

Integrative Biology 154
Plant Ecology
Fall Semester 2013

Instructor

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Office hours: Tues 2-3

GSIs

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Mon 1-2

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Wed 10-11

Lectures: Wednesday and Friday, 10-11 AM, 215 Dwinelle

Sections (required): Mondays: 10-11 AM, 2011 VLSB (AW)
2-3 PM, 3030 VLSB (DC)

Lab (IB 154L - separate enrollment): Wednesdays, 12-4

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

Web site: bspace web site

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 (including climate change). The course addresses basic principles of ecology, viewed from the perspective of terrestrial plants, with an emphasis on functional and evolutionary approaches (ecosystem ecology is not covered).

Requirements: Attendance at lecture; attendance and participation in all sections; readings; weekly section quizzes; three homeworks; midterm and final exams.

Grading:

Take-home short answer	5%
Pop Bio Problem Set	5%
1 page essay question	5%
Midterm	20%
Final	40%
Section	
Weekly discussion quiz	15%
Discussion participation	10%

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	
F	8/30/13	1	Introduction: what's special about plants ch. 1
1. Individual and environment			
M	9/2/13		LABOR DAY HOLIDAY
W	9/4/13	2	Photosynthesis I ch. 2
F	9/6/13	3	Photosynthesis II ch. 2
W	9/11/13	4	Water ch. 3
F	9/13/13	5	Energy Balance ch. 3 Nutrients
W	9/18/13	6	(HW 1 handed out) ch. 4 Allocation and Growth ch. 7 (to 160)
F	9/20/13	7	(HW 1 due) TBA
2. Populations and evolution			
W	9/25/13	8	Populations I ch. 5 Populations II (<i>guest lecture: Meagan Oldfather</i>)
F	9/27/13	9	PopBio III Elasticity / stochasticity ch. 5
W	10/2/13	10	(HW 2 handed out) ch. 5
F	10/4/13	11	Reproductive ecology ch. 7 (160 on) Evolutionary Ecology
W	10/9/13	12	(HW 2 due) ch. 6
F	10/11/13	13	Life history ch. 8
W	10/16/13	14	Comparative Ecology TBA
3. Communities			
F	10/18/13	15	Communities ch. 9
W	10/23/13	16	Midterm (though 10/16)
F	10/25/13	17	Intraspecific competition ch. 10
W	10/30/13	18	Interspecific competition ch. 10
F	11/1/13	19	Plant disease ecology (<i>APW lecture</i>) ch. 11 (275 on)
W	11/6/13	20	Herbivory: resistance and tolerance ch. 11 (to 275)
F	11/8/13	21	Disturbance and succession ch. 12
W	11/13/13	22	Abundance and rarity ch. 13 Island biogeography and metacommunities
F	11/15/13	23	Coexistence and diversity ch. 16
W	11/20/13	24	(HW 3 handed out) TBA
4. Regional and global processes			
F	11/22/13	25	Climate and physiognomy ch. 17-18 Regional and global diversity
W	11/27/13	26	(HW 3 due) ch. 19
F	11/29/13		Thanksgiving
W	12/4/13	27	Paleoecology (<i>DLC lecture</i>) ch. 20
F	12/6/13	28	Global change ch. 21
W	12/11/13		RRR week (TBD)
F	12/13/13		RRR week (TBD)
M	12/16/13		FINAL EXAM (8-11 AM)

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 13
Student Information

Name:

SID:

Undergrad/Grad:

Year:

Dept/Major:

email:

Previous biology classes:

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