



# Horticulture AGRI 1415 – Dual Credit (Advanced Plant Science)

Course Syllabus: Fall 20' - Spring 21'

*“Northeast Texas Community College exists to provide personal, dynamic learning experiences empowering students to succeed.”*

**Instructor: Stephanie Lynch**

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Office	Monday	Tuesday	Wednesday	Thursday	Friday	Online
Hours	2:45- 3:30 PM	2:45- 3:30 PM	2:45- 3:30 PM	2:45- 3:30 PM	2:45- 3:30 PM	By appointment only

*Information relative to the delivery of the content contained in this syllabus is subject to change. Should that happen, the student will be notified.*

**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. (Cross-listed as AGRI 1315). This laboratory-based course accompanies AGRI 1315. Laboratory activities will reinforce the 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. (Cross-listed as AGRI 1115).

**Prerequisite(s):** None

**Student Learning Outcomes:** Upon successful completion of this course, students will:

- Identify the various horticultural industries and their roles in our society.
- Describe the fundamentals of plant science.
- Assess the interactions of soils, water, and fertility in plant science.
- Contrast the methods of plant reproduction and propagation.
- Explain the impacts of production methods and technologies on plant science.
- Contrast methods of pest management in plant science.
- Investigate methods of environmental manipulation (e.g. greenhouse controls, frost management methods, hot caps).
- Apply scientific reasoning to investigate questions and utilize scientific and horticultural tools to collect and analyze data and demonstrate methods.
- Use critical thinking and scientific problem-solving to make informed decisions.
- Communicate effectively the results of scientific investigations.
- Identify the various horticultural industries and their roles in our society.
- Describe the fundamentals of plant science.
- Assess the interactions of soils, water, and fertility in plant science.
- Contrast the methods of plant reproduction and propagation.
- Explain the impacts of production methods and technologies on plant science.
- Contrast methods of pest management in plant science.
- Investigate methods of environmental manipulation (e.g. greenhouse controls, frost management methods, hot caps).

**Evaluation/Grading Policy:** Final course grades will be assigned as follows:

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

Grades will be calculated as follows:

Tests = 45%

Labs = 30%

Daily grades = 25%

This course offers no re-testing opportunities as multiple test/project/research paper grades will be taken each grading period. Late work may be turned in, but will receive a 10 point per day late deduction.

**Required Instructional Materials:** Practical Horticulture, Seventh Edition, by Laura Williams Rice and Robert P. Rice Jr. (optional)

**Publisher:** Pearson; 7<sup>th</sup> Edition

**ISBN Number:** ISBN-10: 0135038669

ISBN-13: 978-0135038666

**Optional Instructional Materials:** None

**Minimum Technology Requirements:** None

**Required Computer Literacy Skills:** Basic computer skills.

**Course Structure and Overview:**

JOURNAL:

Students will be required to maintain an agriculture experience journal throughout the course of the year. They will be required to accrue a minimum of 50 agriculture experience hours per semester. These hours may come from a variety of experiences related to agriculture. These hours will be logged on the following website: [www.theaet.com](http://www.theaet.com)

Agriculture experience hours will be graded throughout the year. Training will be provided on how to access the website and how to enter hours properly.

Examples Journal Hours:

- Evaluated hay pasture before cutting.
- Planted pansies in flower bed.
- Watched National Geographic episode over feeding the world's growing population.
- Welded carbon steel.
- Selected Angus bull to breed to crossbred cows.
- Identified cuts of meat at the supermarket.
- Researched how to prevent foodborne illness in the kitchen.

\*All hours are subject to teacher approval and must be in complete sentences for credit.

**Communications:** Turnaround time for email responses (i.e. within 24 hours), stipulating if you will allow student text messages (i.e. Remind app), etc. \*Reminder: NTCC email is the official form of communication used by the college.

**Institutional/Course Policy:** Attendance is expected and required per the Pewitt CISD District Policy.

Tardiness on days labs are held off campus will be counted as an absence, as you will be unable to participate in lab activities that day. There are no student restrooms in this building, so please plan accordingly. As stated above, this course offers no re-testing opportunities as multiple test/project/research paper grades will be taken each grading period. Late work may be turned in, but will receive a 10 point per day late deduction.

**"Alternate Operations During Campus Closure and/or Alternate Course Delivery Requirements**  
In the event of an emergency or announced campus closure due to a natural disaster or pandemic, it may be necessary for Northeast Texas Community College to move to altered operations. During this time, Northeast Texas Community College may opt to continue delivery of instruction through methods that include, but are not limited to, online through the Blackboard Learning Management System, online conferencing, email messaging, and/or an alternate schedule. It is the responsibility of the student to monitor NTCC's website (<http://www.ntcc.edu/>) for instructions about continuing courses remotely, Blackboard for each class for course-specific communication, and NTCC email for important general information.

