BIOL 3850- MEDICAL & VETERINARY ENTOMOLOGY SPRING 2021 SYLLABUS & COURSE POLICIES

Lecture: 1111 Jennett Hall (M, W, F 9:00-9:50)

Laboratory: BC 2071 (Section A: Thursday 2:00 – 4:50; Section B: Friday 11:00 –

1:50)

Instructor: Dr. Mark Blackmore

Office: Bailey Science Center 2218. Tel. 259-5114; email = mblackmo@valdosta.edu

Office Hours: Mon 11-12; Wed 11-12; Thursday 9:30-10 or by appointment

Course scope and objectives: This course is intended to introduce the student to the biology, ecology and behavior of insects that affect the health of humans, livestock, and other domestic or wild animals.

Factors contributing to the diversity and success of these arthropods and their interactions with humans will be emphasized. Students are expected to learn the characters used to identify the more common and important North American taxa of medical or veterinary importance and to assemble a collection of relevant locally-occurring species. These correspond to Department of Biology Educational Outcomes 2 ("Describe the evolutionary processes responsible for biological diversity, explain the phylogenetic relationships among the major taxa of life, and provide illustrative examples") and 5 (Interpret ecological data pertaining to the behavior of the individual organism in its natural environment; to the structure and function of populations, communities and ecosystems, and to the human impacts on these systems and the environment.")

Catalogue Description: BIOL 3850/5850 Overview of medical and veterinary entomology. Reviews basic biology of insects and other arthropods, with emphasis on species affecting health of humans, domestic animals and livestock. Diseases associated with arthropods and principles of forensic entomology will be considered. 4 credit hours. Prerequisite: BIOL 3200, BIOL 3250, or permission of instructor; admission to graduate program (BIOL 5850 only).

Text: *Medical and Veterinary Entomology* 3rd ed. 2019 by Gary Mullen & Lance Durden.

Course requirements & grading policy: Students are expected to attend all scheduled lectures, all laboratory sessions, and complete all assigned work including quizzes and examinations. BlazeView will be used to communicate with the class, and students should check BV daily for announcements or other information that may be posted there. Regular attendance and participation are essential for success in class. Therefore, students are expected to attend class as scheduled and must complete assignments as outlined in the syllabus. Attendance will not be routinely recorded after the Drop/Add period but students are responsible for all material presented in class. The Instructor is not obligated to provide lecture notes or handouts to absentee students and reserves the right to offer make-up examinations to students with documented valid excuses (eg. a death in the immediate family). Due to the logistical problems of setting up laboratory practical exams, make-ups of these tests may not be available. If students must be absent due to a quarantine or isolation requirement for COVID-19, they must report this situation via the COVID Self Reporting Link in MyVSU and through the Dean of Students Office to report any other absences as well. Instructors will not alter the schedule for individual students unless arrangements have been made in advance.

Lecture topics will be covered in three one-hour examinations and a comprehensive final examination. These exams may consist of any combination of objective (fill-in, true-false, multiple choice) and subjective (essay, diagrams etc.) questions about material presented in class or in the text. *Exams will be retained by the instructor* for 1 calendar year; students may arrange to see these at any time. Laboratory material will be covered by 8 quizzes, 2 practical examinations (sight identification of specimens) and worksheets. Reading material assigned for

the lab also may be covered on these tests but students will not be tested in the lab on subjects covered <u>only</u> in lecture. *All tests are cumulative*.

Points for the course will be allocated as follows:

<u>LABORATORY</u> 8 Quizzes (15 pts each, 2 low scores dropped	LECTURE Hour Exams	300 pts
90 pts		-
Practical Exam I: 40 pts	Final Exam	100 pts
Practical Exam II: 60 pts	TOTAL:	400 pts
Worksheets: 10 pts		-

Worksheets: 10 pts TOTAL: 200 pts

Tentative Lecture Schedule – Spring 2021

Lecture Topics	Assigned Reading (Mullens & Durden 3 rd ed.)	
Introduction & Overview of Arthropods	Ch.1	
Morphological Adaptations of Parasitic Arthropods Ch. 2		
Epidemiology of Vector-borne Diseases	Ch. 4	
Forensic Entomology	Ch. 5	
Cockroaches	Ch. 6	
Lice	Ch. 7	
True Bugs	Ch. 8	
Beetles & Fleas	Ch. 9 & 10	
Flies	Ch. 11 through 20	
Moths & Butterflies	Ch. 21	
Ants, Wasps & Bees	Ch. 22	
Scorpions & Solpugids	Ch. 23 – 24	
Spiders	Ch. 25	
Mites	Ch. 26	
Ticks	Ch. 27	
Molecular Tools Used in Med/Vet Entor	mology Ch. 28	

Tentative lecture exam dates: Fri. Feb 12; Mon. March 22; Wed. April 28. Final Exam Friday May 7, 8:00 – 10:00 AM.

