

Clarendon College  
Division of Science and Health  
Agriculture Department

AGRI 1415: Principles of Horticulture  
Spring 2011

Course Syllabus

Meeting Time: 8:00-9:20 Tuesday, Thursday; Lab: Tuesday, Thursday 9:30-11:50  
Meeting Place: CRSN 107

Instructor: Mr. Brian Fuller

Office Hours: Mon-11:00-12:00, 1:00-4:00; Wed-11:00-12:00, 1:00-4:00; Fri-  
11:00-2:00 Appointments are gladly scheduled.

Contact Information: Phone: 806-874-4844

Email: [brian.fuller@clarendoncollege.edu](mailto:brian.fuller@clarendoncollege.edu)

Office: CRSN 115

**Course Description:**

Structure, growth, and development of horticultural plants from a practical and scientific approach. Environment effects, basic principles of propagation, greenhouse and outdoor production, nutrition, pruning chemical control of growth and pest control.

**Statement of Purpose:**

Principles of Horticulture partially satisfies the requirements for the Associates Degree at Clarendon College and is designed for transfer to a senior college.

**Required Text:**

Preece, John E. and Read, Paul E. *The Biology of Horticulture: An Introductory Textbook*. 2<sup>nd</sup> Edition. Hoboken, N.J.: John Wiley & Sons, 2005.

**Methods of Instruction:**

This course centers upon class lecture and discussion. Discussion is essential for the exchanging of ideas and a greater understanding of the content. Therefore, questions will be asked in order to make a more complete learning environment. It is essential for the student to read the class assignments as a basis for the class. Videos and other materials will also be a part of the instructional process.

## Student Outcomes:

- a) Understand the history, art, culture and science of the various horticultural disciplines and crops.
- b) Discuss the fundamentals of plant classification and plant anatomy.
- c) Predict the outcome of monohybrid plant crosses utilizing an understanding of Mendelian genetics.
- d) Compare and contrast the reproductive strategies of different plant groups (evaluating the costs and benefits of asexual versus sexual reproduction).
- e) Evaluate the ethical issues, costs and benefits of plant cloning (both natural and artificial).
- f) Discuss the physiology of water movement, metabolism and reproduction in plants.
- g) Describe, with a fundamental understanding, the relationships between plants and their environments.
- h) Compare and contrast plant hormones, chemical control of plant growth, pruning techniques, plant propagation and plant pest treatments.
- i) Comprehend the importance of plants and the importance of horticulture in society.

## Course Objectives:

- a) Understand and apply methods and appropriate technology to the study of natural sciences.
- b) Recognize scientific and quantitative methods and the differences between these approaches and other methods of inquiry and to communicate findings, analyses and interpretation both orally and in writing.
- c) Identify and recognize the differences among competing scientific theories.
- d) Demonstrate knowledge of the major issues and problems facing modern science, including issues that touch upon ethics, values and public policies.
- e) Demonstrate knowledge of the interdependence of science and technology and their influence on and contribution to modern culture.

## Grading Policies:

The final semester grades will be figured as set in the current catalog:

90-100 = A 80-89 = B 70-79 = C 60-69 = D 59 or Below = F

Grades will be calculated as follows:

5 Exams (including the final) @ 65% of total grade

Discussion and Participation @ 10%

Entire lab @ 25%

Lab Grading Criteria:

Class Participation and Attendance – 10%

Weekly Assignments – 20%

Lab Mid-Term – 35%

Lab Final – 35%

The lab portion of this class will have a separate grading system. The final lab grade will be figured into the final grade of the class at a value of twenty-five percent of the total grade. The

lab will consist of various assignments, a lab mid-term and a lab final. Each exam will be administered after the completion of the respective unit. Discussion and participation will be based upon the student's involvement in the class. Attendance and participation is required and expected. Final Exam: Students must take a final. The time for the final is published at the beginning of each semester. The fourth exam of the semester will be the "Final" Exam and will be administered during the scheduled final exam time. Early finals will only be given in the case of extreme emergencies. Make-up exams will only be given in rare cases. Arrangements must be made with the instructor prior to the student missing the exam.

### **Class Participation and Attendance:**

As stated earlier, class participation and attendance is required and expected. All absences validated by doctor's notes, Clarendon College Personnel requests (coaches, Deans, etc.), and instances of extreme emergency as determined by the instructor will be considered excused. All other absences will be considered unexcused. A total of four unexcused absences will result in the complete forfeit of the Class Participation grade. An accumulation of five or more unexcused absences will, in all but rare and extreme cases result in failure of the class. It is vital for the education of the student as well as the other students for each student to participate in class discussions and to be involved in the learning process.

**Withdrawal:** If you decide that you are unable to complete this course or that it will be impossible to complete the course with a passing grade, you may drop the course and receive a "W" on our transcript instead. Withdrawal from a course is a formal procedure that you must initiate. If you do not go through the formal withdrawal procedure, you will receive a grade of "F" on your transcript. A student is permitted to drop a course if he/she obtains an official drop slip from the office and has the instructor sign the slip before the 12<sup>th</sup> class week. Remember, a student is only allowed to drop the same class twice before he/she will be charged triple the tuition amount for taking the class a third time or more. Furthermore, beginning with the Fall 2007 semester, students in Texas may only drop a total of 6 courses throughout their entire undergraduate career. After the 6<sup>th</sup> course, he/she will no longer be able to withdraw from any classes.

