.0
Nov 1 10:30am – 12:20pm	Lecture Hall B	Arthropods	Lee	3-4;6	2.0
Nov 3 10:30am – 12:20pm	Lecture Hall B	Parasite control and resistance	Walden	3,6	2.0
Nov 4 10:30am – 12:20pm	Lecture Hall B	Exam review	Walden/Lee	1-7	2.0
<b>Nov 5 10:30am – 12:20pm</b>	<b>Clinical Skills lab</b>	<b>Final Exam – written</b>			
			Total		34.0

## Course Schedule

This weekly schedule contains topics, assignments, quizzes and exams. Please refer to Canvas for updates and announcements for any changes to this schedule.

Class lectures will be delivered in the VAB Lecture Hall B and laboratories in the Clinical Skills lab (V2-126), unless otherwise specified. All lectures will be recorded and placed on the Canvas class page.

Students should have access to PowerPoint so it can be viewed as a ppt or pptx file, as well as access to Poll Everywhere.

## Required Textbooks and/or Course Materials

Bowman. 2021. Georgis' Parasitology for Veterinarians, 11th ed.  
Zajac and Conboy. 2012. Veterinary Clinical Parasitology, 8th ed.

All SAVMA notes, lecture and lab material and lecture PowerPoints will be available on Canvas.

## Recommended Textbooks and/or Course Materials

See above, journal articles will be described in the course or made available through Canvas.

## Methods of Evaluation

Grades will be calculated based on the following:

Daily quizzes (10 quizzes, 5 points each)	50 pts
McMaster's EPG and FECRT exercises	10 pts
Laboratory diagnostic procedures	40 pts
Final exam	100 pts
<b>Total</b>	<b>200 pts</b>

## Grading Scheme

Course grades will be assigned based on the following grading scheme. This grading scale is **final**.

A	100 – 90
B+	85 – 89
B	80 – 84
C+	75 – 79
C	70 – 74
D+	65 – 69
D	60 – 64
E	0 – 59

## Course Policies

**EXAMINATIONS:** There will be one final exam (100 points) at the end of the course. The exam will be based on clinical scenarios and parasite identification (slides, gross). This exam will be given in the Clinical Skills lab and each student will have a working partner with a shared microscope.

There will be 10 quizzes worth 5 points each. These will be given online via Canvas. These quizzes are **OPEN NOTE** but must be completed on your own. These quizzes will enable you to stay on top of the material and can also be used as study aides. They will OPEN after each lecture and CLOSE prior to the beginning of the next lecture. Please plan accordingly.

**LABORATORIES:** There will be two laboratories during this course. These labs will be held in the Clinical Skills laboratory (V2-126). The first will cover helminths and the second will cover arthropods and protozoans. Each laboratory will consist of a handout to guide you through the lab. Lab assignments will not be graded but we are happy to go over any questions so they can also be used as study aides. **Dress code in lab: Closed-toe shoes are required, lab/white coats or scrubs are preferred but not required. Gloves will be provided. Do not bring food or drinks into the lab.**

Each student will be required to complete **four diagnostic procedures** prior to the end of the course. These include 1) centrifugal fecal flotation, 2) McMaster's procedure, 3) direct smear and 4) fecal sedimentation. Each student will receive a completion form at the first laboratory and each procedure must be signed and dated by Dr. Walden or Dr. Lee verifying completion of the procedure. This activity is worth 40 points of your final grade and is due before the final exam. There will also be an in-class activity (McMaster's EPG/FECRT exercises) that is worth 10 points.

## Curriculum Policies

DVM curriculum policies are consistently held and reinforced across all DVM courses. Please visit the DVM webpage and review the curriculum policies listed within the [Online Student Handbook](#).

## Students with Accommodations

Students with disabilities who experience learning barriers and would like to request academic accommodations should connect with the Disability Resource Center by visiting [www.disability.ufl.edu/students/get-started](http://www.disability.ufl.edu/students/get-started). It is important for students to share their accommodation letter with their instructor and discuss their access needs, as early as possible in the semester. **Students in UF Health Sciences programs should be mindful that unique course accommodations may not be applicable in a clinical, fieldwork or practicum setting. Thus, planning a semester in advance with the DRC Health Sciences Learning Specialist, Lisa Diekow [ldiekow@ufsa.ufl.edu](mailto:ldiekow@ufsa.ufl.edu), is highly encouraged.**

The DRC is located on the main UF campus. ASA (Office for Academic and Student Affairs) works closely with the DRC to ensure student accommodations are met in the classroom and during exams. Melissa Pett in ASA assists in coordinating exams and meeting recommended disability-related requirements for students with accommodations ([melissacox@ufl.edu](mailto:melissacox@ufl.edu)).

## Course and Instructor Evaluation

Students are expected to provide professional and respectful feedback on the quality of instruction in this course by completing course evaluations online via GatorEvals. Guidance on how to give feedback in a professional and respectful manner is available on the [GatorEvals Webpage](#). Students will be notified when the evaluation period opens, and can complete evaluations through the email they receive from GatorEvals, in their Canvas course menu under GatorEvals, or via the [Online Platform](#). Summaries of course evaluation results are available to students at the [GatorEvals Public Results Webpage](#).

# Appendix A: Faculty Lecturers

Faculty Name: Alice C. Y. Lee, DVM, PhD

Email: [alice.lee@vetmed.ufl.edu](mailto:alice.lee@vetmed.ufl.edu)

Faculty Name: John Roberts, DVM

Email: [john.roberts1@ufl.edu](mailto:john.roberts1@ufl.edu)