

Clarendon College
AGRI 1415
Principles of Horticulture
SYLLABUS

CLARENDON COLLEGE

Division of Science and Health

Course Name: AGRI 1415 Principles of Horticulture.

Credit Hours: 4 SCH

Semester: Summer 2026 Instructor: Edward Caraway PhD.

Classroom Location: Jordan Unit (Tuesday/Thursday)

Instructor Contact Information:

Email: *Edward.caraway@clarendoncollege.edu*

Office Hours: I-60 education for an appointment

Course Description:

Structure, growth, and development of horticultural plants. Examination of environmental effects, basic principles of reproduction, production methods ranging from outdoor to controlled climates, nutrition, and pest management. Laboratory activities will reinforce the lecture portion of the course.

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 Instructional Materials:

No required textbook

All assignments and reading will be brought to the class room.

Student Requirements

- 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 unless otherwise instructed.
- 5) Absolutely no form of any communication device (cell phone, PDA, laptop, 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) Cheating: If a student is caught cheating on an exam, that student and those seated around that person will have their exams picked up and a grade of "0" assigned to that exam.
- 8) 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.
- 9) Please keep restroom breaks and other interruptions to a bare minimum.
- 10) Please notice the emergency evacuation map and be cognizant of what steps to take in case of emergency (fire, tornado, etc.).

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 produce a more complete learning environment. It is essential for the student to read the class assignments and be caught up and prepared for each class period. Videos and other materials will also be a part of the instructional process. Information will be presented to the students during the regular class time and will be expected to stay on top of assignment due dates and dates for exams or quizzes.

Core Objectives

In accordance with recommendations from the Texas Higher Education Coordinating Board, all life and physical science courses at Clarendon College will address the following core objectives:

- **CT - Critical Thinking Skills** – to include creative thinking, innovation, inquiry, and analysis, evaluation and synthesis of information.
- **COM - Communication Skills** – to include effective written, oral, and visual communication.
- **EQS - Empirical and Quantitative Skills** – to include the manipulation and analysis of numerical data or observable facts resulting in informed conclusions.
- **TW - Teamwork** – to include the ability to consider different points of view and to work effectively with others to support a shared purpose or goal.

Student Outcomes:

1. Identify the various horticultural industries and their roles in our society.
 - a. Assesses CT and EQS with quizzes and exams and COM with research paper.
2. Describe the fundamentals of plant science.
 - a. Assesses CT and EQS with quizzes and exams (lecture and lab).

3. Assess the interactions of soils, water, and fertility in plant science.
 - a. Assesses CT and EQS with quizzes and exams and COM with research paper.
4. Contrast the methods of plant reproduction and propagation.
 - a. Assesses CT, EQS and TW with quizzes and exams (lecture and lab) and COM with research paper.
5. Explain the impacts of production methods and technologies on plant science.
 - a. Assesses CT and EQS with quizzes and exams and COM with research paper.
6. Contrast methods of pest management in plant science.
 - a. Assesses CT and EQS with quizzes and exams and COM with research paper.
7. Investigate methods of environmental manipulation (e.g. greenhouse controls, frost management methods, hot caps).
 - a. Assesses CT and EQS with quizzes and exams and COM with research paper.
8. Apply scientific reasoning to investigate questions and utilize scientific and horticultural tools to collect and analyze data and demonstrate methods.
 - a. Assesses CT, EQS and TW with lab quizzes and assignments.
9. Use critical thinking and scientific problem-solving to make informed decisions.
 - a. Assesses CT and EQS with quizzes and exams and TW with lab assignments
10. Communicate effectively the results of scientific investigations.
 - a. Assesses CT and EQS with lab quizzes and exams.

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:

3 Exams (including the final) @ 70%

Research Paper @ 10%

Discussion, Participation and Quizzes @ 5%

Entire lab @ 15%

Lab Grading Criteria:

Participation – 25% Assignments/Quizzes – 25% Mid-Term – 25% Final – 25%

The lab portion of this class will have a separate grading system. The overall lab grade will be figured into the final grade of the class at a value of fifteen percent of the total grade. The lab will consist of various assignments, including the planting and growing of various plants with a group of fellow students, 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.

The research paper will require the student to choose a horticultural discipline, describe and explain that discipline. Further, this paper will require the student to determine the plants associated with the chosen discipline and describe the scientific processes of those plants in an effort to fully describe the life cycle of those plants.

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. No make-up exams will be given. Arrangements with the instructor must be made prior to the student missing an exam so that an alternative time may be selected.

Students should be prepared to take an oral exam in place of a regularly scheduled exam should they choose to miss a regularly scheduled exam.

Personal Policies

I want everyone to succeed in this class. Never be afraid to come and see me if you have questions or concerns.

Missed Exams: Arrangements with the instructor must be made prior to the student missing an exam so that an alternative time may be scheduled. It is NOT the instructor’s responsibility to track down a student to complete an exam. Should a student not make any attempt to contact the instructor prior to or after missing an exam they will forfeit any possibility of completing any type of make-up exam and will earn a grade of “0” for that exam.

Missed Class: I am not your mother! I will not come to your dorm room and wake you up for class. Welcome to college. It is your responsibility to be in class on time. If you are sick or have an emergency please send me an email or call my office and notify me. Oversleeping will not qualify as an excused absence.

