

TENTATIVE SCHEDULE OF COURSE TOPICS

Date	Major topic	Other topics/activities	Tasks/assignments	Readings/sources
8 June	Intro to insects — diversity & success	collecting, mounting tools; daily bug	Intro to WOWBugs	Field Guide, pp. 4-22 Atlas pp. 37-47  WOWBugs pp. 90-93; 94-99
9 June	The insect body plan metamorphosis, growth & development	mounting techniques; labeling	Grasshopper or cricket dissection; meet the caterpillar; make kill jars	Atlas pp. 5-31 WOWBugs pp. 5-17, 264-268 Field Guide pp. 29-42
12 June	Field Trip — Sandy Creek Nature Center		Baiting and trapping techniques; aquatic insects	
13 June	Insect Classification Dragonflies, damselflies, & mayflies, and stoneflies	sexual selection; using dichotomous keys	Set up Berlese funnels Insects as bioindicators in aquatic ecosystems	Field Guide, pp. 43-46, 56-59 Atlas pp. 36-43, 54-61, 76
14 June	Grasshoppers & kin; stick insects	sensory systems	cricket song	Atlas pp. 63-69 Eisner, 83-89, 94-95, 307-310
15 June	Roaches, Mantids, Earwigs & Termites	urban insects; integrated pest management	Termite communication & gut symbionts;	Atlas pp. 62, 70-75, 77 Eisner, 54-56, 198-206, 295-297
16 June	True bugs	insect endocrinology	Milk weed bugs	Atlas pp. 83-97 Eisner, 233-243, 250-253
19 June	Cicadas, aphids & kin	Biological control	Bottle biology	Atlas pp. 98-105 Eisner, 156-165, 302-306, 318-323
20 June	Thrips, Springtails, Bristletails & review			
21 June	<b>MIDTERM EXAM</b>			
22 June	Beetles I	defensive strategies	Bess Beetles strength	Atlas pp. 111-127 Eisner, 8-43, 119-139, 141-153, 167-175, 328-347,
23 June	Beetles II	insect/plant coevolution	Mealworms culture; ladybugs	Atlas pp. 111-127 Field Guide, pp. 146-150 Eisner, 68-73, 189-196, 258-264,

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26 June	Field Trip -- Lake Herrick			
27 June	Butterflies	mimicry	Monarchs, painted ladys, and cabbage whites	Atlas pp. 129 - 133 Eisner, 387-93, 291-298, 165-175
28 June	Moths & Caddisflies	pollination biology; entomological resources	Mexican jumping beans, Silkworms	Atlas pp. 134 - 139 Eisner, 94-103, 349-384
29 June	Flies	forensic entomology	Mosquitoes; fly taste; Fruit fly cultures	Atlas pp. 41-151
30 June	Ants, Bees, Wasps	insectan sociality	Mud Dauber nest dissection	Atlas pp. 153-165 Eisner, 310-315
3 July	dobsonflies, antlions, lacewings, scorpion-flies	honey bee dance language	<b>COLLECTION DUE</b>	Atlas pp. 106-110, 152 Eisner, 114-118, 158-164, 245-249, 265-273,
4 July	Holiday			
5 July	fleas, lice, ticks, mites, spiders, pillbugs	medical entomology	Review	Atlas pp. 45-50, 52-53, 79-82 Eisner, 146-151, 217-253,

6 July- **FINAL EXAM 8-10:15 AM**

**ENTOMOLOGY 5730/7730**  
**ENTOMOLOGY FOR TEACHERS**

**Course objectives are to enable teachers to:**

- answer the “what is it?” question
- be knowledgeable about “what does it do?”
- develop an identified reference teaching collection of insects representative of the diversity and ecological/behavioral spectrum encompassed within the Class Insecta
- demonstrate proper preservation, mounting, and labeling techniques for insects and other arthropods
- appreciate and understand the underlying reasons for the diversity, adaptability, and evolutionary success of insects
- become familiar with curricular resources that use insects in the classroom
- be comfortable using selected insects as exemplars for teaching diverse life science concepts through inquiry
- connect to sources of equipment, supplies, and materials relating to insect science
- appreciate how insects relate to people and the rest of the planet, and their role in history

**Texts:**

A: Required

*For Love of Insects* by Thomas Eisner, 2003. Belknap Press of Harvard University Press, Cambridge, MA, ISBN0-674-01827-3

*Photographic Atlas of Entomology and Guide to Insect Identification* by J. L. Castner, 2001, Feline Press, Gainesville, FL, ISBN 0-9625150-4-3

*The Peterson Field Guide to Insects* by D. J. Borror & R. E. White, 1970/ paperback/ Houghton Mifflin, Boston, ISBN 0-395-18523-8

B: Optional/Recommended

*WOWBugs: New Life for Life Science* by Matthews, R. W., Koballa, T. R., Jr., Flage, L. R. & E. J. Pyle / 1996 edition/ paperback / Riverview Press, Athens, GA ISBN 1-888499-06-0

*Peterson First Guide to Caterpillars* by A. B. Wright / 1993 edition / paperback /  
Houghton Mifflin, Boston, ISBN0-395-91184-2

CLASS MEETS FROM 8:00 TO 10:15 DAILY IN ROOM 426 BIO SCI.

Daily schedule will include lecture (ca. 45-50 min), daily bug presentations (40-50 min), break (15 min), lab or other activity (45-60 min). NOTE: Lab and lecture are integrated, not separated as listed in OASIS.

You should collect and bring insects to class daily to work on and share. Room 426 will be open and accessible for independent work daily until 5 pm; no other classes are scheduled for this room.