

Course Information

Insects: Friend And Foe CRN- 67231 - ENTM 10500 - 004

Insects: Friend And Foe CRN 11853 - ENTM 10500 - 005

Insects: Friend And Foe CRN 25451 - ENTM 10500 - 006

Courses are Online or Distance

Course credit hours: 3.0

All course information is posted on Brightspace

Instructor:

Instructor: Professor Jonathan Neal

Office hours: Arranged; Smith 127E

My preferred method of communication is through email. We will try to respond to emails within 24 h. The answer to your question may be in the syllabus or on Brightspace. Please check there first

Phone: 765 49-44594 (You can leave a message on my phone, but it will send me an email translation. Use email for a more prompt response)

email: jneal@purdue.edu

Teaching Assistant: Angela Rincon

email: rincona@purdue.edu

We plan to have virtual office hours on Tuesdays and Thursdays from 10:30-11 am EDT and Noon to 12:30 pm EDT. Additional meetings can be arranged by email.

Course Description

A one-semester course for non-science students who want to know more about insects - the most numerous organisms on earth. An introduction to insects and their relationship with humankind, including interesting aspects of insect biology; insects in music, decoration, history; use of insects in teaching at the elementary school level; their use in art, photography, and drawing; insects as human food.

Learning Resources, Technology & Texts

Your course Brightspace page contains this syllabus, all of the readings or links to online reading, videos and other materials. Please review you page when it becomes available at the

start of semester. It is strongly suggested that you explore and become familiar not only with the site navigation, but with content and resources available for this course. See the Help tab for resources.

Learning Outcomes

ENTM 10500 Specific Learning Outcomes:

1 Describe the events of earth history and environmental forces important to the evolution of insects as a dominant life form in terms of number of species, numbers of individuals and biomass and the impact of current environmental changes and human transport on insect populations and species extinctions.

2 Explain the contributions entomology makes to society, how society supports entomology, and the costs and benefits of public funded insect research collections, laboratories, research stations and management programs.

3 Communicate scientific information about insects in lay terms including natural history and biology of commonly encountered insects or insect groups, the benefits and harm caused by insects, when, why and how insect populations are managed and how humans exploit insects and insect products to advance in science, technology and address societal challenges.

4 Develop informed policy positions by studying existing policies, identifying a problem, proposing a policy[s] to address the problem, determining the costs and benefits of implementing or not implementing the policy including how policies confer benefits or impose costs on groups or individual, identify ethical considerations of the policy or its alternatives, develop substantiated arguments to support and oppose the policy and evaluate whether the arguments are valid and fact based, emotional or cultural in nature, or false, misleading or based on misinformation or lack of information?

5 Explain the difference between a belief and a scientific conclusion and the steps of the scientific method used to form a scientific conclusion about questions generated by an observation.

Apply concepts for evaluating the reliability of sources and the scientific validity of information they present

Assessment

The grading philosophy of this class is as follows:

- A: Submitted outstanding work in all metrics (knowledge, application and completeness)
 - B: Performance is above average, but with noticeable flaws.
 - C: Minimum requirements for the course were met
 - D: Some knowledge or some work completed, but did not meet minimum standards.
 - F: Student learned little to nothing or failed to complete work.
- +/- grades indicate borderline between categories.

The following activities are awarded points as follows:

Test Questions: 339 points

Assignments: 130 Points (13 @10 points each)

Reading Quizzes: 50 Points (only the top 10 scores count)

Projects: 200 Points (2 required)

Total Points: 719

(See Brightspace for Due Dates)

The points earned reflect the level of achievement as follows:

A	669
A-	647
B+	626
B	600
B-	575
C+	554
C	525
C-	504
D	431
F	<431

Bonus points may be awarded for participation in surveys and other online activities.

Schedule of require work:

There are 2 team projects. Project 1 will start in the 2nd week of class and be completed in the first half of class. Project 2 will start after Project 1 is completed and be due before finals week. (see Brightspace for due dates)

In each of weeks 1-13, you will have 1 assignment, a reading to complete and an accompanying reading quiz. During the following week, you will be tested on the material for the prior week. A study guide accompanies every test. All questions will come from the study guides.

Schedule of Topics

Week 1	History of Insects and Arthropods
Week 2	Growth/Metabolism/Nutrition/Insects as food & feed
Week 3	Beetles/Invasive Species
Week 4	Lepidoptera
Week 5	Flies, Fleas and Disease
Week 6	Insect senses, communication and orientation
Week 7	Wasps/ Bees and Beekeeping
Week 8	Ants and Social behaviors
Week 9	Parasites/ Paraneoptera
Week 10	Aquatic Insects/ Environmental Indicators/ Polyneoptera
Week 11	Cockroaches and Termites
Week 12	Digestion & Locomotion
Week 13	Pest Management, pesticides and policy
Week 14	Complete all assignments and projects

Attendance Policy

A good online learning experience requires you to be engaged. You will be assigned to a team that will work on team projects and assignments. Your active participation and contributions will determine, in part, your grade on team efforts. Surveys posted on about a weekly basis and may be awarded bonus points. Please use these surveys and email to communicate any difficulties you may have whether they are technical difficulties or health related. Please let me know of any issues and we will try to find solutions. The key is frequent, quality communication.

