

PSS 1411 Section 001, Principles of Horticulture

T,TH 11:00-12:20 pm Location: AGRI 214

Instructor: Ashley Elle, Ph.D.

Office: Plant & Soil Bldg., Inside Lab Room 211,

Back left room Tel: 806.834-7984

Office Hours: T,TH, after class hours by appointment or Wed by appt. Appointment request should be made by email or

after class.



Email: TTU Blackboard, PSS 1411 001 email to instructor.

All emails must be sent by Blackboard only



Lab Information:

University Greenhouse (Across the Street from the United Spirit Arena)

Laboratory Start Week: Jan 27-31

All labs must be attended, count as 40% of the entire course. 1 unexcused absence may result in being dropped from the course.

Textbook for Lecture (Recommended, not required):

Introductory Plant Science: Investigating the Green World. Cynthia McKenney, Ursula K. Schuch and Amanda Chau. First Edition. 2014. Kendall Hunt Publishing ISBN: 9781465218377

Course Description:

Principle of Horticulture is designed to introduce students to the basic principles and practices of horticulture. Emphasis will be placed on growth and maintenance of horticulture crops.

Course Purpose:

The purpose of principles of horticulture is to expose students to the basic principles and practices used in horticulture. Skills learned will allow students to grow and maintain horticultural plants indoors and in gardens and landscapes. Students will be exposed to plant structures, the role of photosynthesis, respiration, and transpiration in plant growth and development, environmental factors that affect plant growth, nutrition and hormones, basic horticultural practices, genetics, horticulture careers, and growing areas of horticulture. This course is one of two



TopHat for Attendance, Quizzes and Discussions:

You should get an email asking to join TopHat, a mobile app/online website that will track you attendance each class, hold presentations, and have unit quizzes. You will need your phone or other electronic devices each class for attendance and other activities.

Student Learning Outcomes

Upon completion of this course, students should be able to:

- 1. Explain the horticulture discipline and historic influences in horticulture.
- 2. Demonstrate knowledge of the scientific method, research tools used by scientists to study the natural world and agriculture.



- 3. Recognize plant structures and how it can be used to identify plant species.
- 4. Demonstrate how to propagate plants from seed, multiple cutting types and recognize grafting types.
- 5. Explain how plant growth and environmental factors influence connected to plant growth.
- 6. Describe how genetics is used for plant breeding, crop diversity and plant propagation.
- 7. Develop a plan using multiple methods in integrated pest management.
- 8. Identify how to be successful at multiple areas of horticulture at a production and home level.
- 9. Recognize new trends in the horticulture industry for food and business.

General Information:

- A. To pass this class, students must take each Exam (including the Final Exam). No make-up Exams will be given. If you are unable to take an Exam, you must make arrangements with the lecture Professor a minimum of 48 hours prior to the scheduled Exam date (an acceptable excuse will be up to the discretion of the lecture Professor). If arrangements are not made prior to the scheduled Exam date, and the student misses an Exam, the student will fail the missed Exam (no exceptions). Exam dates are found on the course calendar. However, with the exception of the Final Exam, dates are subject to change.
- B. Attendance is required. Class roll will be taken regularly and students with unexcused absences over 3 in lecture and 1 in lab will be considered for dropping from the course. A student with excessive absences will be contacted and should meet with the professor before being dropped from the course.
- C. Students are expected to assist in maintaining a classroom environment that is conductive to learning. Class and labs will have large numbers of students. Therefore, in order to assure an opportunity to gain from time spent in class and lab, please turn off electronic devices, do not eat in class, make offensive remarks, read newspapers, talk to neighbors, sleep, or engage in any other forms of distraction. Inappropriate behavior in the classroom shall result in, minimally, a request to leave class or lab.
- D. Integrity and professionalism are expected at this level of education. Dishonesty on quizzes, exams, or lab reports will not be tolerated. Suspected cases of cheating in class or lab as well as grade disputes and appeals will be handled according to the academic regulations of the University. If it is determined that cheating has occurred, the student will be dismissed and FAIL the class. Consult the statement below, or the <u>Undergraduate Catalog</u> for more information.

Grading Procedures and Academic Integrity Students need to REVEW OP 34:12 Link in Blackboard-

ACADEMIC INTEGRITY STATEMENT:

Academic integrity is taking responsibility for one's own class and/or course work, being individually accountable, and demonstrating intellectual honesty and ethical behavior. Academic integrity is a personal choice to abide by the standards of intellectual honesty and responsibility. Because education is a shared effort to achieve learning through the exchange of ideas, students, faculty, and staff have the collective responsibility to build mutual trust and respect. Ethical behavior and independent thought are essential for the highest level of academic achievement, which then must be measured. Academic achievement includes scholarship, teaching, and learning, all of which are shared endeavors. Grades are a device used to quantify the successful accumulation of knowledge through learning. Adhering to the standards of academic integrity ensures grades are earned honestly. Academic integrity is the foundation upon which students, faculty, and staff build their educational and professional careers. [Texas Tech University ("University") Quality Enhancement Plan, Academic Integrity Task Force, 2010

Academic misconduct includes cheating, plagiarism, collusion, falsifying academic records, misrepresenting facts, violations of published professional ethics/standards, and any act or attempted act designed to give unfair academic advantage to oneself or another student. Additional information about academic misconduct is available in the Texas Tech University Handbook in Part II, section B of the Community Policies section in the Student Handbook at http://www.depts.ttu.edu/dos/handbook/.

