

PLSC 210: Horticulture Principles and Practices, Fall 2020
University of Tennessee, Knoxville

COURSE INFORMATION

Meeting Time: Monday, Wednesday, and Friday from 11:45 am to 12:35 pm

Location: Online on Zoom

Course Credit: 3.0 Hours

Faculty Contact Information

- Amanda Spangler
- aplante@utk.edu
- 252 Ellington Plant Sciences Bldg.
- 865-974-7324
- Office Hours: On Zoom by Appointment

GTA Contact Information

- Sam Daniel
- sdanie27@vols.utk.edu
- Office Hours: On Zoom by Appointment



Welcome Statement

My name is Amanda Spangler, and I will be your instructor for the course. I am looking forward to getting to know you this semester! This class will have scheduled weekly assignments due, as well as online discussion forums, readings, quizzes, and course materials.

This is not a self-paced course. It's important that you manage your own time each week to know when assignments, and any other weekly course obligations, are due. This will involve regularly logging into Canvas to check communications, monitoring your campus email address, and virtually interacting with your classmates, myself, and course materials.

I look forward to working with you this semester and getting off to a strong start!

Instructor Availability

Please feel welcome to email me with updates, questions, or concerns. I will typically respond within 24 hours during the week and 48 hours on the weekend. I will notify you if I will be out of town and if connection issues may delay a response.

COURSE DESCRIPTION

An introduction to the science and technology underlying the use and production of horticultural crops and landscape plants. Structure, growth and development of horticultural plants from a practical and scientific approach, environmental effects, basic principles of propagation, greenhouse and outdoor production, nutrition, pruning and chemical control of growth, pest control, and the various branches of horticulture.

Student Learning Outcomes

Everyone is impacted through their involvement in the horticultural sciences. The course has been designed to introduce both the science and practical applications of all areas within horticulture. Upon completion of this course, students will be able to:

1. Describe the structure, growth, and development of horticultural plants from a practical and scientific standpoint.
2. Describe the underlying environmental effects that impact the growth and development of horticultural crops.
3. Have an understanding of the basic principles of propagation, greenhouse and outdoor production, nutrition, pruning and chemical control of growth, pest control, and the various branches of horticulture.

LEARNING ENVIRONMENT

This is a fully online course, which means that you are not required to travel to campus to complete this course. Students will have the option to participate in 3 to 5 in-person outdoor labs in the UT Gardens, but participation in these labs is not required for course completion or for full assignment credit. You will participate in this course using Canvas, the University of Tennessee's Learning Management System. Synchronous sessions will be conducted using Zoom. Additional [Canvas](#) and [Zoom](#) resources are available for students unfamiliar with these online environments. **If you need any equipment to complete this course online, you can submit a technology request online at forms.utk.edu/tech-request.**

HOW TO BE SUCCESSFUL IN THIS COURSE

Students are expected to attend each virtual class, and they are encouraged to prepare for class by reading the sections of the textbook outlined in the semester calendar. Follow along with the semester calendar to be aware of upcoming assignments and assessments. Reach out to the instructor as soon as possible with any questions, ideas, or concerns about the class. Students are encouraged to review UT's Online Programs information for [How to be Successful in an Online Course](#).

Learner Expectations

- Be prepared for all classes
- Be respectful of others
- Actively contribute to the class and learning activities
- Commit to setting and meeting high expectations for yourself
- Stay up-to-date on materials posted to the course Canvas site
- Read and (if necessary) respond to communications from the instructor
- Completely read and follow all instructions given for assignments and assessments
- Ask the instructor for clarification when needed
- Abide by the [UT Student Code of Conduct](#).

Instructor Expectations

- Be prepared for all classes
- Evaluate all fairly and equitably
- Be respectful of all students
- Create and facilitate meaningful learning activities
- Clearly and effectively communicate course expectations and content
- Abide by the University codes of conduct

COURSE REQUIREMENTS

Texts, Resources, and Materials

Recommended readings will be from McMahon et al.'s *Plant Science: Growth, Development, and Utilization of Cultivated Plants* (5th edition) ISBN-13: 978-0-13-501407-3. Textbook is available at [Amazon.com](#) and [on reserve in Pendergrass Library](#).