Additionally, there may be instances where a course may not be able to be continued in the same delivery format as it originates (face-to-face, fully online, live remote, or hybrid). Should this be the case, every effort will be made to continue instruction in an alternative delivery format. Students will be informed of any changes of this nature through email messaging and/or the Blackboard course site."

**NTCC Academic Honesty/Ethics Statement:**

NTCC upholds the highest standards of academic integrity. The college expects all students to engage in their academic pursuits in an honest manner that is beyond reproach using their intellect and resources designated as allowable by the course instructor. Students are responsible for addressing questions about allowable resources with the course instructor. Academic dishonesty such as cheating, plagiarism, and collusion is unacceptable and may result in disciplinary action. This course will follow the NTCC Academic Honesty and Academic Ethics policies stated in the Student Handbook. Refer to the student handbook for more information on these subjects.

**ADA Statement:**

It is the policy of NTCC to provide reasonable accommodations for qualified individuals who are students with disabilities. This College will adhere to all applicable federal, state, and local laws, regulations, and guidelines with respect to providing reasonable accommodations as required to afford equal educational opportunity. It is the student's responsibility to request accommodations. An appointment can be made with the Academic Advisor/Coordinator of Special Populations located in Student Services and can be reached at 903-434-8264. For more information and to obtain a copy of the Request for Accommodations, please refer to the special populations page on the NTCC website.

**Family Educational Rights and Privacy Act (FERPA):**

The Family Educational Rights and Privacy Act (FERPA) is a federal law that protects the privacy of student education records. The law applies to all schools that receive funds under an applicable program of the U.S. Department of Education. FERPA gives parents certain rights with respect to their children's educational records. These rights transfer to the student when he or she attends a school beyond the high school level. Students to whom the rights have transferred are considered "eligible students." In essence, a parent has no legal right to obtain information concerning the child's college records without the written consent of the student. In compliance with FERPA, information classified as "directory information" may be released to the general public without the written consent of the student unless the student makes a request in writing. Directory information is defined as: the student's name, permanent address and/or local address, telephone listing, dates of attendance, most recent previous education institution attended, other information including major, field of study, degrees, awards received, and participation in officially recognized activities/sports.

**Tentative Course Timeline (\*note\* instructor reserves the right to make adjustments to this timeline at any point in the term):**

- The "Green Industry" and Careers in Horticulture Botanical Nomenclature, Anatomy, and Physiology Plant Growth and Development

- Climate and Plant Growth Plant Propagation Outdoor Soils and Fertility
- Diagnosing and Treating Outdoor Plant Disorders Vegetable Gardening
- Growing Tree Fruits and Nuts Bush and Other Small Fruits Flower and Herb Gardening Home Landscape Planning
- Landscape Installation and Maintenance Lawns and Lawn-Substitute Plants Indoor Plant Maintenance
- Media, Fertilizers, and Watering Light and Indoor Plant Growth
- Controlling Indoor Plant Pests and Diseases Decorating with Growing Plants and Fresh Flowers
- Greenhouses and Related Climate-Controlling Structures

## STUDENT LEARNING OBJECTIVES RUBRIC

The following SLO's are to be taught for AGRI 1415 Horticulture Science. An example of how the objective is measured is listed. You can determine your own way to measure the student's performance. All of these selected SLO's must be reported at the end of the year to this course number.

SLO ID#	OBJECTIVE	DEFINED	MEASURED	RESULTS DESIRED
AGRI1415_1	Growth & development of horticultural plants	Students will demonstrate an understanding of the study of structure, growth, and development of horticultural plants from a practical and scientific approach.	Students will demonstrate their comprehension of course objectives and content through standardized exams in every Horticulture section.	70% of the students should score at least 75% or better on exams
AGRI1415_2	Environmental effects	Students will demonstrate a knowledge and understanding of the environmental effects, basic principles of propagation, greenhouse and outdoor production, nutrition, pruning, chemical control of growth, pest control, and landscaping.	Students will demonstrate their comprehension of course objectives and content through standardized exams for every Horticulture section.	70% of the students should score at least 75% or better on exams
AGRI1415_3	Plant taxonomic relationships	Students will be able to understand and demonstrate their knowledge pertaining to plant taxonomic relationships.	Students will demonstrate their comprehension of course objectives and content through standardized exams for every Horticulture section.	70% of the students should score at least 75% on exams
AGRI1415_4	Plants differ in reproduction	Students will demonstrate through weekly laboratory experiences their knowledge of how plants differ in reproduction; understanding soil differences; plant production; harvesting and other Horticulture related topics.	Students will be assessed weekly on their knowledge, individual reports and exams from their lab experiences.	70% of the students should score at least 75% on the lab reports
AGRI1415_5	Elements essential to plant growth	List elements essential to plant growth and describe their functions and deficiency symptoms in plants.	Students will be assessed weekly on their knowledge, individual reports and exams from their lab experiences.	70% of the students should score at least 75% on the lab reports