

INTEGRATIVE BIOLOGY 154L

Plant Ecology Laboratory

Instructor: TBD

Website: bspace.berkeley.edu

Requirements: Concurrent enrollment in IB 154, \$25-\$45 Course Materials Fee

Goals: To explore major concepts in plant biology and ecology through first hand observation and experimentation. The course will be project based, providing a background for experimental design, statistical analysis of simple and complex datasets, and formal scientific reports. The course culminates in an independent project of the student's design, including a proposal, presentation, and final scientific paper.

Requirements: Attendance and participation in all lab exercises, some of which include travel to off-campus sites; completion of written laboratory reports and an independent project, including a formal proposal, in-class presentation, and final paper.

Grading:

Written Laboratory Reports (5):	50%
Morphology/Sampling 10%	
Leaf Size 10%	
Dispersal Ecology 10%	
Floral Traits 10%	
Germination 10%	
Independent Project:	35%
Topic & Methods Outline 2.5%	
Proposal Rough Draft 2.5%	
Proposal 10%	
Presentation 5%	
Final Paper 15%	
Participation:	15%

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: Some laboratory exercises will be completed in pairs/groups, including data collection and analysis. However, unless otherwise instructed, lab reports and the independent project are to be completed independently and materials submitted as homework should be the result of one’s own independent work.

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>

Course Outline:

Week	Date	Topics	Due
1	4-Sep	Plant morphology, structure-function relationships - UC Botanical Garden	
2	11-Sep	Leaf size and comparative analysis of trait evolution - UC Botanical Garden	Lab #1 Report
3	18-Sep	Leaf size project data analysis	Prepared data files
4	25-Sep	Seed banks & competition - soil collections and planting at the greenhouse	Leaf Size Report
5	2-Oct	Dispersal Ecology - flight of the maple seeds	Greenhouse Report (part 1)
6	9-Oct	Greenhouse project data collection & Dispersal analysis	Independent Project Topic and Methods Outline
7	16-Oct	UC Jepson Herbarium - tour, floral trait evolution	Dispersal Ecology Report
8	23-Oct	UC Jepson Herbarium - phylogenies and trait mapping, ranges	(Work on proposal)
9	30-Oct	Finalize greenhouse project	Floral Trait Report
10	6-Nov	Independent Project Proposal Workshop	Greenhouse Report (part 2) & Proposal Rough Draft
11	13-Nov	Independent Projects	Proposal Final Draft
12	20-Nov	Independent Project Assistance (stats, figures, etc.)	
	27-Nov	Thanksgiving (No Class)	
13	4-Dec	Final Presentations	Project Presentation
RRR	9-Dec	Independent Projects (No Class)	Final Paper due

***Course outline subject to change with prior written notice if deemed beneficial or necessary.