

BIO 128  
FALL 2016

**INTRO TO BIOLOGY: THE SECRET LIFE OF PLANTS**  
**Course syllabus**

**Professor** Jason Smith

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Office number: 717-254-8344

**Office:** Rector James 1223

**Office Hours:** W, F 1-2:30 pm, and by appointment

**Course Lectures:** M, W, F: 9:30-10:20 AM @ Dana Hall 201

**Course Labs:** W: 1:30-04:30 PM @ Rector James 2218

**Course Textbook:** Life: The Science of Biology, 10th Ed, by Sadava et. al  
ISBN 9781429298643

- Other readings will be provided

**Other Required Materials:**

- Dickinson email – this is how I will communicate with the class
- Moodle – this is how I will share documents and accept some assignments

**Course Goals:**

1. Students will engage with in fundamental topics in biology including organisms, ecology and evolution
2. Students will acquire in-depth insights into plant ecology that changes the way they perceive natural and agricultural landscapes
3. Students will gain understanding of the scientific process by performing and reading about experiments
4. Students will practice how to find, read and formulate scientific literature
5. Students will engage in sustainability thinking regarding topics of nutrient management and ecosystem rehabilitation and conservation
6. Students will foster skills in analytical thinking and communication

**Course Objectives:**

1. Students will engage in investigative and observational lab and field activities that explore plant interactions with other organisms and how these interactions relate to conservation, agriculture and, more broadly, plant survival

2. Student teams will formulate and conduct a scientific experiment with plants and complete a formal lab report and AV presentation of their results
3. Students will regularly find, read, and interact with scientific primary literature
4. Students will read assigned textbook chapters and answer homework or quiz questions if/when assigned
5. Students will demonstrate mastery of lecture material through four exams and one cumulative final
6. Students will attend at least two Clark Forum lectures throughout the semester related to food.

**Grading:**

<b><u>Lecture</u></b>	<b><u>50%</u></b>
Assignments, quizzes, homework, discussions	8%
Lecture exam I (Mon 9/19 9:30 AM)	8%
Lecture exam II (Fri 10/14, 9:30 AM)	8%
Lecture exam III (Fri 11/11/ 9:30 AM)	8%
Lecture exam IV (Fri, 12/2, 9:30 AM)	8%
Cumulative Final exam (Tues, Dec 13, 9AM)	10%

<b><u>Lab</u></b>	<b><u>50%</u></b>
Active participation in lab activities	10%
Team Research Project	15%
Lab Assignments and Literature Projects	25%

**Grading scale**

A	93-100
A-	90-92.9
B+	87-89.9
B	83-86.9
B-	80-82.9
C+	77-79.9
C	73-76.9
C-	70-72.9
D+	67-69.9
D	63-66.9
D-	60-62.9
F	59.9 and below

Note: Final grades will be rounded to the nearest tenth according to this pattern:

- If hundredth decimal unit is 5 or greater, round up: 92.95 → 93.0 = A
- If hundredth decimal unit is 4 or less, round down: 92.94 → 92.9 = A-

Students are required by Dickinson policy to pass both the lab and the lecture portions of the course. An average below 60% in either portion of the course amounts to failure of the entire course.

**Attendance:**

Students should come to all lectures and all labs to succeed in this class. Lectures will often include information that is not included in the text book. Lecture attendance is expected but not scored directly. However, missing a lecture that has a graded activity (eg, discussion, quiz) will result in a zero for that exercise. Attendance for **exams** is required. Unexcused absence during an exam will result in a zero for the exam.

**Laboratory** attendance is required, and attendance will be noted. Missing a lab for any unexcused reason will result in a 10% reduction in the final lab score.

**Excused Absences from Labs or Exams:**

Missing a required activity due to a family emergencies or serious illness may be excused provided you submit documentation within 24 hours from a parent, guardian or doctor. Other reasons will be considered on a case-by-case basis. Examples of poor excuses include: leaving early for mid-term break, athletic events, forgetfulness, napping, vacationing, being abducted by aliens. Since it is not possible to make up some labs, alternate projects will be assigned for excused lab absences.

