ENTMLGY 5130 – Field Insect Taxonomy (the Bag’em & Tag’em Course!)
3 Semester Credits – Summer Semester 2014
Lecture: Mo & Tu 9:10-10:05am, 115 Howlett; Lab: Mo & Tu 10:20am-1:20pm, 115 Howlett
Lectures will be video-linked to Wooster

A. Instructor:
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B. Course Objectives

1.) The purpose of this course is to give students actual field experience in collecting,
    preserving and properly preparing entomological specimens, as well as,
    developing their skills using identification (taxonomic) keys.
2.) Students will use and demonstrate their ability to use traditional insect collecting
    techniques (nets, traps, extractors, aspirators, killing methods, etc.).
3.) Students will show their skills of properly preserving and presenting
    entomological specimens used in taxonomic, systematic, and biodiversity analysis
    studies.
4.) Students will learn the terms used in taxonomic keys to identify the major orders
    of insects at the family and genus levels. They will demonstrate this ability by
    correctly identifying specimens collected.

C. Course Topic Outline (using 7-week summer semester)

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<tr>
<th>Date</th>
<th>Week 1</th>
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<tbody>
<tr>
<td>16 Jun</td>
<td>Lect 1</td>
<td>Introduction to Field Taxonomy – glass requirement, collecting techniques</td>
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<td>16 Jun</td>
<td>Lab 1</td>
<td>Tools – making killing bottles; collecting &amp; preserving hexapod specimens; pinning techniques (using light trap samples)</td>
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<td>17 Jun</td>
<td>Lect 2</td>
<td>Classes of Arthropods</td>
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<td>17 Jun</td>
<td>Lab 2</td>
<td>Field Trip – Chadwick Area</td>
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Week 2

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<tr>
<td>23 Jun</td>
<td>Lect 3</td>
<td>Review Apterygote Hexapods</td>
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<tr>
<td>23 Jun</td>
<td>Lab 3</td>
<td>Collect Berlese extraction samples; aquatics collecting</td>
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<td>24 Jun</td>
<td>Lect 4</td>
<td>Paleoptera</td>
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<td>24 Jun</td>
<td>Lab 4</td>
<td>Work on collections; Waterman woodlot</td>
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Week 3

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<th>Date</th>
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<tr>
<td>30 Jun</td>
<td>Lect 5</td>
<td>Orthopteroids; Plecopteroids &amp; Dictyoptera</td>
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<tr>
<td>30 Jun</td>
<td>Lab 5</td>
<td>Collecting trip (weather permitting); work on collections</td>
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<tr>
<td>1 July</td>
<td>Lect 6</td>
<td>Hemiptera</td>
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<td>1 July</td>
<td>Lab 6</td>
<td>Work on collections</td>
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Week 4
7 July  Lect 7  Lepidoptera with Dr. Steve Passoa (USDA expert), at Museum of Biological Diversity!
7 July  Lab 7  Lepidoptera with Dr. Steve Passoa, cont’d
8 July  Lect 8  Coleoptera 1 Thysanoptera, Psocoptera & Phthiraptera
8 July  Lab 8  Collecting & mounting Thysanoptera, Psocoptera & Phthiraptera

Week 5
14 July  Lect 9  Coleoptera I
14 July  Lab 9  Work on Collections
15 July  Lect 10  Coleoptera II
15 July  Lab 10  Work on Collections

Week 6
21 July  Lect 11  Mecoptera & Neuroptera
21 July  Lab 11  Work on Collections
22 July  Lect 12  Hymenoptera I
22 July  Lab 12  Hymenoptera II & Work on Collections

Week 7
28 July  Lect 13  Diptera I
28 July  Lab 13  Diptera II & Work on Collections
29 July  Lect 14  Siphonaptera & Strepsiptera
29 July  Lab 14  Final Practicum (sight and key identification of 20 arthropod classes, hexapod orders and major hexapod families) & Work on Collections

31 July  Collections Due

D. Textbooks

Bugguide.net is an excellent resource for identification, but this site will not be used as the final word for insect families. Only B&D will be the final standard.

E. Grade Determination

Collections –
Arthropods other than Hexapoda (10 orders of Arachnida, and/or classes of Crustacea, and/or classes of myriapods) = 50 points (5 points extra for additional orders of arachnids and/or classes of crustaceans or myriapods).
Orders of Insects (22 required) = 220 points (15 points extra for additional orders)
Families of Insects (150 required) = 750 points (5 points per family but deductions for poor preservation/presentation) (5 points extra possible for additional families)
Final Exam – (20 specimens to be identified to class, order or family) = 80 points
Grading Scale – points accumulated (1,100+ possible), curve not used, levels can be moved down if needed (never up!).

1,023 points or more = A; 1,022-990 points = A-; 998-968 points = B+; 967-913 = B; 912-880 points = B-; etc.

F. Academic Misconduct Statement
Students will be encouraged to work on assignments together but they will still be held accountable for normally defined situations of academic misconduct (plagiarism, cheating, and other forms of misconduct as defined by the university). Such misconduct will not be tolerated in this course. According to Faculty Rule 3335-31-02, Academic Misconduct is defined as any activity which tends to compromise the academic integrity of the institution or subvert the educational process. Please see the Student Resource Guide or the instructor if you have questions about this policy.

G. Disability Statement
This course normally requires some physical dexterity to examine, dissect specimens and to demonstrate knowledge of morphological characteristics. However, if any student feels that she/he may need an accommodation based on the impact of a disability as documented through the Office for Disability Services (614-292-3307 in room 150 Pomerene Hall) we will work diligently to coordinate reasonable accommodations for students with such documented disabilities.