Required Equipment

Students must have a working computer that meets the [system requirements for using Zoom](#), a microphone, and a webcam in order to participate in online classes and to complete assignments. **If you need any equipment to complete this course online, you can submit a technology request online at forms.utk.edu/tech-request.** Students may be able to participate in class by using resources available in an [on-campus computer lab](#).

Course Resources

Zoom

We will be utilizing [LiveOnline@UT \(Zoom\)](#) to meet in live, online sessions using webcams and audio. Be sure to use the meeting link as provided to join the class meeting sessions. Please use your UTK Zoom account rather than a personal account for this class to ensure that you are accounted for when attendance is taken and during in-class assignments.

Canvas

This course will use Canvas via [Online@UT](#). As a student registered for this course you are automatically loaded into the course Canvas site, and it should appear on your homepage. I

will post course announcements and materials on the Canvas site. Unless otherwise specified, all exams, discussion groups, and quizzes must be completed online through Canvas, and reports must be submitted online through Canvas.

LockDown Browser

This course requires the use of LockDown Browser and a webcam for online exams. The webcam can be built into your computer or can be the type that plugs in with a USB cable. You will need to download and install the LockDown Browser from this link: <https://download.respondus.com/lockdown/download.php?id=645740725>

Technical Support

For technical issues, contact the OIT HelpDesk by phone at (865) 974-9900 or at the [Walk-in HelpDesk](#). For IT and Computing issues, use the online [Contact Form](#). **Again, if you need any equipment to complete this course online, you can submit a technology request online at forms.utk.edu/tech-request.**

COURSE COMMUNICATIONS POLICY

Online “Classroom” Etiquette (Netiquette)

All online and offline communication should adhere to [UT’s Principles of Civility and Community](#).

Announcements

Announcements will be used to communicate with you about course logistics. All students are responsible for logging into Canvas on a daily basis to check for course updates. The three most recent announcements are posted at the top of the course home page. Students should check their [Canvas notification settings](#) to ensure they receive instructor announcements.

Discussions

We will be utilizing Discussion Boards in this online course as a component of the Plant Problems assignments. When using the discussion space, remember to: respect each other’s ideas, feelings and experience; be courteous and considerate; and explore disagreements and support assertions with data and evidence.

Email

All students are provided with a working university email address. The instructor will use university email to communicate course information. Students are responsible for staying up-to-date on email communications. For assistance with email, please visit help.utk.edu. Thank you for your attention to detail and professional courtesy in all communications regarding the class, including email.

COURSE ATTENDANCE AND PARTICIPATION POLICY

Participation in each class is crucial to fulfilling class purposes. **Students are expected to attend online classes synchronously.** Students may not be distracted or distracting during class. Cell phones, tablets, and laptops should be used for online attendance, participation, and note taking purposes only.

Campus Closures

Online, distance, and hybrid courses follow the same academic calendar and semester schedule as on-campus courses. If the university closes campus for any reason, including [inclement weather](#), students who are unable to attend, submit assignments, or otherwise participate in an online class session will not be penalized.

ASSIGNMENTS, ASSESSMENTS, AND EVALUATIONS

Exams

Students will be evaluated on their progress through **5 examinations**. Each exam is worth 100 points. *Final grades will be based on your highest 4 exam scores, with the **lowest exam grade being dropped**.* If you miss one exam for any reason during the semester, the 0 score on the missed exam will default as your lowest exam grade and it will be dropped at the end of the term.

Readings

It is important that all reading assignments be completed prior to the lecture period. You will get much more out of the lectures if you have prepared yourself ahead of time with the readings and come prepared to ask any questions you may have regarding the material. In addition to recommended readings from the textbook, supplemental reading assignments will be posted on Canvas.

Assignments

Experiential learning will be facilitated through either individual or group assignments for the course. Each assignment is worth 25 points. The Plant Problems project, the Propagation Experiment, and the Mathematical Problem Set will create student engagement in problem solving in a broad array of horticultural topics. Student work is expected to meet the content and formatting requirements outlined in the assignment sheets.