**Preparing for Class:**

Students should read assigned chapters, papers and lab handouts before the start of class. Quizzes or review questions may be assigned online or in class. The schedule shows a rough road map, but students should follow lecture-by-lecture instructions for what materials to read.

**Electronic Device Use Policy:**

Cell phones should not be used during lectures. Use of computers or tablets for note-taking is discouraged unless required for special learning needs. If laptop use becomes a distraction to other students, the privilege to use it may be revoked. During lab periods, electronic devices may be used for personal purposes only during down-times, such as during transport to a field site or while waiting for a caterpillar to choose a leaf.

**Late Assignment Policy:**

Assignments are due when specified. Late assignments receive a -10% penalty per 24 hours, and will not be accepted more than three days late. The 10% penalty is applied at the *beginning* of each 24hr period (ie, -10% for 1-24hrs late, -20% for 25-48hrs late). Each student may have two 24hr grace periods for late assignments.

**Lab Safety:**

- No eating or drinking in the lab. Even though we do not use harsh chemicals in this course, the lab may be contaminated by activities in other courses.

**Student Honesty:**

Honesty is at the heart of academic integrity—and is critical for your success in not only science but also relationships, citizenship, business and many other areas of life. Undergraduate years are formational to who you will be for the rest of your life. Practice honesty in this course! Two required ways:

- avoid cheating
- avoid plagiarism

Let every person do their own work and be rewarded for it. Let every borrowed idea or phrase or photo be accredited to its creator.

Dickinson policies concerning cheating and plagiarism are addressed in the student handbook at:

[http://www.dickinson.edu/info/20273/dean\\_of\\_students/867/community\\_standards/2](http://www.dickinson.edu/info/20273/dean_of_students/867/community_standards/2)

**For Students with Disabilities:**

Dickinson College makes reasonable academic accommodations for students with documented disabilities.

Students requesting accommodations must make their request and provide appropriate documentation to the Office of Disability Services (ODS) in Biddle House. Because classes change every semester, eligible students must obtain a new accommodation letter from Director Marni Jones every semester and review this letter with their professors so the accommodations can be implemented. The Director of ODS is available by appointment to answer questions and discuss any implementation issues you may have.

ODS proctoring is managed by Susan Frommer at 717-254-8107 or [proctoring@dickinson.edu](mailto:proctoring@dickinson.edu). Please address general inquiries to Stephanie Anderberg at 717-245-1734 or e-mail [disabilityservices@dickinson.edu](mailto:disabilityservices@dickinson.edu). For more information, see [www.dickinson.edu/ODS](http://www.dickinson.edu/ODS).

**Schedule Change Clause:**

The professor reserves the right to modify the schedule as needed.

## BI0128 - Clark Forum Attendance Requirement

The Clark Forum is a venue for engaging the Dickinson community with contemporary issues. A number of the sessions this fall center around the theme of food. Food is inherently related to plants and hence is broadly of interest to this course.

Thursday, September 8, 2016

Anita Tuvin Schlechter Auditorium, 7 p.m.

The World That Food Made

Raj Patel, award-winning writer, activist and academic

Thursday, October 27, 2016

Anita Tuvin Schlechter Auditorium, 7 p.m.

Morgan Lecture

*Native Harvest: The Politics, Health, Culture, and Economics of Food*

Winona LaDuke, Honor the Earth

Monday, October 10, 2016

Stern Center, Great Room, 7 p.m.

Eating While Black: A Case Study on Food Shaming and Policing

Psyche Williams–Forson, University of Maryland

Tuesday, November 1, 2016

Stern Center, Great Room, 7 p.m.

*Bringing Animal Welfare to 21st Century Agriculture*

James McWilliams, Texas State University

**Your assignment** is to attend at least two of the food-related seminars during the semester and submit (via the “Assignments” section in the class Moodle site). Your reflections on the talk (below) are due within one week of the talk.

Your name:

Speaker Name:

Talk title:

What are three striking points that the speaker made during their talk?

What are three questions or objections that you have after listening to the talk? Write your question or objection and explain it briefly.