PBIO 115: Plant Structure and Development
Syllabus
Spring Quarter 2008
Call #'s 05113, 05114, 07467, 4 credit hours

Instructor: Dr. Stefan Gleissberg
Teaching Assistants: Ben Flicker, Anandi Bhattacharya

Course Description and Requirements:
For plant biology and other science majors, preprofessional students and science modular students. Introduction to structure, growth, development, and reproductive biology of plants with emphasis on flowering plants. No credit if PBIO 102 or 111. 3 lec, 2 lab.

Class Times
Lectures: MWTh, 10:10 - 11 AM Porter Hall 104
Labs: Porter Hall 301

Assessment and Grading:

First Exam - 100 points	90-92%, 93% and above	A-, A
Second Exam - 100 points	80-82%, 83-87%, 88-89%	B-, B, B+
Final Exam - 150 points	70-72%, 73-77%, 78-79%	C-, C, C+
Laboratory - 150 points	60-62%, 63-67%, 68-69%	D-, D, D+
Total: 500 points	below 59 %	F

Exams will be based upon material covered in class lectures as well as in the assigned readings.

Students must pass both the lecure and the laboratory (minimum 60%) in order to pass the course.

Textbook (required)**:** Raven, P.H., R.F. Evert & S.E. Eichhorn. 2005. Biology of Plants, 7th edition Worth Publishers, New York

Laboratory exercises, supplementary materials, and grades are available on Blackboard http://blackboard.ohiou.edu/. You are expected to read each exercise in advance of the laboratory period, a copy of each exercise will be passed out in class, and you are expected to bring it to the laboratory with you.

Office Hours:
By appointment, Porter Hall Room 500
email (preferred): gleissbe@ohio.edu, or office phone: 593-2549

Attendance Policy: Attendance will not be taken for lectures. However, exam and quiz questions are based on lecture material, some of which is not from the textbook. Lab attendance is mandatory. Missed labs and quizzes and/or missed lecture exams can be made up only with adequate proof of a legitimate absence as defined by Ohio University. Students will not be permitted to take a quiz based on a lab that they did not attend. 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+). Predictable absences must be cleared in advance with the instructor. Make up examinations will be considered only by written request to the instructor. Your request should include your name, course number, day and time of the missed class, and the reason for your absence.

Academic Conduct and Class Etiquette: The penalty for course-related academic dishonesty (i.e., cheating on exams, plagiarism, etc.) will be failure of the entire course. University policy will be followed.

Course Calendar (subject to changes)

Week	*Date*	*Day*	*Topic and Readings*	*Lab Date and Topic*
1	Mar 31	Mon	1. Intro, Land plant diversity [327-329, 337-340, 345-351, 368-369, 380F, 406-407, 432-433]	Mar 31 or Apr 1- **Lab 1** Initiating growth, microscopy
	Apr 2	Wed	2. Life cycles [362-363F, 376F, 386-387F, 396-397F, 418-419F, 448-449F]	
	Apr 3	Thurs	3. Meristems, Growth, Tissue systems [510-513]	
2	Apr 7	Mon	4. Vascular tissues [516-523]	Apr 7 or 8 - **Lab 2** Cells and tissues of the plant body
	Apr 9	Wed	5. Ground and dermal tissues [513-516, 523-527]	
	Apr 10	Thurs	6. Function of apical meristems	
3	Apr 14	Mon	7. Seeds and germination [502-509]	Apr 14 or 15 - **Lab 3** Seeds and seedlings
	Apr 16	Wed	8. Embryogenesis [497-502]	
	Apr 17	Thurs	9. Shoot structure and development I [547-559]	
4	Apr 21	Mon	10. Shoot structure and development II	Apr 21 or 22 - **Lab 4** Shoots and branching
	Apr 23	Wed	**EXAM I; through Embryogenesis**	
	Apr 24	Thurs	11. Shoot branching	
5	Apr 28	Mon	12. Leaf morphology and development I [559-570]	Apr 28 or 29 - **Lab 5** Leaf structure and development
	Apr 30	Wed	13. Leaf morphology and development II	
	May 1	Thurs	14. Shoot and leaf modifications [575-579]	
6	May 5	Mon	15. Structure and development of roots [528-538, 540-546, 570-571]	May 5 or 6 - **Lab 6** Root structure and development
	May 7	Wed	16. Secondary growth in woody plants I [580-601, 538-540]	
	May 8	Thurs	17. Secondary growth in woody plants II	
7	May 12	Mon	18. Reproductive transition, inflorescences [438F]	May 12 or 13 - **Lab 7** Secondary growth
	May 14	Wed	**EXAM II; through Secondary growth**	
	May 15	Thurs	19. Flower structure [436-442]	
8	May 19	Mon	20. Flower development [571-575]	May 19 or 20 - **Lab 8** Flowering
	May 21	Wed	21. Pollination and Fertilization [442-451]	
	May 22	Thurs	22. Fruit development	
9	May 26	Mon	**Memorial Day - NO CLASS**	May 28? or 27 - **Lab 9** Tree tour
	May 28	Wed	23. Fruit diversity [465-470]	
	May 29	Thurs	24. Phylogeny of angiosperms [452-460]	
10	Jun 2	Mon	25. Regulation of development [542-543, 549-515, 573-575, 603-,605, 621]	Jun 2 or 3 **LAB PRACTICAL**
	Jun 4	Wed	26. Evolution of development	
	Jun 5	Thurs	Review	
	Jun 9	Mon	**FINAL EXAM at 10:10 a.m.**	