

Insect Biology - ENTO 115

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WHAT STUDENTS WILL LEARN

This course offers a general introduction to insects. Topics covered include insect diversity, insect morphology and physiology, insect ecology and behavior, and considerations of the economic and medical importance of insects. By the end of this course you should be able to recognize common insects that occur in Nebraska and understand their biology and unique adaptations.

WHY TAKE THIS COURSE?

- Insects have an enormous impact on humans.
- Insects outnumber all other organisms.
- Insects are amazingly diverse.

TEXTBOOKS

There is no required text. References that you may find useful throughout the semester include the following introductory entomology textbooks:

O'Toole, C. 2002. Firefly Encyclopedia of Insects and Spiders. Firefly Books Inc.

Turpin, F.T. 2000. Insect Appreciation, 2 nd edition. Kendall/Hunt Publishing Company.

OFFICE HOURS

We have "Virtual Office Hours" and will be available for interaction via phone, e-mail, or on the Blackboard site. However, feel free to contact us at your convenience. Our goal is to respond to your questions in a timely manner. At a minimum, e-mail and the discussion board on Blackboard site will be checked once a day. Response time for questions will typically be within 24 hours.

Grades for assignments and tests will be posted on the Blackboard site within one week of the due date.

COURSE INFORMATION

Insect Biology is likely to be very different from other university and high school courses that you have taken in the past. This course is a distance education course offered by the Department of Entomology, University of Nebraska-Lincoln. Since this is a distance education course and we do not meet on a regular basis, you will have to be willing to take control of your learning in this class. We have set deadlines for turning in assignments, taking exams, and viewing the lectures to help you stay on track.

Lectures can be accessed through Blackboard:

(<http://my.unl.edu/webapps/portal/frameset.jsp>). Blackboard also includes information on deadlines, assignments, and exams, as well as other important information pertaining to this course. Your first assignment is to view the course syllabus through Blackboard to learn more about how the course works and to provide you with an overview of the material we will be covering during the semester. After reviewing the syllabus, continue as outlined in the course syllabus lecture schedule.

DESCRIPTION OF ASSIGNMENTS AND EXAMS

Assignments:

1. **Introductory Assignments** - Purpose is to familiarize you with Blackboard, the library services, and how to send e-mail messages and attachment files.
2. **Insect Pets** - Each of you will have two insect house-guests for the semester. The two insect pet projects require you to review existing literature, develop a set of hypotheses related to the habitat selection, food preference, defense behaviors, and development of your pets; test your hypotheses through observations and designing experiments to gather appropriate data; interpret your data sets; and ultimately make inferences from the data to determine whether your original hypotheses were accepted. At the end of each project, you will prepare a scientific report that includes your hypotheses, methods, data sets and summaries, and conclusions.
3. **Website Assignments** - Throughout the semester you will be assigned several website assignments. These assignments are designed to provide you

an opportunity to learn more about entomology and to reinforce concepts presented in class.

- Classification Exercise (15 pts)
- Insects in the Sea (15 pts)
- Designer Insect (15 pts)
- How Does the Digestive System Work? (15 pts)
- Comparison of Human & Insect Physiological Systems (15 pts)
- Termite Activity (15 pts)
- Genetically Modified Mosquitoes (15 pts)
- Biotechnology - Bt Corn and Monarch Butterflies (15 pts)

Information Regarding Assignments:

All assignments will be submitted to the Assignment Tool or Discussion Board through Blackboard unless otherwise instructed. Website assignments will be due one week after they are assigned. Assignments are due on time. Late assignments will be down graded (2 points per day), and assignments more than a week late will not be graded. If circumstances arise that do not allow you to complete your assignments by the specified dates, please let us know.

Hourly Exams:

There will be three hourly exams during the semester. Each exam will be a combination of short answers and multiple choice questions. No make up exams without prior approval or a written confirmation of a medical problem or family emergency!!!

Final Exam:

The final exam will cover concepts from the entire semester. The final exam will have the same format as the hourly exams.

COURSE EVALUATION

Test 1	100 points
Test 2	100 points
Test 3	100 points
Final Exam	150 points
Introductory Assignments	15 points
Insect Pets (2 pets @ 50 points)	100 points
Website Assignments (15 points each)	120 points

Total

685 points

** Letter grades will be assigned based on straight percentages of 100 - 90% A range, 89 - 80% B ranges, etc.

SCALE

100 - 98	A+	89 - 87	B+	79 - 77	C+
97 - 94	A	86 - 83	B	76 - 73	C
93 - 90	A-	82 - 80	B-	72 - 70	C-
69 - 67	D+	59 - Below	F		
66 - 63	D				
62 - 60	D-				

Other Information

ENTO / BIOS 115 has been certified for the Achievement Centered Education (ACE) Learning Outcome 4 (Use scientific methods and knowledge of the natural and physical world to address problems through inquiry, interpretation, analysis, and the making of inferences from data, to determine whether conclusions or solutions are reasonable). This course is also designated as an Essential Studies (ES) course for Area D - Science and Technology.

For students wanting (needing) additional instruction in entomology and (or) laboratory credit hours in science, a one-credit entomology introductory laboratory course, ENTO / BIOS 116 (Insect Identification) is available.

Other Important Items of Information:

Technical Requirements

In order to take this course, you must have:

1. E-mail
2. An Internet connection (Netscape 3.01 or higher and Internet Explorer 4.0 or higher)
3. Microsoft Word
4. PowerPoint
5. Adobe Acrobat Reader
6. RealPlayer

The technology skills you will need to succeed in this course are a basic familiarity with your Web browser, e-mail, word processing, and the ability to locate specific information on the Internet. You must also know or learn how to use Blackboard courseware. All of the technologically related plug-ins you need (i.e. for Adobe Acrobat Reader) for class will be available under the "External Links" button on the Blackboard site.

Accommodating Student Disabilities

Any student in this course who has a disability that may prevent him or her from fully demonstrating his or her abilities should contact me as soon as possible, so we can discuss accommodations necessary to ensure full participation and facilitate your educational opportunity.

Course Etiquette

Be courteous to others when submitting assignments and participating in discussions. Offensive materials will be removed from the course web site. Students will be contacted if material is deemed inappropriate by any of the instructors.

Where to get HELP!?!

Various student resources are available for any issues you experience with Blackboard® courseware and any other technical problems that might arise during the course of the semester. You can find a list of helpful resources under "Online Help Resources" on the "My UNL" Blackboard page.

Library Services

UNL distance students have access to a tremendous resource-UNL's Library Services!

If you are using Blackboard, there is a tab at the top of the page, "UNL Library"- just click and you are there. This web site can also be accessed directly at:

<http://iris.unl.edu/>

After you use one of the above options, you will be at the Iris Main Page: Click on "Services", then, on the following page click on "Distance Education Services." At this point, you will be able to read about the various services UNL's Library Services provide to distance learners.

For information about other services check out:

<http://www.unl.edu/libr/dept/subjname.html>

This page has information about the web request form, information about liaison librarian services, various delivery options (including web delivery), and much more.

Elaine Nowick, a liaison librarian, provides reference assistance for students in Entomology. She can be reached at (402) 472-4408 or through email (enowick1@unl.edu).