ENTO 805 Introduction to Entomology Fall 2018

Instructor: Dr. Thomas J. Weissling

Office: 214 Entomology Hall, East Campus

Phone: 472-8680 (office)

E-mail: tweissling2@unl.edu (this is the best way to reach me)

WHAT YOU WILL LEARN

A general introduction to insects. Topics covered include insect diversity, identification, morphology and physiology, ecology and behavior, pest management, and discussions about the beneficial, economic, and medical importance of insects.

LEARNING OUTCOMES

Upon completion of this course, you will be able to:

- Discuss the diversity of insects and basics of insect biology and ecology
- · Identify insects to order
- · Be familiar with insect collecting and curation
- Provide examples of the beneficial and detrimental roles insects play in our lives
- · Discuss the tactics involved in modern insect management

INSTRUCTIONAL METHOD

Canvas will be used for delivery of all materials pertinent to this course (lectures, asynchronous discussions, assignments, and tests). PDF's will be used for delivery of lectures, which will include text and images and will be strengthened by narration to emphasize key points. Asynchronous discussion threads will be used to assess student comprehension of lecture materials.

TEXTBOOKS

None required. Needed materials will be posted on Canvas.

<u>Suggested:</u> Borror and Delong's: Introduction to the study of insects....**7th ed.** (This text is required for the required class, ENTO 818 Insect ID and Natural History).

DESCRIPTION OF ASSIGNMENTS AND EXAMS

Exams: There will be 2 examinations, a midterm and a final. Exams will be timed, multiple choice, and taken on Canvas

Quizzes: Ten, 20 point online quizzes will be given. You will be unable to continue with course material until you score above 90% on each guiz.

Point Breakdown:

Tests (100 points/test) 200 points Quizzes (20 X 10 points each) 200 points

Total 400 points

GRADING: based on percent

| Grade | Scale (%) | Grade | Scale (%) |
|-------|-------------|-------|--------------|
| A+ | 97.5 - 100 | C+ | 77.5 – 79.9 |
| Α | 92.5 – 97.4 | С | 72.5 – 77.4 |
| A- | 90 – 92.4 | C- | 70 – 72.4 |
| B+ | 87.5 – 89.9 | D+ | 67.5 – 69.9 |
| В | 82.5 – 87.4 | D | 62.5 – 67.4 |
| B- | 80 – 82.4 | D- | 60 – 62.4 |
| | | F | 59.9 or less |

Tentative Lecture Schedule (topics and dates subject to change)

| Lecture | Lecture Topic | | |
|---------|---|--|--|
| 1 | Course Introduction/Why study insects | | |
| 2 | Classification of Arthropods (Characteristics) | | |
| 3 | Class Insecta: Evolution | | |
| 4 | External Structure and Identification | | |
| 5 | Biology and ID of the Entognathous Hexapods | | |
| 6 | Biology and ID of the Apterygote Insects | | |
| 7 | Biology and ID of Ephemeroptera, Odonata, Orthoptera, Phasmatodea | | |
| 8 | Biology and ID of Grylloblattodea, Mantophasmatodea, Dermaptera, Plecoptera | | |
| 9 | Biology and ID of Zoraptera, Isoptera, Mantodea, Blattodea, | | |
| 10 | Biology and ID of Hemiptera | | |
| 11 | Biology and ID of Thysanoptera, Psocoptera, Phthiraptera | | |
| 12 | Biology and ID of Coleoptera | | |
| 13 | Biology and ID of Neuroptera, Hymenoptera | | |
| 14 | Biology and ID of Trichoptera, Lepidoptera | | |
| 15 | Biology and ID of Siphonaptera, Mecoptera | | |
| 16 | Biology and ID of Diptera | | |
| 17 | Collecting and curating | | |
| 13 | Growth and Development | | |
| 14 | Metamorphosis | | |
| 15 | Internal Systems: Digestive, Excretory, Circulatory | | |
| 16 | Internal Systems: Respiratory, Nervous, Reproductive | | |
| 17 | Sensory structure and function | | |
| 18 | Insect Ecology | | |
| 19 | Sociality | | |
| 20 | Insect Behavior: Chemical Ecology, Mating, Reproduction, Oviposition | | |
| 21 | Insect Behavior: Migration/Dispersal/Diapause | | |
| 22 | Insect Roles: Pollination Biology | | |
| 23 | Insect Roles: Decomposition | | |
| 24 | Insects Roles: Medically Important Insects | | |
| 25 | Insects as Pests: Agricultural, Structural | | |
| 26 | Insects as Pests: Disease Vectors | | |
| 27 | Management, Integrated Pest Management | | |
| 28 | Conservation of Insects | | |