For this class and Lab, Dr. Elle will follow the Conduct of Student Conduct procedures if there is findings of Academic misconduct, with potential consequences of failure of assignment, lab or the entire course.

ACCOMMODATIONS FOR STUDENTS WITH A DISABILITY

Any student who, because of a disability, may require special arrangements in order to meet the course requirements should contact the instructor as possible to make necessary arrangements. Students must present appropriate verification from Student Disability Services during the instructor's office hours. Please note that instructors are not allowed to provide classroom accommodation to a student until appropriate verification from Student Disability Services has been provided. For additional information, please contact Student Disability Services office in 335 West Hall or call 806-742-2405.

RELIGIOUS HOLY DAY STATEMENT:

"Religious holy day" means a holy day observed by a religion whose places of worship are exempt from property taxation under Texas Tax Code §11.20. A student who intends to observe a religious holy day should make that intention known in writing to the instructor prior to the absence. A student who is absent from classes for the observance of a religious holy day shall be allowed to take an examination or complete an assignment scheduled for that day within a reasonable time after the absence. A student who is excused under section 2 may not be penalized for the absence; however, the instructor may respond appropriately if the student fails to complete the assignment satisfactorily.

TTU RESOURCES FOR DISCRIMINATION, HARASSMENT, AND SEXUAL VIO-LENCE

Texas Tech University is committed to providing and strengthening an educational, working, and living environment where students, faculty, staff, and visitors are free from gender and/or sex discrimination of any kind. Sexual assault, discrimination, harassment, and other <u>Title IX violations</u> are not tolerated by the University.

Report any incidents to the Office for Student Rights & Resolution, (806)-742-SAFE (7233) or file a report online at <u>titleix.ttu.edu/students</u>.

Faculty and staff members at TTU are committed to connecting you to resources on campus. Some of these available resources are:

CIVILITY IN THE CLASSROOM STATEMENT:

Texas Tech University is a community of faculty, students, and staff that enjoys an expectation of cooperation, professionalism, and civility during the conduct of all forms of university business, including the conduct of student–student and student–faculty interactions in and out of the classroom. Further, the classroom is a setting in which an exchange of ideas and creative thinking should be encouraged and where intellectual growth and development are fostered. Students who disrupt this classroom mission by rude, sarcastic, threatening, abusive or obscene language and/or behavior will be subject to appropriate sanctions according to university policy. Likewise, faculty members are expected to maintain the highest standards of professionalism in all interactions with all constituents of the university (www.depts.ttu.edu/ethics/matadorchallenge/ethicalprinciples.php).

Assignments & Point Allotments	
Course Assignments	Points
50 % Quizzes/ 50% Attendance (In Class & Blackboard) Points will typically be 10 to 20 points for Quizzes	100
4 Semester Exams No Makeups Given unless a TTU approved absence	400
Extra Credit - Cumulative quiz that will be given in November, Due at the last day of class	
Total Lecture	500 (60%) for Lecture
Total for Lab -	(40%) for Lab
Α	89.5 to 100
В	79.5 to 89.4
С	69.5 to 79.4
D	59.5 to 69.4
F	Below 59.4

Blackboard for Grade Updates

Logon to Blackboard, PSS 1411 001. Blackboard will be used for updating all your grades, TopHat Quiz/Attendance average at midterms and finals.

Tentative Class Schedule*		
Week	Торіє	
1. Jan 14, 16	Syllabus, Introduction to Horticulture / History & Challenges	
2. Jan 21, 23	Scientific Theory / Classifying and Naming Plants	
3. Jan 38, 30	Cell Anatomy / Plant Structrures- Roots,	
4. Feb 4, 6	Plant Structures- Stems, EXAM 1	
5. Feb 11,13	Plant Structures- Leaves / Flowers	
6. Feb 18, 20	Sexual Reproduction/ Genetics	
7. Feb 25, 27	Asexual Reproduction / Grafting	
8. Mar 3, 5	Soils, More than Dirt/EXAM 2	
9. Mar 10, 12	Plant Nutrition	
10. Mar 14-22	SPRING BREAK	
11. Mar 24, 26	Plant Physiology: Photosynthesis & Respiration	
12. Mar 31, April 2	Integrated Pest Management / Sustainable - Home systems in Vegetables	
13. April 7, 9	Review/ EXAM 3	
14 April 14, 16	Sustainable production systems Temperature Fruits / Home Land- scape: Irrigation tools	
15. April 21, 23	Home Landscape: Native Plants and Water Conservation	
16. April 28, 30	Hydroponics Systems	
17. March 5th	Unit 4 Review	
17. Exam 4	Saturday, May 9th 1:30 to 4:00 p.m in AgScience 214	

^{*}Course Schedule subject to change at the discretion of the Instructor