

**COURSE SYLLABUS  
HORT 3620 PLANT PROPAGATION  
SPRING SEMESTER 2009**

**Instructor:** Dr. Bodie Pennisi  
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**Meeting:** Lecture: Monday and Wednesday 10:10 - 11:00 am, Flynt Bldg 301  
  
Lab: Wednesday 12:30 - 2:20pm Lab, Flynt Bldg 301 and the Horticulture Greenhouse

**Purpose of course:** To provide students with the principles and practices for increasing plant numbers with emphasis on the anatomical, genetic, and physiological basis for various methods.

**Textbook:** Plant Propagation, Principles and Practices by Hartman, H.T., D.E. Kester, F.T. Davies, Jr., R.L. Geneve. Assigned reading to accompany each lecture and lab is listed in the class schedule. *Reading of materials should be done prior to lecture, and will greatly facilitate class discussion.*

**Course Information:** Information for this class will come from class lectures, handouts, slide presentations, laboratories, and assigned readings/viewings of visual recordings.

**Note:** This course syllabus is a *general* plan for the course; deviations announced to the class by the instructor may be necessary.

**Lectures:** The lecture material will come from the class textbook and from references such as those listed under Useful References, below.

**Exams:** There will be four 50-minute exams and a two-hour final exam. The exam material will include topics from the textbook, lectures, and lab projects. All exams will be comprehensive and will include the material covered through the class period previous to the one in which the exam is held. All exam designs will be 30% terms or definitions and 70% short answer, listing, matching, longer discussion questions, or similar format. All exams need to be completed within the time scheduled.

**Lab Reports/Lab Notebook:** There will be 9 labs. Lab reports are due at the times indicated (refer to lab schedule below) and by the end of the lab period. Lab report turned late but by the end of the week when due will have 5 points taken off. A lab report turned later than 5 pm at the end of the week when due will be given 0 points. Late lab reports may be turned electronically however, instructor confirmation is needed. The entire lab notebook carries 200 points.

**Class Discussion of Book:** We will have a class discussion based on Chapters 6 and 7 of the book Guns, Germs, and Steel: The Fates of Human Societies by Jared Diamond. The book is available on reserve in the library. *Although this assignment does not carry formal grading points, student participation in the discussion will be evaluated and taken into consideration when final course grade is assigned.*

<b>Grading:</b>	Midterm exams (4 exams @ 100 points)	400 points
	Lab Notebook	200 points
	Final Exam	100 points
	<b>Total</b>	<b>700 points</b>

<b>Grading Scale:</b>	A	663-700
	A <sup>-</sup>	662-640
	B <sup>+</sup>	639-617
	B	616-594
	B <sup>-</sup>	593-571
	C <sup>+</sup>	570-548
	C	547-525
	C <sup>-</sup>	524-502
	D	501-461
	F	460 and below

**Attendance Policy:** Attendance is not used in the final grade calculation, however, *regardless of the reason for the absence* students are responsible for obtaining any information presented in class during the student's absence.

In case of emergency where the instructor was unable to deliver the lecture, a video-audio file of the lecture material will be made available to the students via WebCT. *Students are responsible for accessing and reviewing the files.*

**Academic Honesty Policy:** All academic work must meet the standards contained in "A Culture of Honesty." Students are responsible for informing themselves about those standards before performing any academic work. The link to more detailed information about academic honesty can be found at:  
<http://www.uga.edu/ovpi/honesty/acadhon.htm>.

**Policy for Makeup Exams and Lab Reports:**

- Exams may be made up at the instructor's discretion with proper justification for the reasons why the student could not take the exam at the specified date and times.
- There will be no make-ups for lab reports for any reason! Lab attendance will be taken, and if a student who missed a lab tried to turn in a lab report for that lab, he/she will be penalized 50 points.

**In-Class Behavior:**

- Unwanted talking or distracting behavior is *unwelcome*; questions, comments, and

discussion of the daily topic are *most welcome*.

- Please treat your classmates and the instructor with the respect and courtesy you expect.
- Cell phones must be turned off during lecture periods however they may be used during lab periods.
- Students that do not adhere to these rules will be asked to stop the unwelcome behavior or to leave the class.

#### Useful References:

Dirr, M., & C. Heuser. 1987. The Reference Manual of Woody Plant Propagation. Varsity Press. Inc.

Plant Propagation. 1999. Allan Toogood (Editor-in-chief) American Horticultural Society, DK Publishing, Inc.

