

## **Botany LS1203 - Plant Biology - Fall 2009**

An expanded version of this syllabus with links to additional information is available online at:  
<http://faculty.weber.edu/sharley/1203/syllabus.html>

**Prerequisites:** none

**Lecture:** MWF, 9:30-10:20

**Instructor:** Dr. S. Harley    **Office:** SL409M

**Office hours:** MWF 10:30-11:20, TuTh 11:00-11:50, or by appointment

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### **Catalog Course Description**

An introductory course for non-majors that emphasizes the unique features of plant biology. Included are discussions on: the origins of life; important plants of the world and their habitats; plant diversity, structure, function, and reproduction; plants and environmental science; plants that changed history; practical botany; and botany as a science. Three lecture/demonstration hours per week.

### **General Education**

This course is designed to meet the Natural Sciences and Life Sciences Learning Outcomes of WSU.  
<http://faculty.weber.edu/senate/Phy%20and%20Life%20Science%20Learning%20Outcomes.htm>

### **Students with disabilities**

Any student requiring accommodations or services due to a disability must contact Services for Students with Disabilities (SSD) in room 181 of the Student Services Center. SSD can arrange to provide course materials in alternative formats, if necessary.

### **Student Behavior**

You are expected to comply with the Botany Department Statement of Expectations of Students.  
<http://www.weber.edu/Botany/expectations.html>

### **Support materials**

The following textbook is required for this class: Stern KR, Bidlack JE, and Jansky S. 2008. *Introductory Plant Biology*, 11<sup>th</sup> ed. McGraw-Hill, Boston. (The 10<sup>th</sup> ed is OK.)

You can access course notes, reviews, and web links to relevant reading material and figures at <http://faculty.weber.edu/sharley/1203/syllabus.html>. You should check this site regularly for updates. There is also a course home page at <http://faculty.weber.edu/sharley/1203/1203.htm> which has links to the field trip web site, the syllabus, and other relevant sites.

### **Grading**

Your grade will be based on four exams and three written assignments.

#### **Exams**

You will be given four exams. The first three will be worth 80 points each, and the fourth (given during finals week) will be worth 115 points. While the second, third, and fourth exams will not be formally cumulative, the later material in the course builds on earlier material. The format of the exams will be a mixture of multiple choice, matching, identification, short answer, and essay.

If you are so late for an exam that one has already been turned in, you may not take the exam. If you will be gone on official university travel, it is **your** responsibility to let me know at least one week before the exam so that you can take the exam **early**. If you miss an exam for a **valid** reason (death in the family, medical emergency), notify me ASAP.

**Written Assignments**

All written assignments are due at the **beginning** of class on the due date. Each assignment is worth 40 points. Late assignments will lose 8 points per *calendar* day. Any assignment that is more than three calendar days late will not be graded. If you cannot turn in an assignment on time for a **valid** reason (death in the family, medical emergency), contact me ASAP. **Any plagiarism in an assignment results in an automatic zero.** All assignments are to be typed (word processed), double spaced, with one inch margins and 12 point font. Do not use a cover page. If you will be gone on official university travel, it is **your** responsibility to turn in assignments **early**.

Details about the written assignments will be covered at the second class meeting. The details are also available with the online version of the syllabus.

As an alternative to the first assignment, you can go on the Uinta Mountains Field Trip on September 16. You can access information about the field trip at <http://departments.weber.edu/botany/UMFT/home.htm>. To use the field trip as a substitute for the first assignment, you must go on the trip and turn in the answers to the field trip review questions by September 23.

**Extra Credit:** There is **no** extra credit in this class. (1) If you do not have time to master the content material and complete the written assignments, you certainly do not have time to do extra work. (2) It is not to fair to your classmates for you to have different criteria for your grade.

