

**BIOL 3840/5840 - ENTOMOLOGY FALL 2013
SYLLABUS & COURSE POLICIES**

Lecture: BC 2022 (10-10:50 a.m. M, W, F)

Laboratory: BC 2071 - Section A, (9:30 – 12:20 Th); Section B (11-1:50 F)

Instructor: Dr. Mark Blackmore

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

Office Hours: M, W 11:15-12:00 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 & gra ny2(Tw 9.9s)11S 9. 9.91avin

The following scale will be used to assign final grades:

| <u>POINTS EARNED</u> | <u>GRADE</u> |
|----------------------|--------------|
| 900-1000 | A |
| 800-899 | B |
| 700-799 | C |
| 600-699 | D |
| < 600 | F |

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

Tentative Lecture Schedule – Fall 2013

| <u>Lecture Topics</u> | <u>Assigned Reading in Elzinga</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. 11, Oct. 16, Nov. 18. **Final exam 8-10 a.m., Friday Dec. 6**

Tentative Lab Schedule (subject to weather conditions)

| <u>Week Beginning</u> | <u>Topic/Activity</u> | <u>Assigned Reading</u> |
|-----------------------|---|-------------------------|
| August 12 | Distribute equipment, Local Collecting | Ch. 13 & 14 |
| August 19 | Keys; Classification; Phylum Arthropoda; External morphology of insects | pp. 10 & 21; 362-364 |
| August 26 | Quiz 1; Apterygota, Ephemeroptera & Odonata; Collecting trip | pp. 374-383 |
| Sept. 2 | Aquatic collecting trip | |

Isoptera, Dermaptera, Plecoptera
Phthapterans & Thysanoptera; Collecting trip
pp. 399-414

pp. 389-399

415-429

Oct. 7

36 374-Trichoptera; Lpidoptera pp. 439-449

Oct. 4

1

Review & Wk on collecti

Oct. 1

2

36 374-Trichoptera; Lpidoptera

pp. 439-449

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

- (1) Prepare two 10-15 minute PowerPoint presentations on topic assigned by instructor. These will be presented to the class during one of the lecture periods.
- (2) Collate sampling data from class collections and prepare a report in the style of the Journal of Medical Entomology.