### HORT 3620 - Plant Propagation Spring 2009 Class Schedule

Wk	Date	Lecture Topic & Assigned Reading	Date	Laboratory
1	Jan 12	Course Introduction, class policies Plant Propagation - introduction.		
1	Jan 14	Lecture 1. Biology of Plant Propagation Chapters 1&2	Rm 301	Introduction, lab policies, lab reports Lab 1. Sexual & Asexual Propagation
2	Jan 19	Holiday (M.L.K. Day)		
2	Jan 21	<i>No lecture</i>		<i>No lab</i>
3	Jan 26	Lecture 2. The Development of Seeds - part 1 Chapter 4		
3	Jan 28	Lecture 3. The Development of Seeds - part 2 Chapter 4	Rm 301	Lab 2. Seed Anatomy & Tetrazolium Staining <i>Lab 1 report due</i>
4	Feb 2	Lecture 4. Principles & Practices of Seed Selection Chapter 5		
4	Feb 4	<i>review session</i>	Rm 301	<b>Exam #1</b>
5	Feb 9	Lecture 5. Techniques of Seed Production & Handling		

		Chapter 6		
5	Feb 11	Lecture 6. Principles of Propagation by Seed. Chapter 7	Rm 301	Lab 3. Commercial Propagation Using Seeds.—video presentation <i>Lab 2 report due</i>
6	Feb 16	Lecture 7. Techniques of Propagation by Seed. Chapter 8		
6	Feb 18	Lecture 8. The Propagation Environment - part 1. Chapter 3	Rm 301	Lab 4. Evaluation of Data from Propagation Experiments <i>Lab 3 report due</i>
7	Feb 23	Lecture 9. The Propagation Environment - part 2. Chapter 3		
7	Feb 25	<i>review session</i>	Rm 301	<b>Exam #2</b>
8	March 2	Lecture 10. Principles of Propagation by Cuttings. Chapter 9		
8	March 4	Lecture 11. Techniques of Propagation by Cuttings. Chapter 10	G'hse	Lab 5. Effect of Auxin on Rooting of Woody Stem Cuttings. Herbaceous Cuttings. <i>Lab 4 report due</i>
SPRING BREAK, March 9-13				
10	March 16	Lecture 12. Principles of Grafting and Budding - part 1. Chapter 11		
10	March 18	Lecture 13. Principles of Grafting and Budding - part 2. Chapter 11	Rm 301	Lab 6. Anatomy of Plant Woody Stems. Splice Grafting Using Herbaceous Plants
11	March 23	<i>10,000 Years of Plant Propagation - Discussion Based on Chapters 6 and 7 of "Guns, Germs and Steel" book</i>		
11	March 25	Lecture 14. Techniques of Grafting and Budding Chapters 12&13	March 25 G'hse	Lab 7. Four-Flap Grafting; Bud Chipping <i>Lab 6 report due</i>
12	March 30	Lecture 15. Techniques of Grafting and Budding Chapters 12&13		
12	April 1	<i>review session</i>		<b>Exam #3</b>
13	April 6	Lecture 16. Propagation by Layering Chapters 14		
13	April 8	Lecture 17. Propagation by Specialized Stems & Roots Chapters 15	Rm 301	Lab 8. Bulbs, corms, tubers, & rhizomes; bulb scaling <i>Lab 7 report due</i>
14	April 13	Lecture 18. Principles & Practices of Clonal		

		Propagation Chapter 16		
14	April 15	Lecture 19. Principles of Tissue Culture and Micropropagation Chapter 17	Tissue culture lab	Lab 9. Tissue culture -- shoot & root organogenesis <i>Labs 5 and 8 reports due</i>
15	April 20	Lecture 20. Techniques for Micropropagation Chapter 18		
15	April 22	<i>review session</i>	Rm 301	<b>Exam #4</b> <b>Lab notebook due</b>
16	April 27	<i>open</i>		
	April 29	<i>open</i>	Rm 301	<i>Review of the semester</i>
17	May 8	<i>FINAL EXAM: 8:00 - 10:00am</i>		

*Documented Disability Statement for Griffin Campus: Students with a documented disability must inform the instructor at the close of the first class meeting. You will be referred to the Office of Academic Programs, Room 107 in the Flynt Building for consultation regarding evaluation, documentation of your disability, and a recommendation as to the accommodation, if any, to be provided. Students must provide instructor with an accommodation form from the Office of Academic Programs listing reasonable accommodation to sign and return to the Office of Academic Programs. Students who do not wish to receive services are still strongly encouraged to register with the Office of Academic Affairs.*