Biology of Horticulture
BIOL 4010
Spring 2011

Instructor: Dr. Emily Cantonwine

Lecture	9:00-9:50 (BC 2022)
Lab	11:00-1:50 (BC 2040)
Office Hours	M 2:30-4, W 2:30-4, F 10-11:30, or by appointment

Course Description: Introduction to the biological principles and practices of propagating and growing plants.

Course Objectives (Educational Outcomes): By the end of the semester, students will be able to

- start and maintain plants in a greenhouse (GEO 5; BEO 5)
- identify important horticultural plants and plant families (GEO 5; BEO 2,5)
- identify structural components of horticultural plants (GEO 5; BEO 3,5)
- explain how environmental factors affect plant growth (GEO 5; BEO 5)
- explain the biological principles behind the manipulation of plant growth for aesthetic and economic purposes (GEO 5; BEO 5)
- explain how plants, insects, and pathogens damage plants or affect plant value (GEO 5; BEO 2,5)
- present complex biological information in report, poster, and video-log format (GEO 3,4,7; BEO 1,5)

Required Text: Preece, J.E. & Read, P. E. 2005. The Biology of Horticulture, an introductory textbook. Second edition. John Wiley & Sons, Inc.

Students are required to bring the syllabus & lecture notes to lecture periods; The Biology of Horticulture text is recommended.

Students are required to bring the syllabus & lecture notes to each laboratory. The Biology of Horticulture text may be required occasionally.

Important information:

- A grade of C or higher is required in this course to count towards biology degree.
- Midterm, March 3, is the last day to withdraw from the course.
- If you have need for special arrangements to meet the requirements of this course, please contact the Access Office for Students with Disabilities in Nevins Hall, 245-2498. Please discuss this need with me as soon as possible.

Assessment	#	points each	points total

Assessments:

- *Exams:* There are 5 exams and a cumulative final exam, each worth 100 points. Material on the exams will include both lecture and laboratory material. Students may drop their lowest exam score (or elect to not take the final). Students may not take exams late, and may not take exams early unless there is a documented university or religious excuse. In case of illness or family emergency, the exam you miss is the exam that will be dropped.

- *Poster:* Each student will research a horticultural topic

Tentative Schedule:

Date	Lecture Topics	Reading Assignments (Chapters)	Lab
1/10	What are the features of horticultural plants? *(Introduction, Classification, Plant structure)* **EXAM 1 - chapters 1-3 (1/31)**	1,2	Service projects, Poster topics
1/17		3	MLK Day no lab
1/24		3	Anatomy Lab
1/31		3	Begin plant propagation experiment (Lab Report - Due 3/7)
2/7	How is plant growth manipulated? *(Hormones, Chemical control of growth, Propagation, Pruning)* **EXAM 2 - chapters 11-14 (2/28)**	11	grafting, pruning, repotting, mulching
2/14		12	Tree planting; data collection
2/21		13	Service Project
2/28		14	Start plants for flower pots, develop planting plan
3/7	How does the ambient environment affect plant growth?		