

ABRAHAM BALDWIN AGRICULTURAL COLLEGE

Tifton, Georgia

HORT 2201: PRINCIPLES OF HORTICULTURE (3 credit hours)

SEMESTER: Fall 2009 **DAYS:** CRN 20523 (Lecture Mon/Wed & Lab Mon @ 1:00)
OR CRN 20524 (Lecture Mon/Wed & Lab Mon @ 3:00)

INSTRUCTORS: Lorie M. Felton, Associate Professor of Environmental Horticulture
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Jimmy Felton, Environmental Horticulture Lab Technician
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TEXTBOOK: Schroeder, Seagle, Felton, Ruter, Kelley, Krewer. *Introduction to Horticulture: Science & Technology*. ISBN 0-8134-3111-5.

SUPPLIES: Pen, paper for copying PPT or sufficient money on Gold Card to use copier, USB computer storage, calculator, knife or by-pass hand pruners

DESCRIPTION: This course is designed to familiarize students with all phases of horticulture and the relationship with other disciplines. The basic principles of plant growth and development will be addressed. Plant responses to environmental factors applicable to fruits/nuts, vegetables, ornamentals and turfgrasses will also be discussed.

EXPECTED LEARNING OUTCOMES: Upon completion of Principles of Horticulture students will:

1. identify the major fields of agriculture that directly relates to horticulture.
2. identify vegetative and reproductive parts of plants and describe each of their functions.
3. explain the important plant growth factors in both the above-ground and below ground environments.
4. explain the botanical and horticultural classification of plants.
5. discuss various methods of sexual and asexual propagation.
6. develop a "pathfinder" for a selected horticulture topic so that a basic understanding of library research is gained.

OUTLINE: Introduction and Definition of Horticulture; Plant Anatomy, Morphology & Development; Plant Metabolism and Functioning; Hormones and PGR; Temperature; Light; Water; Soil & Growing Medium; Nutrition & Fertilizers; Propagation

LABORATORY OUTLINE: Plant Growing Environment; Plant Structures; Plant ID & Taxonomy; Temperature; Light; Propagation by Division, Cuttings & Layering, Growing Media; Nutrition & Fertilization; Sexual Propagation; Grafting

COURSE REQUIREMENTS:

Lecture Exams: Written lecture will be administered throughout the semester as identified in course calendar. *No make-up exams will be given*, except for death in the immediate family, serious illness, or at the discretion of the instructor. Two (2) lecture exams and one (1) final exam are worth 100 points each. Exams will cover material presented in class and require text information.

In-field Project Students will research, plant, grow and harvest a horticulture crop.

Laboratory Exercises: A total of ten (10) laboratory exercises will be assigned during lab meeting times. No make-up labs will be given during the term (don't even ask). One make-up laboratory exercise will be scheduled at the end of the term during a time that is most convenient to the instructor. The make-up lab will replace the lowest lab grade.

Pathfinder Assignment: Each student will develop a printed handout to guide someone through a variety of information resources on a particular horticultural topic.

Final Exam: A comprehensive exam will be given at the day and time specified by ABAC exam schedule. Academic Dean must approve an earlier exam time. (See Final Exam schedule on ABAC Home page www.abac.edu.)

Professionalism: Attendance, participation, dress, conduct, in and outside assignments, pop-quizzes, seminars, and service to campus and/or community.

COURSE POINTS: Semester average determined by using the following points:

| | |
|------------------------------------|----------------|
| Lecture Exams (2 at 100 pts. each) | 200 pts. |
| In-field Project | 100 pts. |
| Lab Exercises (10 at 20 pts. each) | 200 pts. |
| Pathfinder | 100 pts. |
| Final Exam | 100 pts. |
| Professionalism | <u>50 pts.</u> |
| Total Points | 750 pts. |

| | |
|-------------------------------------|-----------------------|
| GRADING: 675 - 750 pts.....A | 450 – 524.99 pts... D |
| 600 – 674.99 pts.....B | Below 450 pts.....F |
| 525 – 599.99 pts.....C | |

This course is transferable to senior universities/colleges in Area F. For A.A.S. degree in Environmental Horticulture Technology a grade of "C" or better is required for graduation. Also a grade of "C" or better is required for all other courses with HORT, AGRP and AGRY prefixes; and ENGL 1101, ENGL 1102 and MATH 1002.

