

FYI Biology

BSC 1920—Fall 2014—Harmon

Course Objectives & Policies

Learning Objectives:

As you begin your career as an undergraduate student at UF, this course provides an introduction to the field of biology and UF resources specific to that discipline. It is expected that this course will be taken the first semester after declaring a biology, zoology, or botany major. In order to encourage interactions between you and the faculty instructor, the class size has been kept small.

Students who have participated fully in this class will be able to:

1. Describe the nature of science (hypothesis testing, peer review, grant funding)
2. Identify and use library resources and databases
3. Access the scientific literature
4. Identify opportunities for undergraduate research
5. State principles of scientific ethics: proper citation of the literature, the ethical use of animals, etc.
6. Identify opportunities for faculty/student interactions.
7. Identify and use advising and career resources

We'll use Genetically Modified Organisms (GMOs) as a thematic area around which to center our scientific discussions.

Textbooks:

There is no required text in this course, but readings will be assigned from books and journal articles; these will be made available electronically.

Course Assignments and Grading: *Pts will be given for good-effort completion of assignments*

1. Develop an **Academic Plan**: CLAS students: View the Advising Center PowerPoint presentation and take the online quiz. Students in other colleges: See an academic advisor and develop a two-year course plan. *Note: Development of a Career Plan is an alternative to this assignment for senior students. (5 pts)*

2. Create a **Bibliography**: Using the database search engines available at UF and reference software (e.g., EndnoteWeb) as explained in the Library Tutorial, conduct a literature search on your research topic and submit a formatted bibliography. (5 pts)
3. Write a 5-page **Paper** on a topic of your choice in Genetically Modified Organisms; individual topics will be approved by the instructor. First submissions will be reviewed by a classmate and revisions will be required for the final submission. This is a **REQUIRED ASSIGNMENT** (5 pts, each for original and revised submissions).
4. **Review** a classmate's paper. Provide an anonymous, constructive review of a peer's first paper submission. This is a **REQUIRED ASSIGNMENT** (5 pts).
5. Complete **Animal Care and Use Training**. Online training is required for every person who will have contact with animals in a research setting. Complete the basic online training module Working with the UF IACUC (non-VA version). (5 pts)
6. **Annotate 1 Reference**. Keeping track of what you've read and where is a key component of proper citation. Try the annotated bibliography approach to summarizing what you read in a primarily literature source. (5 pts)
7. Complete **CHOMP questionnaire**. UF has purchased access to several programs to aid in the discovery of your "best-fit" major and career. These are free resources that help you to set your eyes on a path that will ultimately suit you. (5 pts)
8. **Blogs in Sakai** - You will be assigned topics to write about in your personal blog. (5 pts)
9. **Class Participation**. Participation in class discussions is key to your success of this course, attendance will be documented. (10 pts total, each missed class is a deduction of 1 participation point).

Class discussions

A goal of this course is discussion and the recognition that in many respects there is no single answer to a question and much is yet unknown in biology. In class discussions, please be courteous to others and respectful of alternative views. All of you are encouraged to ask either factual or interpretative questions and discuss the assigned reading material. Please refrain from side-bar discussions and distracting behavior.

Grading scale

This is a S/U course, so your performance will either S (satisfactory) or U (unsatisfactory). To earn an "S" in the course, you must complete all required assignments (i.e., paper, review and paper revision) and earn a total of 41 points (out of 50 possible points) via the completion of assignments and participation in the course.

Course policies

Readings should be done in advance of class; you are expected to come ready to discuss the topics. In cases of major medical and/or family emergencies, as officially documented by a letter, students can negotiate an incomplete for the term. Consistent with University policy, Incompletes will revert to E if not completed within 1 term.

University support services

Resources are available on campus to help students meet academic goals and solve personal problems, which may interfere with their academic performance. Such resources include:

1. [UF Counseling and Wellness Center](#), 301 Peabody Hall and Radio Rd Facility, 392-1575, personal and career counseling.
2. [Career Resource Center](#), Reitz Union, 392-1601, career development assistance and counseling.
3. [CLAS Academic Advising Center](#), Farrior Hall, 100 Fletcher Drive, 392-1521, provides advise on course selection and course planning to meet graduation requirements

Disability Notice

Students with disabilities enrolled in this course and who may need disability-related classroom accommodations are encouraged to make an appointment to see me before the end of the second week of the term. All discussions will remain confidential, although the [Student Accessibility Services](#) office may be consulted to discuss appropriate implementation of any accommodation requested.

Course Details

 [BSC 1920 FYI Biology Harmon Syllabus.docx](#)

Course Schedule

Class Schedule

Date	Topic
Aug 26/28	Introduction to the course, classmates, and UF community
Sept 2/4	GMOs: What are they and how do they impact you? Reading: Before today's class read this excerpt from Hillis et al., 2014 Assignment: due next week - See "You and GMOs" in the assignments tab for full details.
Sept 9/11	GMOs: controversies and separating science from non-science Reading: Before class read http://en.wikipedia.org/wiki/Genetically_modified_food_controversies#Protests Assignment:
Sept 16/18 <i>Note class location</i>	Library resources & database use: Dr. Tara Cataldo, UF libraries. Room L308 , Marston Science Library Reading: Assignment: Bibliography due Sept 30/Oct 2
Sept 23/25	Reading a scientific paper. Reading: before class read this journal article Assignment: "Annotated Reference" due Oct 7/9
Sept 30/ Oct 2 Bibliography Due	Taking Charge of your learning and college degree. Advising – why is it important? How to get the most out of i Reading: before class read http://www.npr.org/blogs/13.7/2014/08/18/341302549/thinking-like-a-scientist-can-help-overcome-allure-of-appearances Assignment: "Paper" due Oct 21/23 Assignment: "Academic Plan" due Oct 14/16
Oct 7/9 Annotated Ref Due	Ethics Part 1: Plagiarism and proper citation Reading: before class read this journal article Assignment:
Oct 14/16 Academic Plan or Quiz Due	Experimental and other approaches to evaluate hypotheses. Reading: Assignment:
Oct 21/23 Paper Due	Reading: Ethics Part 2: The use of animals (and human) subjects in research. Assignment:
	Career Resources: Introduction to the resources at the CRC.

Oct 28/30 <i>Note location</i>	Class will meet in the CRC classroom at the Reitz Union Reading: Assignment:
Nov 4/6 Reviews Due Animal Use Training Due	How to get involved in research Reading: Assignment: "Paper Revision"
Tues, Nov 11	No Class - Memorial Day
Thu, Nov 13 / Tues, Nov 18 CHOMP Due Nov 13	Dogma in Science: Moving the field forward Reading: Read this account of a scientist changing understanding of field. http://today.duke.edu/2014/06/snails Assignment:
Thu, Nov 20 / Tues, Nov 25 Revised Paper Due	Ethics Part 3: Responsible conduct in research and best laboratory practices Reading: read this popular article from Retraction Watch and this account of retracting journal articles http://blogs.scientificamerican.com/food-matters/2013/10/10/lab-life-the-anatomy-of-a-retraction/ Assignment:
Thursday, Nov 27	No Class - Thanksgiving
Dec 2/4	Final Discussion: Sharing what you have learned
Tuesday, Dec 9	No Class