PLSC 421: Native Plants in the Landscape, Fall 2023
University of Tennessee, Knoxville

COURSE INFORMATION

Meeting Time: Tuesday from 12:55 to 5:20 pm, Thursday from 12:55 to 2:10 pm
Location: Tuesday in room 126 of the Food Safety and Processing Building, Thursday in room 134 of the Brehm Animal Science Building
Course Credit: 3.0 Hours
Prerequisites: PLSC 320, PLSC 321, FWF 212 or EEB 330

Faculty Contact Information
Amanda Spangler
aplante@utk.edu
223 Third Creek Building
865-974-5193
Office Hours: by appointment on Zoom

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 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 and holidays. I will notify you if I will be out of town and if connection issues may delay a response.

**COURSE DESCRIPTION**

Native plants and plant communities as a basis for landscaping and environmental restoration. Weekly lecture coupled with either an outing or service practicum of invasive exotic plant removals or planting of natives. Study and work sites will primarily be demonstration projects of the University of Tennessee Environmental Landscape Design Lab. They include local schoolyard habitats, greenways, wetlands, streambanks, and shorelines.

**Student Learning Outcomes**
Upon completion of this course students should have a general knowledge and understanding of:

1. Plant communities as cultural and ecological constructs and their roles as indicators of site conditions as a basis for establishing a plant palette for gardening or ecological restoration.
2. An extensive selection of native plant species of the region including their identification, traditional use, cultural preferences, ecological attributes, habitat value, and potential in landscape development.
3. The issue and impact of invasive exotic species as related to landscape management and ecosystem integrity.
4. The role of natural succession in environmental restoration and its impact on species composition, stability, and evolution over time.
5. Establishment and management considerations in working with native landscapes such as woodlands, wetlands, riparian buffers, rain gardens, and meadows.
6. Conservation issues relating to native plants in our landscapes and developed areas.
7. The role of native plants in strategies relating to contemporary applications and issues relating to sustainability.

**LEARNING ENVIRONMENT**

This is an in-person class. Participation in each class is crucial to fulfilling class purposes. Students are expected to attend each class and lab. Many of your assignments will be administered through Canvas, the University of Tennessee’s Learning Management System.
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 borrow equipment from Pendergrass Library.

HOW TO BE SUCCESSFUL IN THIS COURSE

Students are expected to attend each 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.

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
- Start and end class on time
- 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
- Be open to constructive input from students in the course
- Abide by the University codes of conduct

COURSE REQUIREMENTS

Recommended Texts, Resources, and Materials
- Weaner & Christopher's Garden Revolution: How our Landscapes can be a Source of Environmental Change is on reserve in Pendergrass Library
- Spira’s *Wildflowers and Plant Communities of the Southern Appalachian Mountains and Piedmont* is available online
- The Tennessee Flora Committee’s *Guide to the Vascular Plants of Tennessee* is available online

**Required Equipment**
Students must have a working computer in order to complete assignments. If you need any equipment to complete this course online, you can **borrow equipment from Pendergrass Library**. Students may be able to participate in class by using resources available in an **on-campus computer lab**.

**Course Resources**

**Canvas**
This course will use Canvas via [Online@UT](https://online.utk.edu). 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. Many assignments and assessments must be completed online through Canvas, and reports must be submitted online through Canvas.

**Zoom**
We will be using [LiveOnline@UT (Zoom)](https://liveonline.utk.edu) for virtual office hours, for some group meetings, and, when determined necessary by the instructor or University, online class sessions.

**iNaturalist**
This course will rely heavily on [iNaturalist.org](https://inaturalist.org), a social network for naturalists, to enable the class to record and share observations. Some activities and assignments will take place on the UTK PLSC 421 project which will record and share observations with classmates and the broader iNaturalist community.

**Technical Support**
For technical issues, contact the OIT HelpDesk by phone at (865) 974-9900 or at the [Walk-in HelpDesk](https://oit.utk.edu/helpdesk). For IT and Computing issues, use the online [Contact Form](https://oit.utk.edu/contact-form). **Again, if you need any equipment to complete the online portion of this course, you can **borrow equipment from Pendergrass Library**.**
COURSE COMMUNICATIONS POLICY

Classroom Etiquette
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 have in-person and may have virtual discussion groups in this class. 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 POLICIES

Participation in each class is crucial to fulfilling class purposes. Students are expected to attend all classes. Students may not be distracted or distracting during class.