College Policies

Academic Integrity Policy Clarendon College is committed to a philosophy of honesty and academic integrity. It is the responsibility of all members of the Clarendon College community to maintain academic integrity at Clarendon College by refusing to participate in or tolerate academic dishonesty. Any act of academic dishonesty will be regarded by the faculty and administration as a serious offense.

Academic dishonesty 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) observing the work of another during an examination or providing answers to another during the course of an examination; (4) using an unauthorized source of information during an examination, classroom activity, laboratory exercise, or homework assignment ; (5) entering an office, classroom, laboratory, or building to obtain unfair advantage; (6) taking an examination for another person; (7) completing a classroom activity, laboratory exercise, homework assignment, or research paper for another person; (8) altering grade records; (9) using any unauthorized form of an electronic communication device during an examination, classroom activity, or laboratory exercise; and/or, (10) plagiarism. (Plagiarism is defined as the using, stating, offering, or reporting as one’s own, an idea, expression, or production of another person’s work without proper credit. This includes, but is not limited to, turning in a paper purchased or acquired from any source, written by someone other than the student claiming credit, or stolen from another student.)

Students are responsible for reporting known acts of academic dishonesty to a faculty member, the program coordinator, the associate dean, and/or dean. Any student with knowledge of a violation who fails to report it shall him/herself be in violation and shall be considered to have committed an act of academic dishonesty. Additionally, any student who reports him/herself in violation of this code before it is likely that another might consider this possibility will be understood as repentant and acting in good

faith. Though the confession will not excuse the student for the violation, the confession will be considered and the violation should not result in suspension from school except in the most extreme cases.

While academic integrity and honesty are the responsibility of the individual student, each individual faculty member, teaching assistant, and/or laboratory instructor is responsible for classroom management and for maintaining ethical behavior within the classroom and/or laboratory. Faculty who discover or suspect a violation should discuss the matter with the suspected violator(s) and attempt to resolve the case at that point. In cases of convincing evidence, the faculty member should take appropriate action. The faculty member and student should complete a Counseling Sheet regarding the violation. (The Counseling Sheet should contain at a minimum the date and time of the violation, the course, the instructor's name, the student's name, an explanation of the infraction or facts of the case, and the resolution to the incident.) This form should be signed by the student, faculty member, program coordinator, and the Vice President of Student Affairs. The Vice President of Student Affairs will maintain a file on all violations. If a faculty member prefers to report the case directly to the Vice President of Student Affairs, it remains his/her prerogative to do so. Additionally, if the faculty member and the accused student cannot reach a resolution or if the faculty member believes that suspension from school is the only fair sanction, the case should immediately be reported by the faculty member, in writing, to the Vice President of Student Affairs. If the Vice President of Student Affairs observes any trends in student behavior which involve more than one violation or act of academic dishonesty, the Vice President is responsible for notifying all faculty members involved, for contacting the student(s) involved, and after consultation with the faculty member(s) involved for taking the appropriate action. The Vice President of Student Affairs is responsible for the timely notification (normally within two weeks) to all parties of an action taken. Students wishing to appeal a disciplinary decision involving academic integrity or acts of academic dishonesty may do so through the Student Appeals and Grievance Procedure.

Withdrawing from (Dropping) the Course 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 your transcript instead. (The last day to drop a course is available on the Academic Calendar, located at the Student link on the Clarendon College website.) 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 whatever grade you have earned.

Whether to drop a class or not requires a lot of thought. According to Texas state law 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 6th dropped class, he/she will no longer be able to withdraw from any classes.

Accommodations Statement Clarendon College provides reasonable accommodations for persons with temporary or permanent disabilities. Should you require special accommodations, notify the Vice President of Student Services. We will work with you to make whatever accommodations we need to make.

Student Rights and Responsibilities

listed on the College website at:

<http://www.clarendoncollege.edu/Resources/Student%20Services/StudentRightsResponsibilities.pdf>.

Tentative Course Schedule:

****Subject to change****

Unit 1: Benefits of Horticulture

Unit 2: Plant Structure & Functions

Unit 3: Scientific Classification & Nomenclature of Plants (Part I and II)

Unit 3: Scientific Classification & Nomenclature of Plants (Part III)

Unit 3: Scientific Classification & Nomenclature of Plants (Part IV and V)

Exam 1: Units 1, 2 and 3 (Tentatively)

Unit 4: Plant Nutrient Requirements & Productions

Unit 5: Plant Genetics (Part I)

Unit 5: Plant Genetics (Part II and III)

Unit 5: Plant Genetics (Part IV)

Exam 2: Units 4 and 5 (Tentatively)

Unit 6: Plant Pests (Part I and II)

Unit 7: History of Floral Design & Unit 8: Hydroponics

Exam 3 (Final Exam): Units 6, 7 and 8

Lab Schedule (Subject to Change):

Lab 1: Introduction: Private Life of plants

Lab 2: Germination/ Planting

Lab 3: Plant Evaluation

Lab 4: Dichotomous key

Lab 5: Plant Propagation

Lab 6: Plant Propagation

Lab Midterm

Lab 7: Landmark Nurseries

Lab 8: Punnett Squares and Genetics

Lab 9: Nuts and seeds

Lab 10: Greenhouses/ Horticultural Plant ID

Lab 11: Flower Shop

Lab 12: Landscape Design

Lab Final