



FALL 2011 SYLLABUS

BSCI 124 – PLANT BIOLOGY FOR NON-SCIENCE STUDENTS

Instructor: **Prof. Edgar Moctezuma, Ph.D.**
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GENERAL COURSE INFORMATION FOR BSCI 124, SECTION 1001:

Lecture: Tuesdays and Thursdays, 11:00 am –12:15 am
 Room: 0226 H. J. Patterson Hall

Course Description: Welcome to BSCI 124! This is a three-credit course in Plant Biology, designed for the non-science student. The course is divided into four units with the following objectives:

- 1) To understand basic principles of plant form and function;
- 2) To examine the origins of the great diversity of plants, and its important role in the biosphere;
- 3) To understand the impact, uses and importance of plants in culture, history and modern society, and;
- 4) To provide the information necessary to make wise decisions about the management and protection of world natural resources.

CORE Lab Science Requirement: PLEASE NOTE that Lecture and Lab Courses, BSCI 124 (Plant Biology for Non-Science Students) and BSCI 125 (Laboratory in Plant Biology) must be taken together in the same semester to count for CORE Lab Science. BSCI 124 taken alone will NOT count as a non-lab science for CORE. BSCI 124 and 125 are two separate courses.

Textbook: PLANTS AND SOCIETY, by Estelle Levetin & Karen McMahon. 2008, **Fourth or Fifth Edition (either edition is fine)**. Readings from the textbook are listed on the Lecture Schedule (for both 4th and 5th Editions). Reading the textbook before and after lecture is recommended. The textbook should be used as a reference source.

PRINT YOUR LECTURE NOTES FROM BLACKBOARD BEFORE CLASS!

BLACKBOARD: We will be using Blackboard ELMS for BSCI 124 course announcements, syllabus, sample exam questions, grades, quizzes, extra-credit project information, etc. All students must make sure to have a University of Maryland e-mail account (___@umd.edu) and password in order to gain access to Blackboard. Please activate your umd.edu account ASAP! Also, general lecture outlines for the different topics covered during class can be found in:

<http://www.life.umd.edu/classroom/bsci124/main.html>

Please note that the material in these websites is intended as additional supplements to the course, and *not* as a substitute for attending lectures. Lecture notes will have blank spaces to be filled during the lecture time, therefore it is important to always attend class.

EXAMS AND GRADES

Exams: Three mid-term exams and one final exam will be given (i.e. one exam for each unit), each worth 100 points. All exams will be held on the days given in the Lecture Schedule. All exams are non-cumulative and **will focus on material presented in lecture**. Exams start on time. If a student arrives late, after another student has finished the exam, the late-arriving student will not be permitted to take the exam.

Final Grade:	<u>Exam:</u>	<u>Points:</u>
	Exam # 1	100
	Exam # 2	100
	Exam # 3	100
	Final exam	<u>100</u>
Total exam points possible:		400 points

Extra Credit points: Extra-credit quizzes, in-class pop quizzes, class participation, movies, and other writing exercises (to be announced throughout the semester).

Total possible extra credit points : 30 points

Final letter grades: The grade for the total number of points accumulated in the class will be assigned as follows (your total points, including exam and extra credits, **out of 400 maximum** points, even though 430 points are possible):

400-387 pts. = A+	359-346 = B+	319-306 = C+	279-266 = D+
386-373 pts. = A	345-332 = B	305-292 = C	265-252 = D
372-360 pts. = A-	331-320 = B-	291-280 = C-	251-240 = D-
			< 240 = F

Point scoresheet – keep track of your exam points in the following boxes:

Exam 1	Exam 2	Exam 3	Exam 4	Extra credit points (30 max)	Total Pts.

Exam makeup: If absent from an exam, you must present an official, university-approved excuse, accompanied by appropriate written and verifiable documentation. If absent from an exam due to serious illness, please contact the instructor within 24 hrs. of the exam. Be ready to present proper documentation from you doctor or a hospital/health clinic (a generic time-stamped visit verification slip from the Student University Health Center **won't be accepted**). Upon acceptance and verification of a written excuse for absence from an exam, a makeup exam may be given. If the excuse is unacceptable, you will receive a zero on the exam. PLEASE NOTE: make-up exams are usually different and much more difficult than regular exams, so we strongly discourage taking them.

Lecture Preparation and Attendance:

1. Attend every lecture meeting. Attendance is strongly correlated with your grade! Many announcements will be made only in lecture and all students will be held responsible for these announcements. Quizzes and other extra credit assignments will also be given during lecture only. **Print your lecture notes from Blackboard before class!**
2. Arrive to class on time and do not leave class early.
3. Complete assigned readings prior to their discussion in lecture.
4. **Religious observances, Athletes and Students with Disabilities:** It is the student's responsibility to inform Prof. Moctezuma **in advance and in writing** of any intended absences for religious or athletic events, or any accommodations for students with disabilities. A written notice should be provided as soon as possible, but no later than SEPT 9, 2011.