Tentative Lab Schedule

LAB No.	Topic/Activity
1	Classification, Dichotomous keys, Arthropod classes, Insect & Arachnid orders
2	External morphology, Life history stages,
3	Quiz 1*; Blattodea, Phthiraptera

- 4 **Quiz 2***; Hemiptera, Coleoptera & Siphonaptera
- 5 **Quiz 3*;** Diptera part I (Nematocera)
- 6 **Quiz 4*;** Diptera part II (Brachycera)
- 7 Review for practical exam
- 8 Lab practical exam I
- 9 Lepidoptera & Hymenoptera
- 10 **Quiz 5***; Arachnid orders part I
- 11 **Quiz 6***; Arachnid orders part II
- 12 **Quiz 7***; Arachnid orders part III
- 13 **Quiz 8***; Review for practical exam
- 14 Lab practical exam II

Special needs:

Students with disabilities who are experiencing barriers in this course may contact the Access Office for assistance in determining and implementing reasonable accommodations. The access Office is located in Farbar Hall. The phone numbers are 229-245-2498 (V), 229-375-5871. For more information, please visit VSU's Access Office or email: access@valdosta.edu.

Administration of online Student Opinion of Instruction (SOI):

At the end of the term, all students will be expected to complete an online Student Opinion of Instruction survey (SOI) that will be available on BANNER. Students will receive an email notification through their VSU email address when the SOI is available (generally at least one week before the end of the term). SOI responses are anonymous to instructors/administrators. Instructors will be able to view only a summary of all responses after they have submitted final grades. While instructors will not be able to view individual responses or to access any of the data until after final grade submission, they will be able to see which students have or have not completed their SOIs. These compliance and non-compliance reports will not be available once instructors are able to access the results. Complete information about the SOIs, including how to access the survey and a timetable for this term is available at SOI Procedures and Timelines (located at https://www.valdosta.edu/academics/academic-affairs/sois/ under "Information for Students - Directions for Accessing and Completing SOIs").

Title IX Statement: Valdosta State University (VSU) is committed to creating a diverse and inclusive work and learning environment free from discrimination and harassment. VSU is dedicated to creating an environment where all campus community members feel valued, respected, and included. Valdosta State University prohibits discrimination on the basis of race, color, ethnicity, national origin, sex (including sexual harassment and sexual violence), sexual orientation, gender identity, religion, age national origin, disability, genetic information, or veteran status, in the University's programs and activities as required by applicable laws and regulations such as Title IX. The individual designated with responsibility for coordination of

^{*} Quiz covers all material from previous labs)

compliance efforts and receipt of inquiries concerning nondiscrimination policies is the University's Title IX Coordinator: The Director of the Office of Social Equity, titleix@valdosta.edu, 1208 N. Patterson St., N. Patterson St., Valdosta State University, Valdosta, Georgia 31698, 229-333-5463.

Spring 2021 COVID-19 Notes:

This course is offered as a face-to-face class. Although we continue to practice social distancing and everyone must wear a face covering while in class, the physical size of the classroom is large enough to accommodate all students registered for the class at the same time. Therefore, this class will meet regularly in person on the schedule as listed in Banner (Lectures **MWF in 1111 Jennett Hall and Labs Th/F in 2071 Bailey Science Center**) If students must be absent due to a quarantine or isolation requirement for COVID-19, they must report this situation via the COVID Self Reporting Link in MyVSU and through the <u>Dean of Students Office</u> to report any other absences as well. For those circumstances, or if students have been granted an accommodation by the VSU Access Office, they may be allowed to access the class remotely.

In order to mitigate the health risk of an extended break to the Blazer community, Valdosta State University will eliminate its 2021 weeklong spring break (originally scheduled for March 15-19). However, classes will still begin as originally scheduled on Monday, January 11, and final exams will conclude on Friday, May 7. To allow both students and faculty some needed break time during the course of the semester, VSU will instead use the five days allotted for spring break at various points during the semester as wellness days. These dates are as follows:

- Tuesday, February 16
- Wednesday, March 17
- Friday, April 2
- Thursday, April 15
- Monday, May 3 (Reading Day)

On those days, the university will be open but no classes will be held and no assignments or assessments should be due, in order to ensure that students get some actual break days. There is one additional holiday day: Monday, January 18, when the university will be closed in honor of the Martin Luther King, Jr. National Holiday.

FACE COVERINGS

As the Blazer Creed articulates, members of the VSU community are expected to live by the high standards of civility, integrity, and citizenship and embrace their responsibility as a member of the Blazer community. In recognition of this responsibility, and in response to the best available science and current guidance from the Centers for Disease Control and Prevention and the Georgia Department of Public Health, every student must wear a face covering that covers their nose and mouth at all times while in any campus building, including in this classroom. This requirement is intended to protect the health and safety of all VSU students, the instructor, and the entire university community. Anyone attending class without a face covering will be asked to put one on or leave. Students should also be sure they maintain a distance of at least six feet away from their fellow students and instructor and are seated in a seat that is designated to ensure that distance. Students who refuse to wear face coverings appropriately or adhere to other stated requirements may face disciplinary action for Code of Conduct violations.