ZOO 409/509 GENERAL ENTOMOLOGY Spring 2009

Instructor: Dr. Janice Bossart
Office: 304 NBB
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Office hours: Mon 1 – 3 pm; Tuesday 9am – 4pm; or by appointment

Time & Location: Mon & Wed 11 – 12:15 (Lecture) Wed 1 – 3:50 (Lab)
322 NBB 111 NBB or off campus

**NOTE: This syllabus is tentative and subject to change.**

Texts:

2) Triplehorn and Johnson (2005) Borror and Delong’s introduction to the study of insects. 7th Ed. Thompson/Brooks/Cole

Course Objectives:

1) Acquire fundamental knowledge of insect physiology, morphology, and ecology.
2) Gain appreciation for the tremendous diversity of insects, evolutionary relationships and trends among groups, and the variety of amazing life history strategies.
3) Become familiar with major insect orders and learn basic skills in insect identification.
4) Be exposed to basic approaches to insect pest management.
5) Learn about how insects impact our everyday lives.
6) Become better adept at reading and discussing scientific research papers; learn to identify the primary issues/message addressed in a scientific paper.
7) Gain intellectual confidence discussing conceptual issues with your peers.

<table>
<thead>
<tr>
<th>Lecture Schedule</th>
<th>Topic</th>
<th>Readings**</th>
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<tr>
<td>W Jan 14</td>
<td>Getting started; Diversity &amp; Evolution</td>
<td>Chps 1 &amp; 8</td>
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<tr>
<td>M 19</td>
<td>Martin Luther King Holiday</td>
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<tr>
<td>W 21</td>
<td>Insect Relatives</td>
<td>BD Chp 5</td>
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<tr>
<td>M 26</td>
<td>Insect Relatives cont./What is an Insect/ BD Chp 1 &amp; 7</td>
<td>Begin Insect Systematics &amp; Phylogenies</td>
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<td>W 28</td>
<td>Insect Systematics &amp; Phylogenies cont.</td>
<td>Chp 7; Handout</td>
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<td>M 2 Feb 2</td>
<td>Quiz 1; Insect Orders</td>
<td>BD</td>
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<tr>
<td>W 4</td>
<td>Insect Orders</td>
<td>BD</td>
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<tr>
<td>M 9</td>
<td>1st Presentations</td>
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<tr>
<td>W 11</td>
<td>Insect Orders/Begin External Morphology</td>
<td>Chp 2</td>
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<td>M 16</td>
<td>Exam 1</td>
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<td>W 18</td>
<td>External Morphology cont.</td>
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<td>M&amp;W 23 &amp; 25</td>
<td>Mardi Gras Holiday</td>
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<td>M Mar 2</td>
<td>External Morphology/Begin Circulation &amp; Respiration</td>
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<td>W 4</td>
<td>Circulation &amp; Respiration</td>
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<td>M 9</td>
<td>Quiz 2: Feeding, Digestion, &amp; Excretion</td>
<td>Chp 3</td>
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<td>Date</td>
<td>Monday</td>
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<td>W 11</td>
<td>Reproduction</td>
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<td>M 16</td>
<td>Development &amp; Metamorphosis</td>
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<td>W 18</td>
<td>Nervous System &amp; Sensory Input</td>
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<tr>
<td>M 23</td>
<td><strong>Exam 2</strong></td>
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<td>W 25</td>
<td><strong>2nd Presentations</strong></td>
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<td>M 30</td>
<td>Behavior –1</td>
<td>Chp 4</td>
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<td>W Apr 1</td>
<td>Behavior – 2</td>
<td>Chp 12</td>
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<td>M 6</td>
<td>Insect Ecology – 1</td>
<td>TBA</td>
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<td>W 8</td>
<td><strong>Quiz 3; Insect Ecology – 2</strong></td>
<td>TBA</td>
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<td>M&amp;W 13&amp;15</td>
<td><strong>Spring Break</strong></td>
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<td>M 20</td>
<td>Insects &amp; Plants</td>
<td>Chp 11</td>
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<td>W 22</td>
<td>Insect Management</td>
<td>Chp 16</td>
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<td>M 27</td>
<td><strong>Exam 3</strong></td>
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<tr>
<td>W 29</td>
<td>Insect Management</td>
<td>Chp 16</td>
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<td>M May 4</td>
<td><strong>3rd Presentations</strong></td>
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<td>W 6</td>
<td>Insect Conservation</td>
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<tr>
<td>W 13</td>
<td><strong>Comprehensive Final Exam ... 2:45 – 4:45</strong></td>
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**Note additional assigned readings may be given in the form of handouts.**

**Assigned Readings:**

Assigned readings are relatively extensive and include material from the text and scientific journal articles (we will discuss the journal articles in lab). Handouts may also be given out in class for concepts not adequately covered in your text book. This reading material is intended to reinforce and complement lecture material and to provide additional perspectives on various issues. **You are responsible for material in your text only to the extent the concepts are covered in class.** However, the more you read, the more you will learn. In contrast, **ALL discussion papers are REQUIRED READINGS, i.e., you are responsible for their content on exams whether we specifically talk about all concepts in the associated discussion or not.** With respect to journal articles and exam questions: it is **never** the case that I will expect you to remember gory details; it is **always** the case I will expect you to understand main concepts and points.