"The Student Development Center is the official office to provide disability services at ABAC. If you have a documented disability that may require assistance, you will need to contact the Student Development Center for coordination of your academic accommodations. The Center is located on the 2nd floor of the J. Lamar Branch Student Center. The phone number is 229-391-5135; fax is 229-391-5136. You may also visit the website at www.abac.edu/sdc or email at mmartin@abac.edu or asims@abac.edu "

ACADEMIC AND CLASSROOM BEHAVIOR POLICIES: (See web page <http://www.abac.edu/lfelton/>)

HORT 2201 Calculate Your Grade Worksheet

Enter the number of points received for each of the following:

| | | |
|---|----|-----|
| Lecture Exams | 1. | 2. |
| Total Points for Exams (200 pts. possible) | | |
| Total Points for In-field Project (100 pts. possible) | | |
| Pathfinder (100 pts. possible) | | |
| Lab Exercises | 1. | 6. |
| | 2. | 7. |
| | 3. | 8. |
| | 4. | 9. |
| | 5. | 10. |
| Total Points for Labs (200 pts. possible) | | |
| Professionalism (50 pts. Possible) | | |
| Final Exam (100 pts. possible) | | |
| Add numbers in highlighted cells for grand total | | |
| Divide Grand Total by 850 for percent grade | | |

HORT 2201 Principles of Horticulture *Tentative Class Calendar*

Lecture Mon/Wed (10:00) with Lab on Mon (1:00 OR 3:00)

Fall 2009

| DATE | DAY | TOPICS | TEXT | LAB EXERCISES | RELATED ACTIVITIES |
|--------|-----|---|------------------|---|--|
| Aug 17 | M | Introduction | Chap. 1 | No Lab | Drop/Add ends – 19 th |
| Aug 19 | W | Definitions of Horticulture & Related Disciplines | | | |
| Aug 24 | M | Careers in Horticulture | Chap. 4 | Lab #1 – Careers in Horticulture | |
| Aug 26 | W | Plant Anatomy, Morphology & Development | | | |
| Aug 31 | M | Plant Anatomy, Morphology & Development | Chap. 4 | Lab #2 – Planting Lab | |
| Sep 2 | W | Plant Metabolism and Functioning | | | |
| Sep 7 | M | Labor Day – No classes | Chap 7 | Pathfinder Project – Ag Science Rm #132 | Ag Club Picnic – 8 th Lake Pavilion |
| Sep 9 | W | Plant Metabolism and Functioning | | | |
| Sep 14 | M | Plant Metabolism and Functioning | Chap 7 | In-field Project Work Day - Farm | GGIA's +Southern Green – UGA Conference Center -17 th |
| Sep 16 | W | Exam #1 | | | |
| Sep 21 | M | Hormones and Growth Regulators | Chap 7 | Lab #3 – Plant ID & Taxonomy | |
| Sep 23 | W | Hormones and Growth Regulators | | | |
| Sep 28 | M | Temperature | Chap 3 | Lab #4 – Asexual Propagation Pathfinder DUE 30th | Advising for Spring Begins 1 st |
| Sep 30 | W | Temperature | | | |
| Oct 5 | M | Light | Chap 3 | In-field Project Work Day - Farm | Ag Classic Golf 5 th Mid-term 8 th |
| Oct 7 | W | Light | | | |
| Oct 12 | M | Fall Break – No Classes | Chap 3 | Holiday No Labs | Fall Break 19 th -20 th Sunbelt Expo 20 th -22 nd Pre-Reg begins |
| Oct 14 | W | Light | | | |
| Oct 19 | M | Water | Chap 3 | Lab #5 – Landscaping | |
| Oct 21 | W | Water | | | |
| Oct 26 | M | Exam #2 | Chap 3 Chap 6 | Lab #6 – Growing Media | |
| Oct 28 | W | Soil Growing Media | | | |
| Nov 2 | M | Soil Growing Media | Chap 6 | Lab #7 – Sexual Propagation | |
| Nov 4 | W | Soil Growing Media | | | |
| Nov 9 | M | Plant Nutrition & Fertilizers | Chap 6 Chap 5 | In-field Project Work Day - Farm | |
| Nov 11 | W | Plant Nutrition & Fertilizers | | | |
| Nov 16 | M | Propagation | Chap 5 | Lab #8 – Sexual Propagation | Ag Clubs Christmas Social |
| Nov 18 | W | Propagation | | | |
| Nov 23 | M | Controlling Plant Growth | Chap 18 | Lab #9 – Grafting | Holidays 25 th -27 th |
| Nov 25 | W | Holiday No Classes | | | |
| Nov 30 | M | Controlling Plant Growth | Chap 18 | Lab #10 – Pruning | |
| Dec 2 | W | Review | | | |
| Dec 7 | M | Last class meeting - Review | | Make-up Lab | Finals 8 th – 10 th Graduation – 11 th |
| Dec 9 | W | FINAL EXAM – 10:30 am | | | |