Additional Information:

PLEDGE OF INSTRUCTIONAL STANDARDS

Entomology instructors will provide our students a complete syllabus meeting all UNL standards, our classes will be based on current science and will follow published schedules and descriptions, and our instructors will be timely in returning grades and in responding to our students.

ADA STATEMENT

Students with disabilities are encouraged to contact Christy Horn for a confidential discussion of their individual needs for academic accommodation. It is the policy of the University of Nebraska-Lincoln to provide flexible and individualized accommodation to students with documented disabilities that may affect their ability to fully participate in course activities or to meet course requirements. To receive accommodation services, students must be registered with the Services for Students with Disabilities (SSD) office, 132 Canfield Administration, 472-3787 voice or TTY (updated 8/20/07)

ACADEMIC HONESTY

Students are expected to adhere to guidelines concerning academic dishonesty as specified in Entomology's Academic Integrity Policy (http://entomology.unl.edu/dishonesty.shtml). As a student at UNL, you enjoy rights and protections under the student code of conduct (http://stuafs.unl.edu/dos/code) and are obligated to conduct yourself in compliance with the code. Academic dishonesty can involve cheating; fabrication or falsification of information; plagiarism; or misrepresenting illness, injury, accident, etc., to avoid and/or delay an examination/quiz or the timely submission of academic work and assignments. Disciplinary action imposed may range from a warning (written or oral) to assigning the student a final course grade of F for the semester. The instructor may choose to assign zero or partial credit for a specific assignment, quiz, examination or written report in which academic dishonesty was involved.

If a student wishes to appeal a claim of academic dishonesty, the following process must be followed. First, the student must submit a written appeal to the instructor of the course and state their reason(s) for appealing. If this student appeal cannot be resolved with the course instructor, then the student must immediately submit their appeal statement within seven days to the Department's Curriculum Committee for their recommendation. If a satisfactory solution to this appeal is still not reached with the Department Curriculum Committee, the student's written appeal will then be forwarded to the Department Head. If a satisfactory solution is still not achieved at the Department Head level, the student may then submit their written appeal statement to the College of Agricultural Sciences and Natural Resources (CASNR) Dean's Office. The appeal process for the College of Agricultural Sciences and Natural Resources will then be followed as outlined by the College.

Students are encouraged to contact the instructor for clarification of these guidelines if they have questions or concerns

INFORMATION FOR EMERGENCY RESPONSES: Fire Alarm (or other evacuation)

In the event of a fire alarm: Gather belongings (Purse, keys, cellphone, N-Card, etc.) and use the nearest exit to leave the building. Do not use the elevators. After exiting notify emergency personnel of the location of persons unable to exit the building. Do not return to building unless told to do so by emergency personnel.

Tornado Warning: When sirens sound, move to the lowest interior area of building or designated shelter. Stay away from windows and stay near an inside wall when possible.

Active Shooter Evacuate: if there is a safe escape path, leave belongings behind, keep hands visible and follow police officer instructions. Hide out: If evacuation is impossible secure yourself in your space by turning out lights, closing blinds and barricading doors if possible. Take action: As a last resort, and only when your life is in imminent danger, attempt to disrupt and/or incapacitate the active shooter.

UNL Alert: Notifications about serious incidents on campus are sent via text message, email, unl.edu website, and social media. For more information go to: http://unlalert.unl.edu. Additional Emergency Procedures can be found here: http://emergency.unl.edu/doc/Emergency Procedures Quicklist.pdf