ENTO 3645
Medical Entomology (without lab; 3 hr)
Spring 2022

Instructors: **Instructors:** Dr. Donald Champagne
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Lectures: 11:10-12:25, Tuesdays and Thursdays, in 404B Biological Science Building

Labs: Tues. 12:45-3:35; Wed. 1:50-3:50; 242 Poultry Science Building (enter front door, turn right up stairs, around the corner)

Text: There is no assigned text for the course. Handouts and any readings will be posted on ELC in advance of the lectures. Handouts contain images/graphs/tables used in the lectures, and generally brief outlines of major points pertaining to those images. **The handouts are not meant to be complete lecture notes,** so although we do not take attendance, attendance in class and good note-taking will be essential to ensure a good grade.

Attendance: This course is taught by three faculty, each covering 1/3 of the course, and details of how each section will be available will be announced in advance. In the initial section of the course, you may choose to attend in person or you can attend by Zoom (link below). You do not have to notify Dr. Champagne of your choice. **If you choose to attend by Zoom, you will have to do so at the scheduled lecture times** as recordings of the lectures will not generally be posted for later viewing. If you have to miss a lecture for a legitimate reason, a recording may be made available at the discretion of the instructor.

The **Zoom link** for the course is:
https://zoom.us/j/94382652952?pwd=NHErWXNUd1U4TCt5VWcxSHM5RHVBUT09

The passcode is: 645780

Covid precautions: See the current UGA advisory on Covid-19:
https://coronavirus.uga.edu/information-for/students/ Students are expected to participate in the DawgCheck program: https://dawgcheck.uga.edu/ , and to attend class online if health concerns arise. When attending class or labs in person, wearing a mask and maintaining appropriate social distancing is strongly encouraged. A properly worn mask covers both the mouth and nose. A mask used as a chin guard does not fulfill any useful function.

Current CDC guidance does not require you to self-isolate following exposure to an infected person if you are fully vaccinated (and ideally boosted) and you have no symptoms. If you develop symptoms consistent with Covid, you should isolate and attend lectures by Zoom for at least 5 days, as long as symptoms abate (disappear or are noticeably reduced).

Disclaimer: The course syllabus is a general plan for the course; deviations announced to the class by the instructor may be necessary.

Prerequisites: BIOL 1104 or BIOL 1104H or BIOL 1108 or BIOL 1108H. Not open to students with credit in ENTO 3645.

Course Description: Study of arthropods of medical and veterinary importance, and the diseases they transmit.

Course Objectives/Learning Outcomes: After completing this course, students will have an understanding of the biology and diversity of medically important arthropods and their associated diseases. Following an introduction emphasizing basic principles and concepts in medical and veterinary entomology, we will examine the characteristics, biology, and significance of each group of medically important arthropods. Students will also gain an understanding of the biology of arthropod-transmitted pathogens, as well as mechanisms underlying disease pathology. Students will be aware of the economic and social impact of arthropod-caused (or vectored) diseases, and strategies for their management.

Grading Policy

Students are responsible for all material and handouts covered in lecture, and in the laboratory. There will be three lecture midterm examinations (100 points each); each professor will set the exam that covers their portion of the course. Midterm examinations will be a combination of multiple choice/fill in the blank and written answer (generally 1-2 paragraphs). Each midterm will emphasize material covered in class or assigned readings since the previous exam, but questions addressing comparisons with material from earlier in the course may be asked. From time to time, readings may be assigned over the semester, and students will be given sample questions to consider regarding the readings. These assignments will not be graded directly, but material from the assigned readings may be included in the midterm and final examinations.

The lecture final examination will be a comprehensive exam covering the whole semester. This exam will be optional: students will have the option of keeping their end-of-semester grade, or they may elect to drop their lowest midterm and take the final exam. The final exam will be structured similarly to the midterms. Note that the final exam is worth 200 points, so it is worth more than the dropped midterm. Be aware that this can affect calculation of your final grade. As we get to the end of the semester Dr. Champagne will post material to help guide you in calculating the grade you will need to earn on the final exam to raise your final letter grade. The decision whether or not to take the final is up to you.

Examinations can be made up only if the instructor is notified in advance, and receives proof in writing of a legitimate reason (as per University policy) to miss the original exam. Makeup exams will differ from the original exams, and may be more demanding.

Lecture Midterm Exams (3)	3 x 100 pt
Lecture Final Exam (Optional, replaces lowest midterm)	200 pt

Note that the possible total points differs depending on whether or not one takes the final exam (3 x 100 = 300 points without the final, or 2 x 100 + 200 = 400 points with the final).

A = 90-100%
B+ = 86-89%
B = 80-85%
C+ = 75-79%
C = 60-74%
D = 50-59%
F= less than 50%

Academic Honesty

Students are expected to adhere to all aspects of the University Academic Honesty Policy (which may be found at https://honesty.uga.edu) and Honor Code:

"I will be academically honest in all of my academic work and will not tolerate academic dishonesty of others."

Honors Option

This course may be taken as an honors option. Please contact Dr. Champagne to arrange for this. The honors option will require a term paper.

Lecture schedule

Date		**Lecture Topic**
January	11	Introduction; Overview of Arthropods
	13	Structure and Function of Arthropods
	18	Structure and Function of Arthropods
	20	Structure and Function of Arthropods
	25	Arthropods and disease: concepts and principles
	27	Arthropods and disease: concepts and principles cont'd

February	1	Acari: Mites
	3	Acari: Ticks
	8	Acari: Ticks
	10	**Midterm test 1**
	15	Cockroaches and nuisance invaders; insecticide resistance
	17	Phthiraptera: Lice
	22	Hemiptera: Chagas' Disease
	24	Psychodidae (Sand flies) + Ceratopogonidae (Midges)
March	1	Simuliidae: Black flies
	3	Culicidae: Mosquitoes
	7-11	Spring Break!
	15	Mosquito-borne diseases: Arboviruses
	17	Mosquito-borne diseases: Malaria
	22	Mosquito-borne diseases: Lymphatic Filariasis
	24	**Midterm test 2 (also withdrawal deadline)**
	29	Brachycerous and Muscoid Flies
	31	Brachycerous and Muscoid Flies
April	5	Brachycerous and Muscoid Flies
	7	Brachycerous and Muscoid Flies
	12	Siphonaptera: Fleas
	14	Stinging and venomous arthropods
	19	Stinging and venomous arthropods
	21	Stinging and venomous arthropods
	26	Ekbom syndrome and other topics
	28	**Midterm 3**
May	3	discussion and review for final

May 10 (Tuesday) 12:00-3:00 Final Exam (Optional)