

**BIOL 5840 - ENTOMOLOGY FALL 2018
SYLLABUS & COURSE POLICIES**

Lecture: BC 2202 (MWF 9:00 – 9:50 a.m.)

Laboratory: BC 2071 - Section A, (Th 9:30 – 12:20); Section B (W 2 – 4:50)

Instructor: Dr. Mark Blackmore

Office: BC 2218, Tel. 259-5114; email = mblackmo@valdosta.edu

Office Hours: MWF 12-1:00; Tue 2-3:00 or by appointment

Research Lab: BC 2060, Tel. 245-6422

Course scope and objectives: This course is intended to introduce the student to the study of insects, their biology, ecology and behavior. 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 and to assemble a broadly representative collection of 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 3840/5840 Introduction to the study of insect biology including ecology, behavior and taxonomy. Laboratory includes field observation, sampling and identification of local fauna.

4 credit hours. Prerequisite: BIOL 1107K, BIOL 1108K; admission to graduate program (BIOL 5840 only).

Texts: *Fundamentals of Entomology* 6th ed. by R. J. Elzinga; recommended references *An Introduction to the Study of Insects* 6th ed. by Borror, Triplehorn & Johnson and *Insects, Spiders and Other Terrestrial Arthropods* by George C. McGavin.

Course requirements & grading policy: Students are expected to attend all scheduled lectures and laboratory sessions, take examinations and turn in an insect collection. One or two Saturday or overnight field trips are planned but scheduling depends on availability at the field stations. These extended field trips provide opportunities to broaden the collection. Participation is recommended but not mandatory. **Daily attendance** will not be 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, PowerPoint slides, 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. Make up work or alternative assignments will be determined by the professor and at the sole discretion of the professor. These assignments may or may not exactly duplicate the original and will not entitle other students to the same alternatives since they may not have experienced the same situations.

Lecture topics will be covered in 3 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 6 quizzes and 2 practical examinations (sight identification). 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 only in lecture. ***All tests are cumulative.*** Grading of the collection will include consideration of mounting technique, appropriateness of mounts, condition and appearance of specimens, proper labeling and identification, as well as content (see handout). Specifically, the collection should include a minimum of 4 arthropod classes, plus 15 orders and 75 families of insects. Oral presentations and curatorial duties to improve the teaching collection also may be assigned; satisfactory completion will earn additional points.

Points for the course will be allocated as follows:

LABORATORY

Quizzes: 75 pts (15 each, low score dropped)
 Practical Exam I: 75 pts
 Practical Exam II: 125 pts
 5 Lab reports: 25 pts
Collection: 200 pts
 TOTAL: 500 pts

LECTURE

Hour Exams 300 pts
Final Exam 200 pts
 TOTAL: 500 pts
Oral presentation
 Will not exceed 25 pts

The following scale will be used to assign final grades:

GRADE

POINTS EARNED

900-1000	A
800-899	B
700-799	C
600-699	D
< 600	F

Academic Integrity:

Academic Honesty Policy: Cheating, plagiarism (submitting another person's material as one's own, or doing work which will receive academic credit for another person) are all impermissible. This includes the use of electronic devices, unauthorized books, notebooks, or other sources in order to secure or give help during an assignment or exam; the unauthorized copying of examinations, assignments, reports, or term papers, or the presentation of unacknowledged material as if it were your own work. In this particular course, removing or altering collection information associated with specimens is considered a violation of the Academic Honesty Policy and will be treated in the same manner as any other violation.

Students are responsible for knowing, understanding and complying with the VSU Student Code of Conduct, in Appendix A of the Student Handbook (<http://www.valdosta.edu/stulife/handbook/>) If substantial evidence exists for a violation of this policy, the student(s) involved will receive a grade of 'F' for the course and an official record will be filed following the Academic Integrity

Response along with a letter to the Dean of Students. See also:
<http://www.valdosta.edu/academic/AcademicHonestyPoliciesandProcedures.shtml>
<https://www.valdosta.edu/academics/academic-affairs/academic-honesty-at-vsu.php>

Tentative Lecture Schedule – Fall 2018

<u>Lecture Topics</u>	<u>Assigned Reading</u>
Introduction: Why study insects?	Preface & handouts
Overview of Arthropods	Ch. 1
Insect Body Plan: External Characteristics	Ch. 2
Insect Body Plan: Internal Characteristics	Ch. 3
Development & Specialization	Ch. 4
Insect Ecology	Ch. 5
Behavior & Sociality	Ch. 6 & 7
Parasitism & Predation	Ch. 8 & 9
Interactions with the Human World	Ch. 10
Pest Management & Household Insects	Ch. 11 & 12

Tentative lecture exam dates: Sept. 9, Oct. 5, Nov. 16.

Final exam 8:00 a.m – 10:00 a.m., Friday Dec. 7

Tentative Lab Schedule (subject to weather conditions)

<u>Date</u>	<u>Topic/Activity</u>	<u>Assigned Reading</u>
August 15,16	Distribute equipment, Local Collecting	Ch. 13 & 14
August 22, 23	Keys; Classification; Phylum Arthropoda; External morphology of insects, Insect orders; Apterygota,	pp. 10 & 21; 362-378
August 29, 30	Quiz 1; Ephemeroptera & Odonata;	pp. 378-383
Sept. 5, 6	Collecting trip Aquatic collecting trip	
Sept. 12, 13	Quiz 2; Orthopteroid orders	pp. 383-389
Sept. 19, 20	Isoptera, Dermaptera, Plecoptera	pp. 389-399
Sept. 26, 27	Phthirapterans & Thysanoptera; Collecting trip Quiz 3; Hemiptera, Megaloptera, Neuroptera	pp. 399-414
Oct. 3, 4	Lab practicum I; Check collections	
Oct. 10, 11	Coleoptera; Collecting trip	pp. 415-429
Oct. 17, 18	Quiz 4; Hymenoptera, Mecoptera,	pp. 576-661
Oct. 24, 25	Trichoptera; Lepidoptera; Collecting trip	pp. 439-449
Oct. 31, Nov. 1	Quiz 5; Siphonaptera; lower Diptera; Collecting trip	pp. 450-465
Nov. 7, 8	Diptera continued; work on collections	
Nov 14, 15	Quiz 6; TBA Collections due	
Nov. 21, 22	Thanksgiving Break – Labs do not meet	
Nov. 28, 29	Lab practicum II	

Special needs: Students requesting classroom accommodations or modifications due to a documented disability must contact the Access Office for Students with Disabilities located in Farbar Hall. The phone numbers are 245-2498 (V/VP) and 219-1348 (TTY).

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 <http://www.valdosta.edu/academics/academicaffairs/sois/welcome.php>).

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 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.

BIOL 5840: Graduate students will complete the following work ***in addition to*** assignments described above:

- (1) Prepare 45 minute PowerPoint presentations on topic assigned by instructor. These will be presented to the class during one of the lecture or lab periods.
- (2) Pool data from class collections and prepare a report in the style of the Journal of Environmental Entomology. (See instructor for more details)