Entomology 4000: General Entomology

**Lecturer:** Dr. Joseph M. Raczkowski  
Office: 257 B Howlett Hall  
Phone: 614-688-1054  
Email: raczkowski.2@osu.edu  
*Office hours by appointment*

**Teaching Assistant:**

**Lecture**  
M & W: 1:50 PM – 2:45 PM

**Lab**  
F: 12:40 PM – 2:30 PM

**Reading**

**Required:**  

**Recommended:**  

**Description:**  
The course serves both as a single, concise exposure to the subject and as a foundation for advanced work in entomology. Lectures cover all fundamental aspects but emphasize basic biological phenomena, including diversity, evolution, classification, structure, function, development, reproduction, behavior, and ecology. Laboratories will introduce the major patterns of diversity among insects and will provide experience and develop abilities in the identification of insects. Labs also include a wide variety of demonstrations that supplement lecture topics.

Attendance at all lectures is mandatory.

Attendance for the full laboratory period time is mandatory. A personally collected and personally identified insect collection is a major educational component of the course. It must be started during the first week and brought into the laboratory frequently.
If you must miss an exam for a university-sanctioned event, you must supply appropriate documentation no less than one week before the event. If you are too ill to take an exam, please contact Dr. Raczkowski, within 24 hours of the class period in which the exam was taken.

Grading

<table>
<thead>
<tr>
<th>Assignment</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>Lab Quizzes (Best 4 of 5)</td>
<td>5%</td>
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<tr>
<td>Lecture Quizzes (5)</td>
<td>5%</td>
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<tr>
<td>Preliminary Insect Collection</td>
<td>5% (only class and order evaluated)</td>
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<tr>
<td>Identification Exam 1</td>
<td>10% (morphology, classes, orders)</td>
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<tr>
<td>Written midterm Exam</td>
<td>15%</td>
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<tr>
<td>Identification Exam 2</td>
<td>15% (hexapod orders and families)</td>
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<td>Final Insect Collection</td>
<td>20% (class, order, and family all evaluated)</td>
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<tr>
<td>Final Written Exam</td>
<td>25% (comprehensive)</td>
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Letter grades will be assigned based on the following scale:

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<thead>
<tr>
<th>Grade</th>
<th>%</th>
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<tbody>
<tr>
<td>A</td>
<td>93-100</td>
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<tr>
<td>A-</td>
<td>90-92</td>
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<tr>
<td>B+</td>
<td>87-89</td>
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<tr>
<td>B</td>
<td>83-86</td>
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<tr>
<td>B-</td>
<td>80-82</td>
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<tr>
<td>C+</td>
<td>77-79</td>
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<td>C</td>
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<td>C-</td>
<td>70-72</td>
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<td>D+</td>
<td>67-69</td>
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<tr>
<td>D</td>
<td>63-66</td>
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<td>E</td>
<td>62 and below</td>
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**Academic Integrity:**
Please note that the university policy will serve as the basis for dealing with any such issues in this course. [http://studentaffairs.osu.edu/pdfs/csc_12-31-07.pdf](http://studentaffairs.osu.edu/pdfs/csc_12-31-07.pdf)

**Special Needs and Accommodations:**
Any student who feels s/he may need an accommodation based on the impact of a disability should contact me privately to discuss your specific needs. Please contact the Office for Disability Services at 614-292-3307 (Fax: 614-292-4190; TDD: 614-292-0901) in room 150 Pomerene Hall, 1760 Neil Ave, Columbus, Ohio 43210 to coordinate reasonable accommodations for students with documented disabilities. [http://www.ods.ohio-state.edu/](http://www.ods.ohio-state.edu/)

**Incomplete Grade Policy:**
Incomplete grades will be given only in special circumstances as outlined in university policy. [http://trustees.osu.edu/rules8/ru8-21.php](http://trustees.osu.edu/rules8/ru8-21.php)
General Information:
Additional information on general Ohio State University Policies can be found at:
http://trustees.osu.edu/ChapIndex/index.php

Lecture/Lab Schedule:
*topics are subject to change*

**Week 1**
August 27: Collecting/Preserving, Characteristics
August 29: Lab - Arthropod Anatomy

**Week 2**
September 1: No Classes
September 3: Importance of Insects
September 5: Lab - External Morphology I

**Week 3**
September 8: Evolution of Insects
September 10: External Structure, Lecture Quiz 1
September 12: Lab - External Morphology II, Lab Quiz 1

**Week 4**
September 15: Internal Anatomy
September 17: Digestive/Excretory
September 19: Lab - Internal morphology
**September 20: Collecting Trip to Deep Woods**

**Week 5**
September 22: Circulatory/Respiratory
September 24: Reproductive System, Lecture Quiz 2
September 26: Lab - Arthropod Classes and Orders, Lab Quiz 2

**Week 6**
September 29: Endocrine System/Growth & Molting
October 1: Endocrine System/Metamorphosis
October 3: Lab - Hexapod Orders: Adults and Immatures

**Week 7**
October 6: Nervous System/ Sensory Receptors
October 8: Semiochemicals, Lecture Quiz 3
October 10: Lab - Identification Exam I

**Week 8**
October 13: Written Midterm
October 15: TBA
October 17: Lab - Odonata, Orthoptera, and Blattaria Families
Week 9
October 20: Muscles and Locomotion
October 22: Migration/Behavior I
October 24: Lab - Hemiptera Families, Lab Quiz 3

Week 10
October 27: Behavior II
October 29: Mating, Lecture Quiz 4
October 31: Neuroptera & Coleoptera Families

Week 11
November 3: Presocial
November 5: Termites
November 7: Lab - Hymenoptera Families, Lab Quiz 4

Week 12
November 10: Wasps
November 12: Honey Bees, Lecture Quiz 5
November 14: Lab - Lepidoptera Families

Week 13
November 17: ESA (On-line lecture on Carmen)
November 19: ESA (On-line lecture on Carmen)
November 21: Lily Conference

Week 14
November 24: Lab Quiz 5
November 26: No classes
November 28: No classes

Week 15
December 1: Enemies, Protection
December 3: Vertebrate Parasites
December 5: Lab - Identification Exam II

Week 16
December: Pest Management

Final Exam: Thursday, December 11th, 4:00 - 5:45 PM