**Calculation of your grade:**

Four exams (3 @ 80 points each; 1 @ 115 points)	355 points
Three written assignments @ 40 points each	120 points
TOTAL	475 points

**Point totals to achieve a specific grade are as follows:**

A = 441-475	B = 394-412	C = 346-364	D = 299-317
A- = 427-440	B- = 380-393	C- = 332-345	D- = 285-298
B+ = 413-426	C+ = 365-379	D+ = 318-331	E = 0-284

<b>Course Topics (subject to change)</b>	<b>Textbook, 11<sup>th</sup> ed.</b>	<b>Textbook, 10<sup>th</sup> ed.</b>	
1. Introduction Economic botany	Ch 1 Ch 5: 75-76 Ch 6: 99-103 Ch 7: 123-124 Ch 14: 247-249	Ch 20: 383 Ch 21: 402-405 Ch 22: 419-425 Ch 24 App 3	Ch 1 Ch 5: 75-77 Ch 6: 99-104 Ch 7: 123-125 Ch 14: 248-249 Ch 20: 385 Ch 21: 404-407 Ch 22: 421-427 Ch 24 App 3
2. To be alive Attributes of life Molecules of life Cellular basis of life	Ch 2: 14-15, 21-27 Ch 3: 30-44 Ch 10: 185-186	Ch 2: 14-15, 21-27 Ch 3: 30-44 Ch 10: 185-186	
3. To be a plant Challenges Characteristics of plants Basic structure Development and plant movements (video)	Ch 1 Ch 4 Ch 5: 65-74 Ch 6	Ch 7: 107-118, 122-125 Ch 11: 200-208	Ch 1 Ch 4 Ch 5: 65-74 Ch 6 Ch 7: 107-119, 122-125 Ch 11: 201-209
4. Reproduction Asexual reproduction Sexual reproduction: flowers and pollination (video) Fruits, seeds, and seed dispersal (video)	Ch 3: 44-50 Ch 8 Ch 12	Ch 14: 259-264 Ch 23 App4: 579-585	Ch 3: 44-50 Ch 8 Ch 12 Ch 14: 260-265 Ch 23 App4: 586-591
5. Metabolism and assimilation Photosynthesis Cellular respiration Mineral nutrition Carnivorous plants (video)	Ch 5: 74-75 Ch 7: 118-122 Ch 9: 161-163 Ch 10 Ch 17: 303-307 Ch 25: 480-483	Ch 5: 74-75 Ch 7: 119-122 Ch 9: 160-163 Ch 10 Ch 17: 304-308 Ch 25: 479-483	

6. Some other organisms Life cycles Fungi Algae Lichens (video) Other plants Bryophytes (Nonvascular Plants) Vascular Plants Seedless Vascular Plants Seed Plants: Gymnosperms and Angiosperms	Ch 12: 219-222 Ch. 18: 318-338 Ch. 19 Ch. 20 Ch. 21 Ch. 22	Ch 12: 222-223 Ch. 18: 320-341 Ch. 19 Ch. 20 Ch. 21 Ch. 22
7. Plant ecology Soil Plant successions (video) Cryptobiotic soil crusts Ecosystems and biomes	Ch 5: 77-81 Ch 25: 475-480, 483-488 Ch 26	Ch 5: 77-80 Ch 25: 475-479, 483-486 Ch 26

### Important Dates:

September 7	Labor Day - no classes
September 16	Annual Botany Department Field Trip to the Uinta Mountains - class will not meet. For more information, go to <a href="http://departments.weber.edu/botany/UMFT/home.htm">http://departments.weber.edu/botany/UMFT/home.htm</a>
September 18	First Exam
September 23	Answers to the field trip review questions are due
September 23	Summary of the first <i>Economic Botany</i> paper is due if you did not go on the field trip
October 12	Second Exam
October 16	Fall Break - no classes
October 21	Summary of the second <i>Economic Botany</i> paper is due
November 4	Third Exam
November 18	Summary of the third <i>Economic Botany</i> paper is due
November 26-27	Thanksgiving Break - no classes
December 7 (Monday)	Fourth Exam, 9:30-11:20