Technology
Unless otherwise stated, cell phones, tablets, and laptops should be used for notetaking purposes only, but may not be used for recording audio or visuals. Sharing audio or visual files may violate University policy, copyright laws, or other restrictions. Smart phones and other technology will be turned off and remain in backpacks or purses during quizzes and exams. Use calculators and not smart phones during exams.
**Plant Walks**
Plant walks are required and taken during most class periods to learn to identify plant material in the field. Dress properly for the weather each day and bring your plant list to check off new plants. Be prepared for inclement weather; so, bring pencils (ink will run when wet) and an umbrella on those days. You may also wish to have a clip-board to help you out in the field.

While it may be tempting to take samples of the plant material as they are presented, this practice is highly discouraged by the instructor. Students will need to go to the landscape locations of the specimens to study them. It is suggested that students either purchase borrow a 10X eyepiece ("hand lens" or “field loupe”) for use in locating identifying characters of the plants.

**Field Study**
The intent of the course is to couple academic study with field experiences that reinforce classroom teaching. The area of environmental restoration is uniquely suited to this format, and such ‘service learning’ provides important benefits to the community or region. Also, the knowledge and enjoyment of gardening with natives is an indirect benefit. Outings to observe various habitat types, plant communities, or other landscape projects will supplement the ‘service learning’ practicum experiences.

Class will be held regardless of weather conditions. Students should dress appropriately for the weather and the work. We may encounter biting insects, poisonous plants, and difficult terrain. On all field study days, students are

- Required to wear long pants and closed-toe and closed-heel shoes
- Advised to wear durable, comfortable clothing that can get dirty
- Strongly encouraged to bring along water, bug spray, sunscreen, and a snack

Vans will be provided for transportation, if possible, for off-campus field trips. Accurate counts of those attending are needed in order to know number of vans to reserve. Students who plan to ride the van must inform the instructor one week prior to the field trip.

**Readings and Videos**
It is important that all reading be completed and video assignments be watched prior to the lecture period. You will get much more out of the lectures if you have prepared yourself ahead of time and come prepared to ask any questions you may have regarding the material. Required reading assignments will be posted on Canvas.
Guest Speakers
We are extremely fortunate to host guest speakers for many class sessions. These are professionals in their field, and their input often replaces recommended reading from the textbook. You are expected to be respectful, take notes, and ask speakers thoughtful questions.

Campus Closures
If the university closes campus for any reason, including inclement weather, students who are unable to attend, submit assignments, or otherwise participate in a class session will not be penalized.

ASSIGNMENTS, ASSESSMENTS, AND EVALUATIONS

Exams
Students will be evaluated on their progress through a series of examinations. Exams will include a plant identification component. Students will be evaluated on their progress through 3 examinations. Each exam is worth 200 points.

No make-up exams will be given under any circumstances during the regular class calendar. However, for those students who have missed one exam and have had excused absences, a make-up exam could be arranged for the final exam period scheduled in the timetable. This must be arranged for in advance and approved by the instructor. This final make-up exam will be cumulative, with plant material from the whole semester.

Assignments
Experiential learning will be facilitated through either individual or group assignments for the course. Assignments are designed to reinforce class content, demonstrate comprehension, and improve communication skills. Student work is expected to meet the content and formatting requirements outlined in the assignment sheets and rubrics. Assignment sheets and rubrics will be posted on Canvas. Late assignments will not be accepted.

Field Reports
Only students who participate in tours and labs are eligible to submit written reports. Reports are due one week (7 days) after the event and must meet the criteria outlined in the assignment sheet. Field trip reports are worth 20 points each. Late submissions will not be accepted.

If a student cannot participate in a field trip or lab, they must provide notice to the instructor by the Wednesday prior to the event in order to receive an alternative...
assignment. **Students who fail to provide sufficient notice of absence will not receive an alternative assignment.** Alternative reports are due 7 days after they are assigned.

**Quizzes**
Online reading assessments and pop quizzes will be worth **10 points each.** During every class period there is a chance to have a pop quiz on assigned reading or previously covered material.

**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.

In this course, it is expected that all submitted work is produced by the students themselves, whether individually or collaboratively. Students must not seek the assistance of Generative AI Tools like ChatGPT. Use of a Generative AI Tool to complete an assignment constitutes academic dishonesty.

