

**Plant Biology 211**  
**Diversity of Life**  
**Winter 2008**

**Learning Objectives:** In this course, you will learn about the life cycles and evolutionary relationships of major groups of organisms (with emphasis on plants, fungi, and protists), as well as the similarities and differences in their body structure and reproduction. You will also be introduced to the science of systematic biology, which deals with the evolutionary history, classification and naming of organisms. The lab portion of the course provides hands-on experience with the groups of organisms introduced in lecture. Additionally, in lab you will learn to use compound and dissecting microscopes and identification keys.

**Instructor:** Philip D. Cantino

**Office Hours:** By appointment (please email me: [cantino@ohio.edu](mailto:cantino@ohio.edu))

**Text:** Raven, P. H., R. F. Evert, and S. E. Eichhorn. Biology of Plants, 7<sup>th</sup> edition (2005), Freeman & Co., New York.

**Basis for Grade:**

First Lecture Exam	20%
Second Lecture Exam	20%
Lecture Final	25%
Lab	30%*
Attendance	5%

\*A passing grade in lab is required to pass the course.

**Attendance Policy:** Attendance, taken in lecture on 10 randomly chosen days, counts 5% of the course grade. In addition, exam questions are based heavily on lecture material, some of which is NOT in the text. Lab attendance is mandatory. Any unexcused absence from lab will result in the lowering of your course grade by one notch (e.g., from an A- to a B+).

Legitimate reasons for missing a lab include illness, death in the immediate family, religious observance, and involvement in University-sponsored academic activities. Other reasons will be considered on a case by case basis. Any absence other than for illness or death in the family must be cleared in advance with the course instructor or the lab instructor.

In order to schedule a make-up exam, you must contact the course instructor (P. Cantino) within 24 hours after an exam that was missed due to illness or death in the family.

**Academic Dishonesty:** Any student caught cheating on a quiz or exam will fail the course.

**Examinations:**

First Lecture Exam: Friday, February 8, 9:10 a.m.  
Second Lecture Exam: Friday, February 29, 9:10 a.m.  
Lab Final: Wednesday, March 12, regular lab time  
Lecture Final (comprehensive): Wednesday, March 19, 8:00 a.m.

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**Course Schedule**

<u>Dates</u>	<u>Lecture Topics</u>	<u>Text Pages</u>
Jan. 7-11	Introduction Evolution and systematics	37-38, 226-235 198-200, 219-226
Jan. 14-16	Bacteria Eukaryotic life cycles	239-252, 258 141-142, 147 158-160, 235-237
Jan. 18-25	Fungi, lichens	260-295
Jan. 28 - Feb. 1	Slime molds, water molds, algae	296-344
<u>Feb. 8</u>	<u>First lecture exam</u> (through algae)	
Feb. 4-6	Bryophytes	345-367
Feb. 11-13	Ferns, Horsetails, Clubmosses, etc.	368-407
Feb. 15-20	Reproduction by seed; gymnosperms	408-433
<u>Feb. 29</u>	<u>Second lecture exam</u> (through gymnosperms)	
Feb. 22-Mar 10	Angiosperms	434-451, 460-470
Mar. 12-14	Recapitulation of phylogeny; review for final	
<u>March 19 (Wednesday), 8:00 a.m.: Final Lecture Exam</u>		

PBIO 211 Lab Schedule  
Winter 2008

No labs in Week 1

Week 2

Mon., January 14

Lab 1. Introduction to Major Taxa

Wed., January 16

Lab 2. Microscopy; Initiating Cultures & Mini-marshes

Week 3

Mon., January 21

NO CLASS (MARTIN LUTHER KING DAY)

Wed., January 23\*\*

Lab 3. Bacteria

Week 4

Mon., January 28\*

Lab 4. Fungi I

Wed., January 30

Lab 5. Fungi II

Week 5

Mon., February 4\*

Lab 6. Protista I

Wed., February 6

Lab 7. Protista II

Week 6

Mon., February 11

Lab 8. Bryophytes

Wed., February 13\*

Lab 9. Psilophyta, Lycophyta, Sphenophyta

Week 7

Mon., February 18\*

Lab 10. Ferns

Wed., February 20

Lab 11. Gymnosperms

Week 8

Mon., February 25

Lab 12. Angiosperms (flowers)

Wed., February 27\*

Lab 13. Angiosperms (life cycle)

Week 9

Mon., March 3

Lab 14. Angiosperms (fruits)

Wed., March 5\*

QUIZ ONLY (weekend field trip substitutes for the lab)

**Sat., March 8, 1-4 pm**

**FIELD TRIP (1-3 PM lab)**

**Sun., March 9, 1-4 pm**

**FIELD TRIP (3-5 PM lab)**

Week 10

Mon., March 10

Lab Review

Wed., March 12

Lab Final

\* Quiz covering the previous week's labs

\*\* Lecture quiz, to be taken during lab