### **Classroom Policies:**

#### **Classroom Conduct**

Failure to comply with lawful direction of a classroom instructor is a disruption for all students enrolled in the class. Cheating violations include, but are not limited to: (1) obtaining an examination, classroom activity, or laboratory exercise by stealing or collusion; (2) discovering the content of an examination, classroom activity, laboratory exercise, or homework assignment before it is given; (3) using an unauthorized source of information during an examination, classroom activity, laboratory exercise, or homework assignment; (4) entering an office or building to obtain unfair advantage; (5) taking an examination for another person; (6) completing a classroom activity, laboratory exercise, homework assignment, or research paper for another person; (7) altering grade records; (8) using any unauthorized form of electronic communication device during an examination, classroom activity, or laboratory exercise; (9) Plagiarism. Plagiarism is the using, stating, offering, or reporting as one's own, an idea, expression, or

production of another person without proper credit. Disciplinary actions for cheating in a course are at the discretion of the individual instructor. The instructor of that course will file a report with the Dean of Students when a student is caught cheating in the course, whether it be a workforce or academic course. The report shall include the course, instructor, student's name, and the type of cheating involved. Students who are reported as cheating to the Dean of Students more than once shall be disciplined by the Dean. The Dean will notify all involved parties within fourteen days of any action taken.

### **American with Disabilities Act Statement:**

Clarendon College provides reasonable accommodations for persons with temporary or permanent disabilities. Should you require special accommodations, notify the Office of Student Services (806-874-3571 or 800-687-9737). We will work with you to make whatever accommodations we need to make.

### **Dropping a Course:**

A student who is enrolled in a developmental course for TSI purposes may not drop his/her only developmental course unless the student completely withdraws from the college. A student may drop any other course with a grade of "W" any time after the census date for the semester and on or before the end of the 12th week of a long semester, or on or before the last day to drop a class of a term as designated in the college calendar. The request for permission to drop a course is initiated by the student by procuring a drop form from the Office of Student Services. (Refer to other policies concerning this issue in the current college catalog online.)

### **Withdrawal from College:**

When a student finds it necessary to withdraw from school before the end of the semester, he or she should obtain a withdrawal form from the Office of Student Services. Students may also withdraw from the college by sending a written request for such action to the Registrar's Office. The request must include the student's signature, the student's current address, social security number and course information details. Students who withdraw after the census date for the semester and on or before the end of the 12th week of a long semester, or on or before the last day to drop a class of a term as designated in the college calendar will be assigned a grade of "W."

### **Student Expectations and Guidelines:**

In addition to the previously stated expectations and guidelines, students are expected to adhere to the following:

- 1) Grant respect to each other and to the instructor and respect shall be shown to you.
- 2) Refrain from using profane or obscene language or gestures at all times in class.
- 3) Dress in clean, appropriate and courteous clothing.
- 4) Refrain from using any communication device, except in emergency situations.
- 5) Absolutely no form of any communication device (cell phone, PDA, laptop, carrier pigeon, or any other imaginable device) will be allowed during exams, quizzes, or other testing periods. Upon visualization of the device, the instructor will remove the exam or

other testing material from the student, ask the student to leave the room and assign a grade of zero to the material.

- 6) No material other than the exam and writing utensil will be allowed on the student's desk during an exam unless approved by the instructor. Approved devices will only include items such as calculators, approved formula sheets, or other test appropriate material.
- 7) No hats, caps, or head coverings of any kind will be allowed at any time during a testing period. This includes all students, male and female. If a head covering of any kind is worn during the testing period, the student will be asked to remove the object. If the student refuses to remove the covering or cannot remove the covering and return to the class and finish the exam during the scheduled time, a grade of zero will be assigned to the material.
- 8) Please keep restroom breaks and other interruptions to a bare minimum.
- 9) Please notice the emergency evacuation map and be cognizant of what steps to take in case of emergency (fire, tornado, etc.).

## Course Calendar

<b>Week Of</b>	<b>Lecture Topics</b>	<b>Lab Activities</b>
Jan. 17	Syllabus and Intro Ch: 1 Intro to Horticulture	No Lab
Jan. 24	Ch 2: Plant Classification	Lab 1: Video - Growing
Jan. 31	Ch 3: Plant Structure	Lab 2: Recognition of Plant Structures
Feb. 7	Ch 4: Plant Genotype	Lab 3: Plant Identification & Taxonomy
Feb. 14	<b>Exam 1 - Tuesday</b> Ch 5: Light	Lab 4: Genetics
Feb. 21	Ch 6: Temperature	Lab 5: Cyclosis Video: Living Together
Feb. 28	Ch 7: Water	Lab 6: Temperature & Light Video : The Secret Life of Leaves
Mar. 7	<b>Exam 2 - Tuesday</b> Ch 8: Soils & Soil Management	<b>Lab Midterm</b>
Mar. 21	Ch 9: Mineral Nutrition	Lab 7: Asexual Propagation
Mar. 28	Ch 10: Mulches	Lab 8: Sexual Propagation
Apr. 4	<b>Exam 3 - Tuesday</b> Ch 11: Plant Hormones	Lab 9: Soil & Growing Medium Amendments
Apr. 11	Ch 12: Chemical Control of Plant Growth	Lab 10: Nutrition & Fertilizers

Apr. 18	<b>Exam 4 - Tuesday</b> Ch 13: Pruning	Lab 11: Pest Identification & Control
Apr. 25	Ch 14: Plant Propagation	No Lab: Happy Thanksgiving!!
May. 2	Ch 15: Post Harvest Handling	<b>Lab Final</b>
Dec. 6	<b>Final Exam – Thursday</b> <b>May 12, 2011 @ 8:00 a.m.</b>	