

SPRING 2004 SYLLABUS

BSCI 124 – PLANT BIOLOGY FOR NON-SCIENCE STUDENTS

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Read this
entire syllabus!

GENERAL COURSE INFORMATION for SECTION 1001:

Lecture: Tuesdays and Thursdays, 9:30 am –10:45 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

Textbook: PLANTS AND SOCIETY, by Estelle Levetin & Karen McMahon. 2002, **3rd Edition**. Readings from the textbook will be listed on the Lecture Schedule. Reading the textbook before and after each lecture is strongly recommended.

WebCT: For BSCI 124 course announcements, syllabus, sample exam questions, grades, quizzes, Plant Journal extra-credit project information, etc., we'll be using WebCT. **All students must make sure to have a University of Maryland e-mail account and password**, in order to gain access to WebCT. More on WebCT will be announced during lecture.

Course Website: The class syllabus, course policies, sample exam questions, extra credit assignments and other links will be available on the web at:

<http://www.life.umd.edu/CBMG/faculty/moctezuma/bsci124/index.html>

Also, general lecture outlines for the different topics covered during class can be found in:

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

Also useful is the textbook's website: **<http://www.mhhe.com/botany>**

Please note that the material in these websites is intended as additional supplements to the course, and *not* as a substitute for attending lectures.

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: Exam: Points:

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 (3)	9
Exam Bonus questions	6
The Life of a Plant Journal	<u>15</u>
Total extra credit points:	30

Total possible points in class: 430 points

Final letter grades: The grade for the total number of points accumulated in the class will be assigned as follows:

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

Exam 1	Exam 2	Exam 3	Exam 4	Extracredit Quizzes (3)	Plant Journal

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 exam due to serious illness, please contact the instructor within 24 hrs. of the exam. Be ready to present proper documentation (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 will be given (different from the regular exam).

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. Additionally, a significant amount of material is covered only during the lecture. Exams will be testing material covered in lecture.
2. Arrive to class on time and do not leave class early.
3. Complete assigned readings prior to their discussion in lecture. The material presented in the course can be difficult, but it'll be easier to understand if you read the book first.
4. Religious observances and accommodations for students with disabilities: students should bring documentation outlining their needs to Prof. Moctezuma as soon as possible, but no later than February 6, 2004.

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.
2. **PLEASE TURN OFF ANY CELL PHONES, PAGERS, BEEPERS, ETC. DURING CLASS!** They are disruptive and annoying to the class.
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.

SPRING 2004 LECTURE SCHEDULE – BSCI 124

UNIT I – HOW PLANTS FUNCTION

LECTURE NUMBER	DATE	LECTURE TOPIC	TEXTBOOK READINGS
1	Jan. 27	Introduction to Science and Plants	Pages 32-44
2	Jan. 29	The Plant Cell and Macromolecules	Pg. 9-16, 20-27
3	Feb. 3	Plant Anatomy and Physiology	Pg. 32-42, 48-52, 92-3
4	Feb. 5	Photosynthesis, Respiration and the Carbon Cycle	Pg. 53, 56, 63-68 Pg. 57-63
5	Feb. 10	DNA, RNA and Proteins	Pg. 110-117
6	Feb. 12	Mitosis, Meiosis and Sexual Reproduction	Pg. 27-30 Pg. 75-77
7	Feb. 17	Mendelian Genetics	Pg. 102-110

UNIT II – PLANT DIVERSITY

LECTURE NUMBER	DATE	LECTURE TOPIC	TEXTBOOK READING
8	Feb. 19	Plant Systematics and Darwinian Evolution	Chapter 8
Exam 1	Feb. 24	<u>FIRST EXAM</u> (on Unit I topics, <u>Lectures 1-7</u> only)	
9	Feb. 26	Evolution and adaptations	Pg. 41, 401-402(box)
10	Mar. 2	Viruses, Prokaryotes, Eukaryotes and Fungi	Chapter 23 and Pg. 399-411
11	Mar. 4	Algae and Bryophytes	Chapter 22 and Pg. 137-145
12	Mar. 9	Gymnosperms and Flowering Plants	Pg. 145-150 Pg. 71, 78, 83-84
13	Mar. 11	Pollination	Pg. 79-82
14	Mar. 16	Seeds and Fruit	Chapter 6
Exam 2	Mar. 18	<u>SECOND EXAM</u> (on previous Unit II, Lectures 8-14)	

UNIT III – HUMAN USES OF FLOWERING PLANTS

LECTURE NUMBER	DATE	LECTURE TOPIC	TEXTBOOK READINGS
March 22-28		<i>Spring Break – no lectures this week!</i>	
15	Mar. 30	The origin of Agriculture; Human Nutrition	Chapters 10 & 11
16	Apr. 1	Grasses, Legumes and Starchy Staples	Ch. 12, pg. 421- 423; Ch. 13 & 14
17	Apr. 6	Plant Fibers: Cloth and Paper; Herbs and Spices	Chapter 18; Chapter 17
18	Apr. 8	Stimulating Beverages	Chapter 16
19	Apr. 13	Medicinal, Poisonous and Allergenic Plants (guest lecturer)	Chapter 19; Chapter 21
20	Apr. 15	Psychoactive Plants	Chapter 20
Exam 3	Apr. 20	<u>THIRD EXAM</u> (on previous Unit III, Lectures 15-20)	

UNIT IV – ECOLOGY

LECTURE NUMBER	DATE	LECTURE TOPIC	TEXTBOOK READINGS
21	Apr. 22	Ecology and Succession	Pg. 451-456; Pg. 459-460
22	Apr. 27	Terrestrial Biomes	Pg. 461-467
23	Apr. 29	Aquatic Biomes	(Video in class)
24	May 4	Biodiversity and Extinction; Atmosphere	Pg. 456-459
25	May 6	Agriculture and Environment; World Food Problems	Pg. 230-240
26	May 11	Plant Biotechnology	Pg. 242-250
Exam 4	May 14	<u>FINAL EXAM</u> (on previous Unit IV, Lectures 21-26) Note: exam is from 8:00 AM – 10:00 AM !	