Academic Integrity

All submitted work other than team submissions must be your own. Copying answers will result in a grade of zero on the assignment.

[Purdue's Honor Pledge](#): "As a boilermaker pursuing academic excellence, I pledge to be honest and true in all that I do. Accountable together - we are Purdue"

Academic integrity is one of the highest values that Purdue University holds. Individuals are encouraged to alert university officials to potential breaches of this value by either emailing integrity@purdue.edu or by calling 765-494-8778. While information may be submitted anonymously, the more information that is submitted provides the greatest opportunity for the university to investigate the concern. More details are available on our course Brightspace table of contents, under University Policies.

[Nondiscrimination Statement](#)

Purdue University is committed to maintaining a community which recognizes and values the inherent worth and dignity of every person; fosters tolerance, sensitivity, understanding, and mutual respect among its members; and encourages each individual to strive to reach his or her own potential. In pursuit of its goal of academic excellence, the University seeks to develop and nurture diversity. The University believes that diversity among its many members strengthens the institution, stimulates creativity, promotes the exchange of ideas, and enriches campus life.

[Link to Purdue's nondiscrimination policy statement](#)

[Students with Disabilities](#)

Purdue University strives to make learning experiences as accessible as possible. If you anticipate or experience physical or academic barriers based on disability, you are welcome to let me know so that we can discuss options. Students with disabilities should contact The Disability Resource Center. Should you have a change in health status, the best policy is to contact the DRC who will then confidentially notify your academic advisors and instructors.

drc@purdue.edu

Or by phone: 765-494-1247.

[Emergency Preparation](#)

In the event of a major campus emergency, course requirements, deadlines and grading percentages are subject to changes that may be necessitated by a revised semester calendar or other circumstances beyond the instructor's control. Relevant changes to this course will be posted onto the course website or can be obtained by contacting the instructors or TAs via email or phone.

You are expected to read your @purdue.edu email on a frequent basis.

[Mental Health Statement](#)

If you find yourself beginning to feel some stress, anxiety and/or feeling slightly overwhelmed, try WellTrack. Sign in and find information and tools at your fingertips, available to you at any time. If you need support and information about options and resources, please see the Office of the Dean of Students during drop-in hours (M-F, 8 am- 5 pm).

If you're struggling and need mental health services, Purdue University is committed to advancing the mental health and well-being of its students. If you or someone you know is feeling overwhelmed, depressed, and/or in need of mental health support, services are available. For help, such individuals should contact Counseling and Psychological Services (CAPS) at 765-494-6995 during and after hours, on weekends and holidays, or by going to the CAPS office of the second floor of the Purdue University Student Health Center (PUSH) during business hours.

[Team Etiquette](#)

Part of your career development is learning how to be a productive team member. All opinions and experiences, no matter how different or controversial they may be perceived, must be respected in the tolerant spirit of academic discourse. You are encouraged to comment, question, or critique an idea, but you are not to attack an individual. Our differences, some of which are outlined in the University's nondiscrimination statement below, will add richness to this learning experience. Please consider that sarcasm and humor can be misconstrued in online interactions and generate unintended disruptions. Working as a community of learners, we can build a polite and respectful course ambience.

Points to Consider:

- ★ Do not dominate any discussion. Give other students the opportunity to join in the discussion.
- ★ Do not use offensive language. Present ideas appropriately.
- ★ Be cautious in using Internet language. For example, do not capitalize all letters since this suggests SHOUTING!!!.
- ★ Avoid using vernacular and/or slang language. This could possibly lead to misinterpretation.
- ★ Keep an “open-mind” and be willing to express even your minority opinion.
- ★ Think and edit before you push the “Send” button.
- ★ Do not hesitate to ask for feedback.
- ★ Nothing online ever disappears entirely.

Violent Behavior

Purdue University is committed to providing a safe and secure campus environment for members of the university community. Purdue strives to create an educational environment for students and a work environment for employees that promote educational and career goals. Violent Behavior impedes such goals. Therefore, Violent Behavior is prohibited in or on any University Facility or while participating in any university activity.

Diversity and Inclusion Statement

In our discussions, structured and unstructured, we will explore a variety of challenging issues, which can help us enhance our understanding of different experiences and perspectives. This can be challenging, but in overcoming these challenges we find the greatest rewards. While we will design guidelines as a group, everyone should remember the following points:

We are all in the process of learning about others and their experiences. Please speak with me, anonymously if needed, if something has made you uncomfortable.

Intention and impact are not always aligned, and we should respect the impact something may have on someone even if it was not the speaker's intention.

We all come to the class with a variety of experiences and a range of expertise, we should respect these in others while critically examining them in ourselves.

Course Evaluation

During the last two weeks of the course, you will be provided with an opportunity to evaluate this course and your instructor. Purdue uses an online course evaluation system. You will receive an official email from evaluation administrators with a link to the online evaluation site. You will have up to two weeks to complete this evaluation. Your participation is an integral part of this course, and your feedback is vital to improving education at Purdue University. I strongly urge you to participate in the evaluation system.

Disclaimer

This syllabus is subject to change due to unforeseen events. All changes will be announced through email and Brightspace.