Quizzes

Online reading assessments, participation in Outdoor Labs, and pop quizzes will be worth 5 points. During every class period there is a chance to have a pop quiz on assigned reading or previously covered material. Your participation in the three scheduled Outdoor Labs in the class Adopt a Spot at the UT Gardens will count as a quiz grade. At the end of the semester, your three lowest quiz grades will be dropped.

Outdoor Labs

Students will have the option to gain practical experience in a variety of topics on scheduled in-person lab days. Class will be held regardless of weather conditions. Students should dress appropriately for the weather and the work. Students are required to wear closed-toe shoes on all lab days (inside or outdoors) and they are advised to wear durable clothing that can get dirty on outdoor workdays. Students are required to follow all COVID 19 safety measures outlined in the section “Social Distancing and COVID 19 Procedures” below.

Volunteer Experience

Students have the option to complete 10 hours of volunteer experience, where they will have the opportunity to apply practices learned in class. Completed service hours will contribute up to 25 bonus points to students’ final grades. **Volunteer experience must be approved by the instructor prior to beginning work.** Grades will be a combination of completion of the 10 hours, receipt of an evaluation from the volunteer site host, and a brief report from the student about their experience.

Academic Honesty and Student Conduct

For this course, academic integrity includes, but is not limited to, not receiving unauthorized assistance to complete an assignment and selling or purchasing course assignments or assessments. Academic honesty will apply in accordance with policies found in [Hilltopics](#), the official student handbook of the University of Tennessee. Students must adhere to the principles and rules of the University and pursue academic work in a straightforward and truthful manner, free from deception or fraud.

GRADING CRITERIA

Points possible

Assignment	Points Possible
Exams (5 with lowest grade dropped)	400 pts (100 pts ea.)
Quizzes	50 pts (5 pts ea.)
Mathematical Problem Set	25 pts
Plant Adaptations Discussion	25 pts
Plant Problems	25 pts
Propagation Experiment	25 pts
<i>Extra Credit Volunteer Assignment</i>	<i>Up to 25 pts</i>
Total Points Available	550 pts

Grading Scale

Final grades will be assigned in accordance with the UT grading scale. For further explanation about student [UT Grades and GPA](#) or other policies related to academic standing, please reach out to [OneStop](#).

Letter Grade	Percentage	Projected Points
A	More than 93 %	511 to 550 pts
A-	90 to less than 93 %	495 to 510 pts
B+	87 to less than 90 %	478 to 494 pts
B	83 to less than 87 %	456 to 477 pts
B-	80 to less than 83 %	440 to 455 pts
C+	77 to less than 80 %	423 to 439 pts
C	73 to less than 77 %	401 to 422 pts
C-	70 to less than 73 %	385 to 400 pts
D	60 to less than 70 %	330 to 384 pts
F	Less than 60 %	329 pts and below

UNIVERSITY POLICIES

Academic Integrity

Each student is responsible for their personal integrity in academic life and for adhering to UT's Honor Statement. The Honor Statement reads: "An essential feature of the University of Tennessee, Knoxville is a commitment to maintaining an atmosphere of intellectual integrity and academic honesty. *As a student of the university, I pledge that I will neither knowingly give nor receive any inappropriate assistance in academic work, thus affirming my own personal commitment to honor and integrity.*"

University Civility Statement

"Civility is genuine respect and regard for others: politeness, consideration, tact, good manners, graciousness, cordiality, affability, amiability and courteousness. Civility enhances academic freedom and integrity, and is a prerequisite to the free exchange of ideas and knowledge in the learning community. Our community consists of students, faculty, staff, alumni, and campus visitors. Community members affect each other's well-being and have a shared interest in creating and sustaining an environment where all community members and their points of view are valued and respected. Affirming the value of each member of the university community, the campus asks that all its members adhere to the principles of civility and community adopted by the campus." See the [UT Principles of Civility and Community](#).