ACADEMIC HONESTY AND CLASSROOM CONDUCT

1. By enrolling in this course you agree to abide by the **University's Code of Academic Integrity**. The Code prohibits students from cheating on exams, plagiarizing papers, submitting fraudulent documents, and forging signatures. See Chapter 4 of the Undergraduate Catalog for additional details. Students caught cheating, plagiarizing, etc. will be given an "XF" grade (failure due to academic dishonesty) in their transcript.
2. **PLEASE TURN OFF ANY CELL PHONES, PAGERS, BEEPERS, ETC. DURING CLASS!** They are disruptive and annoying to the class. No cell phones allowed in exams.
3. **Eating and drinking are not permitted during lecture.**
4. **Reading the newspaper or other materials not related to the course is not permitted during the lecture.**
5. **Please refrain from talking during lecture.** Even quiet conversations become disruptive when multiplied by the large number of students in class. Students who disrupt the ability of others to concentrate will be asked to leave the lecture room.
6. **THERE WILL BE NO EXCEPTIONS TO THESE POLICIES.** Please do not ask.

FALL 2011 LECTURE SCHEDULE – BSCI 124

UNIT I – HOW PLANTS FUNCTION

LECTURE NUMBER	DATE	LECTURE TOPIC	TEXTBOOK READINGS 4 TH EDITION	TEXTBOOK READINGS 5 TH EDITION
1		Introduction to Science and Plants	Pages 2-8	Pages 4-8
2		The Plant Cell and Macromolecules	Pg. 9-16, 20-27	Pg. 8-6, 20-26
3		Plant Anatomy and Physiology	Pg. 32-42, 51-55, 96-97	Pg. 32-44, 50-54
4		Photosynthesis, Respiration and the Carbon Cycle	Pg. 55-71	Pg. 54-69
5		DNA, RNA and Proteins	Pg. 113-121	Pg. 112-120
6		Mitosis, Meiosis and Sexual Reproduction	Pg. 27-31 Pg. 78-81	Pg. 26-29, 77-80
7		Mendelian Genetics	Pg. 105-113	Pg. 104-112
Exam 1		FIRST EXAM (on Unit I, Lectures 1-7)		

UNIT II – PLANT DIVERSITY

LECTURE NUMBER	DATE	LECTURE TOPIC	TEXTBOOK READINGS 4 TH EDITION	TEXTBOOK READINGS 5 TH EDITION
8		Plant Systematics and Darwinian Evolution	Chapter 8	Chapter 8
9		Evolution and adaptations	Pg. 43, 422-423 (box)	Chapter 8
10		Viruses, Prokaryotes, Eukaryotes and Fungi	Chapter 23, 25	Chapter 23, 25
11		Algae, Bryophytes and Ferns	Chapter 22 Pg. 140-149	Chapter 22 Pg. 140-148
12		Gymnosperms and Flowering Plants	Pg. 149-154 Pg. 74-75, 81-84	Pg. 149-153 Pg. 73-74, 28, 86
13	*	Pollination	Pg. 84-87	Pg. 75-77
14		Seeds and Fruit	Chapter 6: Pg. 90-93	Pg. 89-99
Exam 2		SECOND EXAM (on previous Unit II, Lectures 8-14)		

UNIT III – HUMAN USES OF PLANTS

LECTURE NUMBER	DATE	LECTURE TOPIC	TEXTBOOK READINGS 4 TH EDITION	TEXTBOOK READINGS 5 TH EDITION
15	*	The origin of Agriculture; Human Nutrition	Chapters 10 & 11	Chapters 10 & 11
16	*	Grasses, Legumes and Starchy Staples	Ch. 12, pg. 212-18 Ch. 13 & 14	Ch. 12, pg. 435-438 Ch. 13 & 14
17	*	Plant Fibers: Cloth and Paper; Herbs and Spices	Chapter 18; Chapter 17	Chapter 18; Chapter 17
18	*	Stimulating Beverages	Chapter 16	Chapter 16
19		Medicinal, Poisonous and Allergenic Plants	Chapter 19; Chapter 21	Chapter 19; Chapter 21
20		Psychoactive Plants	Chapter 20	Chapter 20
Exam 3		THIRD EXAM (on previous Unit III, Lectures 15-20)		

UNIT IV – ECOLOGY

LECTURE NUMBER	DATE	LECTURE TOPIC	TEXTBOOK READINGS 4 TH EDITION	TEXTBOOK READINGS 5 TH EDITION
21	*	Ecology and Succession	Chapter 26: Pg. 473-483;	Pg. 466-472 Pg. 476-477
22	*	Terrestrial Biomes	Pg. 483-489	Pg. 478-485
23	*	Aquatic Biomes		
24	*	Biodiversity and Extinction; Sustainability; Atmosphere	Pg. 478-482	Pg. 473-476
25	*	Agriculture and Environment; World Food Problems	Pg. 242-253	Pg. 236-247
26	*	Plant Biotechnology	Pg. 253-264	Pg. 248-260
Exam 4		FINAL EXAM (on previous Unit IV, Lectures 21-26) Note: exam is on Thursday from 8:00 – 10:00 AM !		

* SUSTAINABILITY TOPIC

