

Course Details

- Online, asynchronous conducted via Canvas
- No prerequisites

Instructor

Jennifer Weeks Steinmetz Entomology Bldg. Room 3103, 273-3955 Jenweeks1@ufl.edu

Requirements

- 1. You will be required to watch the movie Flock of Dodos, which is available through the UF Library.
- 2. You are required to purchase a Painted Lady Butterfly Larvae Culture from Carolina Biological. Cost:

ENY 3007C: Survey of Science with Insects

Overview

How do people learn science, and what do they remember? How does science differ from other methods of learning and knowing? How can we encourage students and the general public to think like scientists, and use evidence to inform their opinions? What can we learn about biology as a whole by studying insects?

During this course, we will explore the scientific process and how people learn science. We will learn how to use insects to engage people and enhance scientific learning. We will also use insects to explore fundamental, complex biological topics that people often struggle with, including ecology and evolution. In this course, students will strengthen their foundation in the life sciences through readings, discussions, and lectures, and they will develop educational materials for K-12 or informal education environments.

Course Objectives

By the end of the course, students will be able to:

- 1. Differentiate science from other ways of "knowing", identify common misconceptions, and formulate ways to address and correct them.
- 2. Summarize and assess the scientific evidence for the theory of evolution.
- 3. Compare and evaluate original research with the conclusions reported in the news for that research.
- 4. Assess best practices in science education and create educational resources related to biology and entomology.

Grading Scale

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A	$(\ge 93 \%) \ge 837 \text{ pts.}$
A-	$(\ge 90 \%) \ge 810 \text{ pts.}$
B+	$(\ge 87 \%) \ge 783 \text{ pts.}$
В	$(\ge 83 \%) \ge 747 \text{ pts.}$
B-	$(\ge 80 \%) \ge 720 \text{ pts.}$
C+	$(\ge 77 \%) \ge 693 \text{ pts.}$
C	$(\ge 73 \%) \ge 657 \text{ pts.}$
C-	$(\ge 70 \%) \ge 630 \text{ pts.}$
D+	$(\ge 67 \%) \ge 603 \text{ pts.}$
D	$(\ge 63\%) \ge 567$ pts.
D-	$(\ge 60\%) \ge 540$ pts.
E.	(<60 %) <540 pts.

Grades and Evaluation

There are 900 points awarded in this class. I provide a variety of diverse opportunities for you to engage with the content and demonstrate mastery. For information on current UF policies for assigning grade points, see https://catalog.ufl.edu/UGRD/academic-regulations/grades-grading-policies/

Introduction in Discussion	20
Syllabus Scavenger Hunt	20
Weekly Reflection (14 @ 15 pts.)	210
Discussions (2 @ 30 pts)	60
Assignments (6 @ 40 pts)	240
Exams (3 @ 50 pts.)	150
Project	200

First Week Details

The first week of class there are several small tasks to complete.

1. Complete an INTRODUCTION OF YOURSELF(20 pts.) on the Discussion board that includes your

major, current standing, interest in the course topics, experience within agriculture...and a photo of yourself, pet, or favorite place.

2. Complete an open book SYLLABUS SCAVENGER HUNT(20 pts.) available in Canvas.

Graded Assessments

There are 14 (15 points each) **READING REFLECTIONS**. For each reading, you are provided a reading guide with questions so you understand what you are expected to get out of each assigned reading. I will read through them for completeness and address any errors or misconceptions I see in a weekly Clarification Announcement. I am hoping this will provide a positive incentive to keep up with the readings and help me address any misconceptions with the content.

Note: There are sometimes more than one reading a week and these are due by Sunday at midnight of the week the readings were assigned. You can hand those in late for up to 7 days for half credit.

There are 2 mandatory <u>DISCUSSIONS</u> (30 pts. ea.). Each discussion has two deadlines. At the end of the first week it is open, you must post your response. In the second week, you must respond to three classmates. There are explicit instructions and a rubric posted in the Discussion and I will send reminders for deadlines associated with discussions through the Announcements to keep everyone on track.

There are 6 <u>ASSIGNMENTS</u> (40 pts. ea.). The detailed instructions for each assignment can be found within the Canvas link for that assignment. A rubric provided, read it over before you begin work so you can tailor your effort based on how I am grading it.

