

Integrative Biology 154
Plant Ecology

Instructor

TBD

Lectures: Wednesday and Friday, 1-2 PM, Wheeler 102

Sections (required): Monday 9-10 AM, VLSB 2030
Monday 10-11AM, Dwinelle 79

Textbook: The Ecology of Plants, 2nd ed. by J. Gurevitch, S. Scheiner, G. Fox

Web site: <https://bcourses.berkeley.edu/courses/1463596>

Objectives: This class provides an in-depth introduction to plant ecology, focusing on four areas: i) individual and environment, ii) populations and evolution, iii) diversity and community ecology, and iv) landscape, regional and global processes. The course addresses basic principles of ecology, viewed from the perspective of plants, with an emphasis on applications to conservation and current challenges in an era of climate change.

Requirements: Attendance at lecture; attendance and participation in section; readings; weekly quizzes; three homeworks; midterm and final exams. Weekly quizzes are aimed at making sure you are understanding material presented in the reading and lecture and will ask you to define terms and concepts. Homework assignments are more open-ended and require you to do some independent research, thinking and writing. Exams will be comprehensive, asking you to interpret data and synthesize material using concepts we covered in lectures.

Grading:

Attend & report on research seminar	1%
HW 1: UC Garden observations	4%
HW 2: Pop Bio Problem Set	5%
HW 3: Conservation challenge essay	10%
Weekly quizzes (10 * 1.5 pts)	15%
Midterm	15%
Final	30%
Section	20%

The student community at UC Berkeley has adopted the following Honor Code:

“As a member of the UC Berkeley community, I act with honesty, integrity, and respect for others.” The hope and expectation is that you will adhere to this code.

Collaboration and Independence: Reviewing lecture and reading materials and studying for exams can be enjoyable and enriching things to do with fellow students. This is recommended. However, unless otherwise instructed, homework assignments are to be completed independently and materials submitted as homework should be the result of one’s own independent work.

Cheating: A good lifetime strategy is always to act in such a way that no one would ever imagine that you would even consider cheating. Anyone caught cheating on a quiz or exam in this course will receive a failing grade in the course and will also be reported to the University Center for Student Conduct. In order to guarantee that you are not suspected of cheating, please keep your eyes on your own materials and do not converse with others during quizzes or exams.

Plagiarism: To copy text or ideas from another source without appropriate reference is plagiarism and will result in a failing grade for your assignment and usually further disciplinary action. For additional information on plagiarism and how to avoid it, see, for example:

<http://www.lib.berkeley.edu/instruct/guides/citations.html#Plagiarism>

<http://gsi.berkeley.edu/teachingguide/misconduct/prevent-plag.html>

Academic Integrity and Ethics: Cheating on exams and plagiarism are two common examples of dishonest, unethical behavior. Honesty and integrity are of great importance in all facets of life. They help to build a sense of self-confidence, and are key to building trust within relationships, whether personal or professional. There is no tolerance for dishonesty in the academic world, for it undermines what we are dedicated to doing – furthering knowledge for the benefit of humanity.

Your experience as a student at UC Berkeley is hopefully fueled by passion for learning and replete with fulfilling activities. And we also appreciate that being a student can be stressful. There may be times when there is temptation to engage in some kind of cheating in order to improve a grade or otherwise advance your career. This could be as blatant as having someone else sit for you in an exam, or submitting a written assignment that has been copied from another source. And it could be as subtle as glancing at a fellow student’s exam when you are unsure of an answer to a question and are looking for some confirmation. One might do any of these things and potentially not get caught. However, if you cheat, no matter how much you may have learned in this class, you have failed to learn perhaps the most important lesson of all.

For more information: <http://asuc.org/honorcode/resources.php>

Schedule of lectures

Day	Date	Class	Topic	Reading
W	8/23/17	1	Welcome, Video	
F	8/25/17	2	Attenborough Video	ch. 1
			1. Individual and environment	
W	8/30/17	3	Introduction: Plant Ecology and research methods	ch. 2
F	9/1/17	4	Light and Photosynthesis	ch. 2
W	9/6/17	5	Water Relations (quiz)	ch. 3
F	9/8/17	6	Nutrients	ch. 4
W	9/13/17	7	Water and Energy Balance (David Ackerly)	ch. 3
F	9/15/17	8	Physiognomy and Biomes (quiz)	ch.17-18
			2. Populations and evolution	
W	9/20/17	9	Populations I (quiz)	ch. 5
F	9/22/17	10	Populations II (Meghan Oldfather)	ch. 5
W	9/27/17	11	Evolutionary Ecology (quiz)	ch. 6
F	9/29/17	12	Growth and Reproduction	ch. 7
W	10/4/17	13	Life History (quiz)	ch. 8
			3. Communities	
F	10/6/17	14	Communities	ch. 9
W	10/11/17	15	Midterm (though 10/4)	
F	10/13/17	16	Plant Communities of California (Erik Grijalva)	
W	10/18/17	17	Species Interactions I (quiz)	ch. 10
F	10/20/17	18	Species Interactions II	ch. 10
W	10/25/17	19	Herbivory (quiz)	ch. 11
F	10/27/17	20	Disturbance and succession	ch. 12
W	11/1/17	21	Abundance and rarity (quiz)	ch. 13
			4. Regional and global processes	
F	11/3/17	22	Ecosystem Processes	ch. 14
W	11/8/17	23	Landscape Ecology (quiz)	ch. 16
F	11/10/17		NO CLASS	
W	11/15/17	24	Regional and global diversity	ch. 19
F	11/17/17	25	Current topics in plant conservation (Peggy Fielder)	
W	11/22/17		NO CLASS	
F	11/24/17		NO CLASS	
W	11/29/17	26	Global change I (quiz)	ch. 21
F	12/1/17	27	Global change II	TBA
W	12/6/17		RRR (TBD)	RRR
F	12/8/17		RRR (TBD)	RRR
T	12/12/17	8-11AM	FINAL EXAM	

Grading Information

I do not grade on a curve (i.e. predetermined percentages). The table below shows the minimum grade you will receive based on your cumulative numeric score across all required assignments and exams. At our discretion, we may lower the numeric breakpoints (i.e. you could get a higher grade than indicated here), but we will not raise them.

Number grade	Minimum letter grade
> 93.5	A
≥ 90 - 93.5	A-
≥ 87 - 90	B+
≥ 83.5 - 87	B
≥ 80 - 83.5	B-
≥ 77 - 80	C+
≥ 73.5 - 77	C
≥ 70 - 73.5	C-
≥ 65 - 70	D+
≥ 60 - 65	D
< 60	F

IB 154 – Fall '17 - Student Information

Name:

Undergrad/Grad:

Year:

Dept/Major:

[use back of page if you need more space for any of these questions:]

1. Previous biology classes:

2. Other information - Why are you taking this class? Other experiences in ecology or plant biology? Research interests?

3. Where did you grow up, and list one or two places where you have a 'feel' for plants in the environment – it could be your backyard, a local park, or a desert wilderness