Disability Services

Any student who feels they may need an accommodation based on the impact of a disability should contact the [Student Disability Services](#) (SDS) at 865-974-6087 [or by video relay at 865-622-6566] in 100 Dunford Hall to document their eligibility for services. Student Disability Services will work with students and faculty to coordinate reasonable accommodations for students with documented disabilities.

Emergency Alert System

The University of Tennessee is committed to providing a safe environment to learn and work. When you are alerted to an emergency, please take appropriate action. Learn more about what to do in an emergency and sign up for [UT Alerts](#). Check the emergency posters near exits and elevators for building specific information. In the event of an emergency, the course schedule and assignments may be subject to change. If changes to graded activities are required, reasonable adjustments will be made, and you will be responsible for meeting revised deadlines.

Your Role in Improving Teaching and Learning Through Course Assessment

At UT, it is our collective responsibility to improve the state of teaching and learning. During the semester you may be requested to assess aspects of this course either during class or at the completion of the class. You are encouraged to respond to these various forms of assessment as a means of continuing to improve the quality of the UT learning experience.

Wellness

The [Student Counseling Center](#) is the university's primary facility for personal counseling, psychotherapy, and psychological outreach and consultation services. The [Center for Health Education and Wellness](#) manages 974-HELP, the distressed student protocol, case management, the Sexual Assault Response Team, and the Threat Assessment Task Force.

Social Distancing and COVID 19 Procedures

Students are required to wear face masks at all times and maintain social distancing (6 feet between individuals in traditional classrooms, or, in instructional laboratories and similar settings, only a few minutes in closer proximity when absolutely necessary to achieve learning objectives). Students who are feeling ill or experiencing symptoms such as sneezing, coughing, or a higher than normal temperature will be excused from class and should stay at home.

Instructors have the right to ask those who are not complying with these requirements to leave class in the interest of everyone's health and safety. In the event that a student refuses to comply with these requirements, the instructor has the right to cancel class.

Additionally, following other simple practices will promote good health in and out of the classroom, such as frequent and thorough hand washing, wiping down desks and seats with disinfectant wipes whenever possible, not sharing personal items such as pens and cell phones, and avoiding crowded hallways and other enclosed spaces.

The Volunteer Creed reminds us that we bear the torch in order to give light to others. As Volunteers, we commit to caring for one another and for the members of the communities in which we live, work, and learn. This semester, the University asks that we all demonstrate the Volunteer spirit by following these and other health guidelines and requirements.

Key Campus Resources for Students

- [Center for Career Development](#) (Career counseling and resources; HIRE-A-VOL job search system)
- [Course Catalogs](#) (Listing of academic programs, courses, and policies)
- [Hilltopics](#) (Campus and academic policies, procedures and standards of conduct)
- [OIT HelpDesk](#) (865) 974-9900
- [Schedule of Classes/Timetable](#)
- [Student Health Center](#) (visit the site for a list of services)
- [Student Success Center](#) (Academic support resources)
- [Undergraduate Academic Advising](#) (Advising resources, course requirements, and major guides)
- [University Libraries](#) (Access to library resources, databases, course reserves, and services)

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COURSE SCHEDULE

In addition to the schedule provided below, the Canvas Calendar is a great way to view everything you have to do for all your courses in one place. Each calendar view shows any assignments or events that have been added.

