

**Biology 156 – Plant Biology: Plants and People
Class Syllabus, Fall 2010**

Lecture: T/R 1:30 pm – 2:45 pm, King Hall Lecture 1
Labs: Six sections, all in BIOS 261

Instructor: Dr. Kirsten Fisher. *ASCL 393*; kfisher2@calstatela.edu
Course materials and announcements will be available on webCT/Blackboard: course ID: *BIOL156_kf_SEC01_FA10_CNSS*
Office hours: Wednesdays: 9:00 am – 11:00 am and by appointment

Lab Instructors: David Yang – dvdc.yang@gmail.com
Mayra Torres – mtorres8@calstatela.edu
Aishwarya Santhanam – asanthanam29@gmail.com
Greg Namba – gnamba@calstatela.edu

Textbook: Levetin and McMahon. *Plants & Society, 5th ed.* McGraw Hill (CSULA custom edition)

Laboratory Manual: *Biology 156 Laboratory Manual. Required.* Available at the CSULA Bookstore and at Student Book Mart (1725A N. Eastern Ave.)

Course Overview: From foods and drugs to tools and tattoos, plants exert a significant impact on human culture and well-being. In this course, you will learn the basics of plant anatomy and morphology – that is, what makes a plant and how plant structures are organized. More importantly, you will gain an appreciation for the stunning diversity of the plant kingdom and the critical importance of plants to human existence. Emphasis will be placed on the integrated nature of cultural, ethnobiological and ecosystem (biodiversity) resources.

During labs, you will learn to use a compound microscope to visualize plant tissue systems and anatomy. You will also use a dissecting microscope to view diverse floral structures and other details of plant morphology that will help your understanding of plant diversity. The lab portion of this course will also provide the opportunity to engage in a research project that introduces the process of scientific inquiry.

Grading Policy: Your grade will be based on point totals from a formal lab report, lab exercises, two lab practical exams, two midterm exams, and a final exam.

Point values for assignments are as follows:

Formal Lab Report.....	40
Lab Exercises.....	10
First Laboratory Practical	25
Final Laboratory Practical	25
First Midterm Exam.....	50
Second Midterm Exam.....	50
<u>Final Exam.....</u>	<u>50</u>
Total Points:.....	250

Grading will be based on a percentage of total points, as follows:

93-100% = A	80-82% = B-	68-69% = D+
90-92% = A-	78-79% = C+	63-67% = D
88-89% = B+	73-77% = C	60-62% = D-
83-87% = B	70-72% = C-	<60% = F

Formal lab report: Students will conduct a research project and prepare a formal lab report following standard scientific research format (to be covered during lab sections).

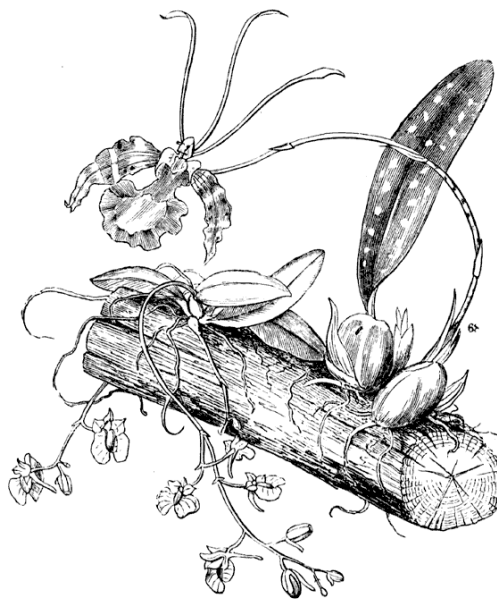
Lab exercises will help students focus on key skills or knowledge, in preparation for the lab practicals. Lab instructors will check students' lab manuals / notes periodically for completeness.

Laboratory practicals will occur twice over the quarter, during regular lab times. Practical will focus on interpreting live plant materials and selected prepared specimens. Make-up practicals will only be arranged under exceptional circumstances, for absences with valid, thoroughly documented excuses. The final practical is cumulative, but will emphasize material presented after the first practical.

Exams will primarily reflect the material covered in the lectures, as well as any assigned reading. Exams will be composed of multiple choice questions. On exam days, students should come to class prepared with a scantron and #2 pencil. There will be two midterms and one final exam. Make-up exams will be given only for absences with valid, documented excuses. The final exam is cumulative, but will emphasize material presented after the second midterm. It is essential that you attend all the lectures, as exams emphasize lecture material. *Reasonable accommodation will be provided to any student who is registered with the Office of Students with Disabilities and requests needed accommodation.*

Other requirements: Each student is expected to have an NIS account and access to the course materials on WebCT/Blackboard. The entry page for Blackboard (webCT) can be found on the menu of your myCSULA page OR at: <http://webct6.calstatela.edu/webct/entryPageIns.dowebct>

Academic honesty: Students are expected to abide by the University's Academic Honesty Policy, (<http://www.calstatela.edu/academic/senate/handbook/ch5a.htm>). Students who violate this policy will be subject to disciplinary action, and may receive a failing grade in the course for a single violation. Students are expected to do independent work on all exams and written assignments; copying from each other or from any other source without proper attribution will be considered plagiarism.



Biology 156 Lecture and Lab Schedule – Fall 2010

Note that dates, topics and activities may change. Any changes to the schedule will be announced in class or in labs and posted on WebCT/Blackboard; it is the responsibility of the student to remain informed of any announced schedule changes.

<i>Date</i>	<i>Lecture topic</i>	<i>Relevant Readings in Textbook</i>
Thurs Sept. 23	Plants, photosynthesis, and life on Earth as we know it	Ch. 1: pp 1-8; Ch. 2: pp 19-26
Tues Sept. 28	Overview of plant diversity and the tree of life	---
Thurs Sept. 30	What makes a green plant? Plant anatomy and morphology	Ch. 3
Tues Oct. 5	The plant lifecycle	Ch. 5: pp 72-78, 82
Thurs Oct. 7	Plants and modern genetics	Ch. 7
Tues Oct. 12	Flowers and co-evolution	Ch. 5: pp 83-85
Thurs Oct. 14	First Midterm Exam	
Tues Oct. 19	Agriculture and crop plants	Ch. 11; Ch. 12: pp 187-190, 193-197; Ch. 14: pp 223-226
Thurs Oct. 21	Crops, biotechnology and GMOs	Ch. 15
Tues Oct. 26	Fungi and their impact on society	Ch. 24
Thurs Oct. 28	Plants in material culture	Ch. 17; Ch 18: pp 302-308
Tues Nov. 2	Plant secondary chemicals and ethnopharmacology	Ch. 1: box on pp 10-11; Ch. 19
Thurs Nov. 4	Herbal medicines: past and present	Ch. 19
Tues Nov. 9	Second Midterm Exam	
Thurs Nov. 11	Vettrans' Day – No Class	
Tues Nov. 16	Plants that affect the peripheral nervous system (PNS)	Ch. 19: pp 336-338; Ch. 20: pp 352-353 (Box 20.1), 356-358
Thurs. Nov. 18	Psychoactive plants: plants that affect the central nervous system (CNS)	Ch. 20
Tues. Nov. 23	Foods as drugs	--
Thurs. Nov. 25	Thanksgiving – No Class	
Tues. Nov. 30	Gardens and horticulture	Ch. 6: pp 94-95 (Box 6.1), 97
Thurs. Dec. 2	California natives	--
Tues. Dec. 7, 1:30-400pm	Final examination	