**Attendance:**

**Lab Attendance is mandatory.** You will be docked 5pts off of your participation grade for each missed lab unless you have a legitimate excused absence. In addition, **for every three labs missed** you will be docked an entire letter grade for the overall course. Note that success in a course is positively correlated with attendance. So if you want to succeed in the course, you need to also attend every lecture. Class attendance will be taken as per University policy. Note: I will NOT be responsible for withdrawing you from the course. If you stop coming to the course, I will assign a grade of either FY or FN depending on when you stop coming to the course, unless you have officially withdrawn through proper channels.

**Missed exams** will result in a grade of ZERO unless you have a recognized excuse (i.e., one identified as legitimate by the student handbook and accompanied by proof). **Assignments handed in late** will be docked 10% points for each day late (including weekends) unless you have a recognized excuse. I need to be informed in writing (email is okay) of scheduling conflicts that arise because of college sponsored activities **well in advance of the actual conflict.** In the case of a valid excuse, point deductions will commence from the date agreed upon by the professor and the student.

**Grades and Point Distributions:**
Your grade will be based on total points earned out of 800 total points possible. Point breakdown is as follows:

- 240 pts. Three regular exams worth 80 pts. each
- 120 pts. **Comprehensive** Final Exam
- 60 pts. Mini Presentation**
- 60 pts. Three quizzes worth 20 pts. each
- 40 pts. Participation
- 120 pts. Insect Collection**
- 130 pts. Two Lab Practicals worth 65 pts. each**
- 30 pts. 2 Discussion Paper Summaries worth 15 pts. each**

**Exams**
Exam questions will be in a variety of formats, e.g., multiple choice, short definitions, fill-ins, and short essay.

**Other Formats**
**denotes that format/expectations/grading criteria and other details will be forthcoming

**Presentations**
Each undergraduate student will give a 8-10 minute PowerPoint presentation on a specific topic followed by a 3-5 minute question and discussion period. The list of topics has been predetermined by me and your assigned topic will be the one that you randomly draw from those available (We will do this today). You must then also sign up for one of the three lecture dates designated for these presentation (We will do this today also).

This mini presentation component of the course will give us an opportunity to learn about topics that we wouldn’t otherwise be able to cover in class, but that I feel are particularly interesting or otherwise important. Many of the topics we will cover are aspects of insects and entomology that are quirky or novel and that you probably aren’t even aware of. Many of these also explicitly show the impact of insects in your everyday lives. Although I certainly expect a professional effort, I also expect that you will have fun with this assignment, both in terms of your own effort and in terms of what you learn from the presentations that other students give. More specific details on format and grading criteria will be given out next week.

**Grading – General**
There is a one week grace period after an assignment or exam is returned when students can petition the instructor to receive points back if they feel points were wrongly deducted. Sometimes I give points back, sometimes I don’t. After this one week grace period, grades will not be changed.

Scale:

- A 89.56 – 100%
- B 79.56 – 89.55
- C 69.56 – 79.55
- D 59.56 – 69.55
- F 59.55 and lower

**Written Work:**
All written work must be produced using a word processor with 11 or 12 point font, double-spaced with 1” margins, stapled. Unstapled and/or hand-written work will not be accepted (Buy a cheap stapler!). Any work that requires a graph or table must also be computer generated. Hand-drawn
graphs will not be accepted. Microsoft Excel is available on the terminals in the computer lab and is sufficient for producing simple graphs and charts. Microsoft Word is also available and easily makes tables. Any other comparable programs are fine also. If you are unfamiliar with Excel and Word (or analogous programs), NOW is the time to learn. DON’T wait until just before work is due.

University Policies:

Disabilities: "If you are a qualified student with a disability seeking accommodations under the Americans with Disabilities Act, you are required to self-identify with the Office of Disability Services, Room 203, Student Union. No accommodations will be granted without documentation from the Office of Disability Services."

Children: “The classroom is not a place for children and students are not to bring their family members for day care or baby sitting.

Civility: “Free discussion, inquiry, and expression are encouraged in this class. Classroom behavior that interferes with either (a) the instructor’s ability to conduct the class or (b) the ability of students to benefit from the instruction is not acceptable. Examples may include routinely entering class late or departing early; use of beepers, cellular telephones, or other electronic devices; repeatedly talking in class without being recognized; talking while others are speaking; or arguing in a way that is perceived as “crossing the civility line.” In the event of a situation where a student legitimately needs to carry a beeper/cellular telephone to class, prior notice and approval of the instructor is required.” Classroom behavior which is deemed inappropriate and cannot be resolved by the student and the faculty member may be referred to the Office of Judicial Affairs for administrative or disciplinary review as per the Code of Student Conduct which may be found at http://www.selu.edu/StudentAffairs/Handbook/.

Email: Important messages related to the course will be sent to students via email using Blackboard. Only Southeastern’s email address will be used.

Academic Integrity: “Students are expected to maintain the highest standards of academic integrity. Behavior that violates these standards is not acceptable. Examples are the use of unauthorized material, communication with fellow students during an examination, attempting to benefit from the work of another student and similar behavior that defeats the intent of an examination or other class work. Cheating on examinations, plagiarism, improper acknowledgment of sources in essays, and the use of a single essay or paper in more than one course without permission are considered very serious offenses and shall be grounds for disciplinary action as outlined in the current General Catalogue."