Week	Date	Topics to be Covered	Assignments Due
1	W 8/19	First day of class: Syllabus and Introductions <i>Plant Adaptations</i>	
	F 8/21	History of Agriculture and Horticulture	<i>Ch. 1, pp. 2-15</i> <i>Ch. 3, pp. 33-43</i>
2	M 8/24	Terrestrial Ecosystems and Cultivating Plants	<i>Ch. 2, pp. 17-31</i> Online Reading
	W 8/26	Climate and Intro to Soils	<i>Ch. 4, pp. 45-59</i> <i>Ch. 5, pp. 62-75</i>
	F 8/28	Plant Classification	<i>Ch. 10, pp. 197-222</i> Online Reading
3	M 8/31	Structure of Higher Plants pt. 1	<i>Ch. 6, pp. 78-96</i>
	W 9/02	Structure of Higher Plants pt. 2	<i>Ch. 6, pp. 96-107</i>
	F 9/04	<i>Outdoor Lab: Adopt a Spot</i>	Plant Adaptations
4	M 9/07	Plant Growth and Development pt. 1	<i>Ch. 7, pp. 110-117</i>
	W 9/09	Plant Growth and Development pt. 2	<i>Ch. 7, pp. 117-133</i>
	F 9/11	Exam 1	
5	M 9/14	Plant Growth Regulators	<i>Ch. 7, pp. 133-141</i>
	W 9/16	Genetics and Propagation pt. 1	<i>Ch. 9, pp. 158-174</i> Online Reading
	F 9/18	Genetics and Propagation pt. 2 <i>Lab: Propagation Experiment pt. 1</i>	<i>Ch. 9, pp. 175-194</i>
6	M 9/21	Photosynthesis and Respiration pt. 1	<i>Ch. 11, pp. 225-238</i>
	W 9/23	Photosynthesis and Respiration pt. 2 <i>Plant Problems 1</i>	<i>Ch. 11, pp. 235-238</i>
	F 9/25	Exam 2	
7	M 9/28	Mineral Nutrition and Fertility Management pt. 1	<i>Ch. 13, pp. 251-263</i>
	W 9/30	Mineral Nutrition and Fertility Management pt. 2	<i>Ch. 14, pp. 288-291</i>

	F	10/2	Water Relations	<i>Ch. 12, pp. 241-249</i>
8	M	10/05	Soil Management	<i>Ch. 14, pp. 266-281</i> Online Reading
	W	10/07	<i>Lab: Propagation Experiment pt. 2</i>	Plant Problems 1
	F	10/09	Exam 3	
9	M	10/12	Water Management <i>Plant Problems 2</i>	<i>Ch. 14, pp. 281-288</i>
	W	10/14	Integrated Pest Management pt. 1 <i>Mathematical Problem Set</i>	<i>Ch. 15, pp. 296-312</i>
	F	10/16	Integrated Pest Management pt. 2	<i>Ch. 15, pp. 312-337</i> Online Reading
10	M	10/19	Landscape Plants pt. 1, Woody Plants	<i>Ch. 25, pp. 579-598</i>
	W	10/21	Landscape Plants pt. 2, Herbaceous Plants	<i>Ch. 25, pp. 599-611</i>
	F	10/23	Landscape Plants pt. 3, Maintenance	Plant Problems 2
11	M	10/26	Greenhouse Management	<i>Ch. 23, pp. 528-547</i>
	W	10/28	Special Topics, Nursery Production <i>Plant Problems 3</i>	<i>Ch. 22, pp. 517-525</i>
	F	10/30	<i>Outdoor Lab: Adopt a Spot</i>	Math Problem Set
12	M	11/02	Special Topics, Landscape Design	<i>Ch. 26, pp. 615-628</i>
	W	11/04	<i>Lab: Propagation Experiment pt. 3</i>	
	F	11/06	EXAM 4	
13	M	11/09	Special Topics, Vegetable and Fruit Production Guest Speaker Samantha Flowers, UT Organic Farm	<i>Ch. 19, pp. 417-440</i> Plant Problems 3
	W	11/11	Guest Speaker Dr. Alan Windham, UT Extension	
	F	11/13	<i>Outdoor Lab: Adopt a Spot</i>	
14	M	11/16	Special Topics, Turfgrass Management Guest Speaker Dr. Tom Samples, UT PLSC	<i>Ch. 24, pp. 550-576</i>
	W	11/18	<i>Group Meetings</i> 11:45 – 12:10, Plant Problems 12:10 – 12:35, Propagation Experiment	
	F	11/20	Group Presentations – Plant Problems	Plant Problems Presentations
15	M	11/23	Final Exam Review	Experiment Reports Due
	W	11/25	No class	
	F	11/27	No class – Thanksgiving Break	
16	M	11/30	No Class – Study Day	Peer Evals Due
	W	12/09	FINAL EXAM (5) 10:30 a.m. –12:45 p.m.	

The instructor reserves the right to revise, alter or amend this syllabus and the course schedule as necessary. Students will be notified in writing/email of any such changes.