



# BIOLOGY 1304 Fall 2003

Course Reference Number 10710 Tentative Syllabus

---

## PLANT BIOLOGY & LAB

CRN 10710: M W 5:30 - 8:20 PM

302 Howell Hall

<http://www.metabolism.net/bidlack>

<http://biology.ucok.edu/bidlack>

**Dr. Jim Bidlack**

301B Howell Hall

(405) 974-5927

E-Mail: [jbidlack@ucok.edu](mailto:jbidlack@ucok.edu)

Office Hrs: 3:30 - 4:30 MTWR

**PLANT BIOLOGY AND LABORATORY:** An introduction to plant cells, plant morphology, plant anatomy, plant physiology, and plant diversity. Laboratory and lecture are integrated with three hours of lecture and three hours of laboratory per week. *No college prerequisites*; high school biology and/or science is required.

<u>DATE</u>	<u>LECTURE TOPIC</u>	<u>LAB TOPIC</u>	<u>READING (TEXT)</u>
<b>August</b>			
18 M	Course description: what is a plant? Plant morphology & identification	Plant biology & diversity Plant morphology & key const.	1-11,12-14,135,290-298 53-55,86-90,109-114,135
20 W	Plant identification Scientific method	Plant biology & scientific method	7-8,286-298
25 M	Campus trees Monocots and dicots	FALL FIELD TRIP	See lab manual
27 W	Inorganic & organic chemistry Biological molecules	Use of the microscope	12-21 21-27
<b>September</b>			
1 M	HAPPY LABOR DAY!		
3 W	Biological molecules (continued) Cell structure & function	Plant compounds	21-27,232-234 28-44,50
8 M	Cell structure & function (continued) Cell organelles	Plant cells & organelles <b>LAB CHECK #1</b>	36-43,50-52 36-43,50-52
10 W	Cell membranes & transport Mitosis	Plant cells & organelles Mitosis & meiosis	36-43,154-159 44-52,221-229,443-449
15 M	Meiosis	Mitosis & meiosis	44-52,221-229,443-449
17 W	<b>EXAM I</b> Apical meristems	<b>LAB EXAM I</b> Plant tissues	53-55,86-91
22 M	Plant cells & tissue types	Plant tissues (continued)	53-64
24 W	Roots	Root anatomy	65-85
29 M	Stems: primary growth	Stem anatomy	86-92
<b>October</b>			
1 W	Stems: primary growth (continued) Stems: secondary growth	Stem anatomy	86-108

<u>DATE</u>	<u>LECTURE TOPIC</u>	<u>LAB TOPIC</u>	<u>READING (TEXT)</u>
<b>October (continued)</b>			
6	M Leaves	Leaf anatomy	109-129
8	W Overview of metabolism Photosynthesis: light reactions	Overview of metabolism Photosynthesis	20-21,170-172 170-182
13	M Photosynthesis: dark reactions <b>INTERNET PROJECT DUE</b>	Photosynthesis	182-186
15	W Cellular respiration Review of metabolism	Respiration	186-196
20	M <b>EXAM II</b> Classification	<b>LAB EXAM II</b> Classification	286-298
22	W Fungi	Fungi	355-380
27	M Algae	Algae	310-314,325-354
29	W Bryophytes	Bryophytes	381-395
<b>November</b>			
3	M Lower vascular plants	Lower vascular plants	396-420
5	W Gymnosperms	Gymnosperms	421-440
10	M <b>EXAM III</b> Flowering plants	<b>LAB EXAM III</b> Flowers and angiosperm life cycle	130-136,449-450,480-481
12	W Angiosperm life cycle	Flowers and angiosperm life cycle	221-223,441-460
17	M Fruits	Fruit morphology and anatomy	130-147
19	W Seeds & seedlings	Seed and seedling morphology <b>LAB CHECK #2</b>	147-153
24	M Plant growth regulation Plant propagation	Plant hormones	197-220 253-272
26	W <b>HAPPY THANKSGIVING!</b>		
<b>December</b>			
1	M Absorption & transport	Plant nutrition	154-169
3	W Ecology	<b>LAB EXAM IV</b>	89-90,487-518
8-12	<b>FINAL EXAMINATIONS</b>		

CRN 10710: Final Exam is Wednesday, 10 December at 5:30 - 7:20 PM. The Final Exam will be approximately 1/2 comprehensive and 1/2 new material.

Additional course information: Students are encouraged to read the book before coming to class. Review what pages will be discussed in lecture by looking at the pictures, figures, and illustrations. Read the chapter summary and then move on to reading the text to acquaint yourself with the learning material. If you prefer computer, Internet, and multimedia presentations of the material, go to the textbook website at <http://www.mhhe.com/botany> (there are computers available for your use in Room 303 of Howell Hall). After lecture and lab, you should review your notes and try the practice exams that are available at the University Copy Center.

# BIOLOGY 1304 & 1304L PLANT BIOLOGY & LAB

Fall 2003 - CRN 10710

Instructor: Dr. Jim Bidlack

Office Phone: (405) 974-5927 UCO Weather Line: (405) 974-2002

E-Mail: [jbidlack@ucok.edu](mailto:jbidlack@ucok.edu)

Internet: <http://www.metabolism.net/bidlack> or <http://biology.ucok.edu/bidlack>

Office hours: 3:30 - 4:30 MTWR, 301B Howell Hall

*Avoid Scheduling Office Visits Just Before Class*

**Textbook:** Stern, K.R., S. Jansky, and J. Bidlack. 2003. [Introductory Plant Biology](#). 9<sup>th</sup> edition. The McGraw-Hill Companies, Inc., Dubuque, IA.

**Lab Manual:** Bidlack, J.E., and R.W. Myster. Fall 2003. *Laboratory Manual for Plant Biology*. 2<sup>nd</sup> edition. Available at the University Copy Center.

**Lab tools:** Supplies may include drawing paper (blank white paper), lead and color pencils, ruler, eraser, compass, and a dissecting kit (NO SCALPELS).

**Attendance:** Students are expected to attend all classes.

**Grading:** An approximate breakdown of points for the course is as follows:

3 lecture exams @ 100 points each	300
4 lab exams @ 50 points each	200
2 lab checks @ 25 points each	50
1 Internet project @ 50 points	50
1 final exam @ 200 points	200
<hr/>	
<b>TOTAL POSSIBLE POINTS</b>	<b>800</b>

Grading scale	Grade	Minimum points needed
90 - 100% of total possible points	A	720
80 - 89% of total possible points	B	640
70 - 79% of total possible points	C	560
60 - 69% of total possible points	D	480
Below 60% of total possible points	F	-

**Exam material:** Lecture, lab, and the final exams will consist mostly of multiple-choice, matching, true-false, short answer, and short essay questions. All exams count in determining the final grade. For best performance, read the assigned text before attending lecture and review lecture notes after each class. Sample exams are available at the UCO copy center. These sample exams should be used as a study guide and not as the sole source for exam preparation. Make-up lecture exams will be given only in extenuating circumstances and will usually consist of long essay questions. There will be no make-up lab exams. Should you miss a lab exam, you will receive a zero for that exam.

**Cheating:** All work should be that of the student alone. If it is determined by the instructor that a student has cheated on an exam or any assignment, the student will receive no credit for that exam or assignment and the student's name will be reported to the proper authorities.

**Special Needs:** Students with disabilities who believe they may need accommodations in class are encouraged to contact the Disability Support Services at 974-2549.