Three, one hour, **PROCTORED EXAMS** (50 pts. ea.) are taken online in Canvas. They are a combination of multiple choice, short answer, and essay questions. The exams will open on a Sunday at 7 am and close Wednesday at midnight so that you have FOUR DAYS in which to complete your exam. The third exam is NOT CUMULATIVE. The exams must be taken during the allotted time period with the exception of excused absences and university approved travel. Please arrange that with the instructor in advance if possible. You are required to use Honorlock to access the exam.

Students will complete a **PROJECT** (200 pts.) that consists of a field-based lesson plan for either a K-12 or informal audience (the public or stakeholder group). The project has three deadlines. Proposal submission and approval (25 pts), rough draft (75 pts), and final draft (100 pts). Further details including deadlines and a rubric are provided in Canvas under the assignment link.

Absences and Make up Work

Assignment deadlines are listed in the course outline in this syllabus as well as on the calendar on the course website. It is your responsibility to make sure assignments are submitted through the assignment links (NOT to my email). I do accept late assignments, but you lose 20% of the points for each day after deadline. Reading guide/

Reflection assignments can be submitted late for half credit. Exams and discussions cannot be completed after deadline in the case of unexcused absences.

Requirements for make-up exams, assignments and other work are consistent with university policies that can be found at: https://catalog.ufl.edu/ugrad/current/regulations/info/attendance.aspx

Date	Course Material	Actions	Due
Week 1 May 9-15	Nature of Science Scientific Method	 Introductions in Discussion Syllabus Scavenger Hunt Reading Guide 1 Reading Guide 2 Order Butterfly Rearing kit Start Insect Photo Collection Start Science Educator Interview 	Sun May 15 Sun May 15 Sun May 15 Sun May 15 Due later in the semester (see below)
Week 2 May 16-22	Science Teaching Roadmap Importance of Prior Knowledge	Reading Guide 3 Reading Guide 4 Discussion 1: initial Post	Sun May 22 Sun May 22 Sun May 22
Week 3 May 23–29	Instructional Strategies Evaluating Science in the News	1. Reading Guide 5 2. Discussion 1: responses 3. Exam 1 opens	Sun May 29 Sun May 29 Sun May 29
Week 4 May 30 - June 5	What are Insects? Why study Insects?	 Exam 1 Reading Guide 6 Assignment: Science in the News 	Wed June 1 Sun June 5 Sun June 5
Week 5 June 6-12	Insect Structure and Function	Discussion 2 : initial post Assignment: Science Educator Interview	Sun June 12 Sun June 12
Week 6 June 13-19	Insect Physiology	Assignment: Citizen Science Discussion 2: responses Project Proposal deadline	Sun June 19 Sun June 19 Sun June 19
Week 7 June 20- 26	SUMMER BREAK		
Week 8 June 27- July 3	Insect Ecology	 Reading Guide 7 Assignment: Photo Insect Collection Exam 2 opens 	Sun July 3 Sun July 3 Sun July 3
Week 9 July 4-10	Aquatic Entomology Social Insects	1. Exam 2 closes 2. Reading Guide 8 3. Reading Guide 9 4. Grad student assignment	Wed July 6 Sun July 10 Sun July 10
Week 10 July 11-17	Insect Evolution Evolution in the Classroom	 Reading Guide 10 Reading Guide 11 Reading Guide 12 A5: Evolution Checkpoint 	Sun July 17 Sun July 17 Sun July 17 Sun July 17
Week 11 July 18 - 24	Educational Assessments and Designing Lesson Plans	 Reading Guide 13 Reading Guide 14 Butterfly Rearing Project Lesson Plan Project Rough Draft due 	Sun July 24 Sun July 24 Sun July 24 Sun July 24
Week 12 July 25 - 31	No topics. Wrap up assignments	1. Exam 3 Opens 2. Lesson Plan Project Final Draft Due	Sun Jul 31 Sun Jul 31
Week 13		1. Exam 3 Closes	Wed Aug 3
Aug 1-Aug 5		2. Grad student course reflection	Wed Aug 3

Academic Honesty

As a student at the University of Florida, you have committed yourself to uphold the Honor Code, which includes the following pledge:

"We, the members of the University of Florida community, pledge to hold ourselves and our peers to the highest standards of honesty and integrity." You are expected to exhibit behavior consistent with this commitment to the UF academic community, and on all work submitted for credit at the University of Florida, the following pledge is either required or implied: "On my honor, I have neither given nor received unauthorized aid in doing this assignment."

Ym complete all work independently in each course unless the instructor provides explicit permission for you to collaborate on course tasks (e.g. assignments, papers, quizzes, exams). Furthermore, as part of your obligation to uphold the Honor Code, you should report any condition that facilitates academic misconduct to appropriate personnel. It is your individual responsibility to know and comply with all university policies and procedures regarding academic integrity and the Student Honor Code. Violations of the Honor Code at the University of Floridawill not be tolerated.

Violations will be reported to the Dean of Students Office for consideration of disciplinary action. For more information regarding the Student Honor Code, please see: http://www.dso.ufl.edu/SCCR/honorcodes/honorcode.php.

Software Use

All faculty, staff, and students of the university are required and expected to obey the laws and legal agreements governing software use. Failure to do so can lead to monetary damages and/or criminal penalties for the individual violator. Because such violations are also against university policies and rules, disciplinary action will betaken as appropriate.

COVID response

This course is conducted asynchronously such that you are not required to attend at specific times and all course materials are available in the course.

In the event that we utilize zoom for a meeting, students who participate in Zoom meetings with their camera engaged or utilize a profile image are agreeing to have their video or image recorded. If you are unwilling to consent to have your profile or video image recorded, be sure to keep your camera off during any meetings you request and do not use a profile image. Likewise, students participating orally in Zoom meetings are agreeing to have their voices recorded. If you are not willing to consent to have your voice recorded, you will need to communicate exclusively with instructors via email. As in all courses, unauthorized recording and unauthorized sharing of recorded materials is prohibited.

Online Course Evaluation

Student assessment of instruction is an important part of efforts to improve teaching and learning. At the end of the semester, students are expected to provide feedback on the quality of instruction in this course using a standard set of university and college criteria. Students are expected to provide professional and respectful feedback on the quality of instruction in this course by completing course evaluations online via GatorEvals. Guidance on how to give feedback in a professional and respectful manner is available at: https://gatorevals.aa.ufl.edu/students/. Students will be notified when the evaluation period opens and can complete evaluations through the email they receive from GatorEvals, in their Canvas course menu under GatorEvals, or via https://ufl.bluera.com/ufl/. Summaries of course evaluation results are available to students at: https://gatorevals.aa.ufl.edu/ pucode.

The Disability Resource Center coordinates the needed accommodations of students with disabilities. This includes registering disabilities, recommending academic accommodations within the classroom, accessing special adaptive computer equipment, providing interpretation services and mediating faculty-student disability related issues. Students requesting classroom accommodation must first register with the Dean of

Students Office. The Dean of Students Office will provide documentation to the student who must then provide this documentation to the Instructor when requesting accommodation

0001 Reid Hall, 352-392-8565, https://disability.ufl.edu/

Campus Helping Resources

Students experiencing crises or personal problems that interfere with their general well-being are encouraged to utilize the university's counseling resources. The Counseling & Wellness Center provides confidential counseling services at no cost for currently enrolled students. Resources are available on campus for students having personal problems or lacking clear career or academic goals, which interfere with their academic performance.

 University Counseling & Wellness Center, 3190 Radio Road, 352-392-1575, www.counseling.ufl.edu

Counseling Services Groups and Workshops Outreach and Consultation Self-Help Library Wellness Coaching

- U Matter We Care, www.umatter.ufl.edu/
- Career Connections Center, First Floor JWRU, 392-1601, https://career.ufl.edu/.
- Student Success Initiative, http://studentsuccess.ufl.edu. Student Complaints:

Student Complaints

- Residential Course: https://sccr.dso.ufl.edu/policies/student-honor-code-student- conduct-code/.
- Online Course: http://www.distance.ufl.edu/student-complaint-process