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<thead>
<tr>
<th>GRADING CRITERIA</th>
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<tbody>
<tr>
<td><strong>Points possible</strong></td>
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<tr>
<td>Assignment</td>
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<tr>
<td>Exams</td>
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<tr>
<td>Plant Database</td>
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<tr>
<td>Garden Design Project</td>
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<td>Plant Community Project</td>
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<tr>
<td>Field Reports</td>
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<tr>
<td>Quizzes (Up to 10)</td>
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<tr>
<td><strong>Total Points Available</strong></td>
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**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](#).
<table>
<thead>
<tr>
<th>Letter Grade</th>
<th>Percentage</th>
<th>Projected Points</th>
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<tbody>
<tr>
<td>A</td>
<td>More than 93 %</td>
<td>1209 to 1300 pts</td>
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<tr>
<td>A-</td>
<td>90 to less than 93 %</td>
<td>1170 to 1208 pts</td>
</tr>
<tr>
<td>B+</td>
<td>87 to less than 90 %</td>
<td>1131 to 1169 pts</td>
</tr>
<tr>
<td>B</td>
<td>83 to less than 87 %</td>
<td>1079 to 1130 pts</td>
</tr>
<tr>
<td>B-</td>
<td>80 to less than 83 %</td>
<td>1040 to 1078 pts</td>
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<tr>
<td>C+</td>
<td>77 to less than 80 %</td>
<td>1001 to 1039 pts</td>
</tr>
<tr>
<td>C</td>
<td>73 to less than 77 %</td>
<td>949 to 1000 pts</td>
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<tr>
<td>C-</td>
<td>70 to less than 73 %</td>
<td>910 to 948 pts</td>
</tr>
<tr>
<td>D</td>
<td>60 to less than 70 %</td>
<td>780 to 909 pts</td>
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<tr>
<td>F</td>
<td>Less than 60 %</td>
<td>779 pts and below</td>
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**CAMPUS SYLLABUS**

Dear Student,

The purpose of this Campus Syllabus is to provide you with important information that applies to all UTK courses. Please observe the following policies and familiarize yourself with the university resources listed below. At UT, we are committed to providing you with a high-quality learning experience. I want to wish you the best for a successful and productive semester.

- Dr. John Zomchick, Provost and Senior Vice Chancellor

**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.”

**Your Role in Improving the Course Through 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, and through the TNVoice course evaluation. Please take the few moments needed to respond to these requests as they are used by instructors, department heads, deans and others to improve the quality of your UT learning experience.
Students with Disabilities – http://sds.utk.edu
The University of Tennessee, Knoxville, is committed to providing an inclusive learning environment for all students. If you anticipate or experience a barrier in this course due to a chronic health condition, a learning, hearing, neurological, mental health, vision, physical, or other kind of disability, or a temporary injury, you are encouraged to contact Student Disability Services (SDS) at 865-974-6087 or sds@utk.edu. An SDS Coordinator will meet with you to develop a plan to ensure you have equitable access to this course. If you are already registered with SDS, please contact your instructor to discuss implementing accommodations included in your course access letter.

Accessibility Policy and Training – http://accessibility.utk.edu
The University of Tennessee, Knoxville, provides reasonable accommodations for individual students with disabilities through its office of Student Disability Services. The university is also committed to making information and materials accessible, when possible. Resources and assistance to support these efforts can be found at http://accessibility.utk.edu/.

Wellness – http://wellness.utk.edu/ and http://counselingcenter.utk.edu/
The Center for Health Education and Wellness empowers all Volunteers to thrive by cultivating personal and community well-being. The Center can answer questions about general wellness, substance use, sexual health, healthy relationships, and sexual assault prevention. The Student Counseling Center is the university's primary facility for personal counseling, psychotherapy, and psychological outreach and consultation services.

Any student who has difficulty affording hygiene products, groceries, or accessing sufficient food to eat every day is urged to contact the Big Orange Pantry for support. The Big Orange Pantry, located in Greve Hall, is a free resource for all students, faculty, and staff, no matter how great or small their need is. Students who need emergency financial assistance can also request funding from the Student Emergency Fund.

Students who are experiencing non-academic difficulty or distress and need assistance should call 974-HELP or submit an online referral. The 974-HELP team specializes in aligning resources and support to students experiencing mental health distress.

Emergency Alert System – http://safety.utk.edu/
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.

**COVID-19 Guidelines**

CDC guidance recognizes the changing dynamics of living in a world with COVID-19. It rates COVID-19 community levels as low, medium, and high, with recommendations at each level about the use of masks and other precautions. At all levels of community spread, staying up-to-date with vaccination is the best way to protect yourself from serious illness and to limit the spread of COVID-19. Wearing a mask is always an option for any individual who chooses to do so, and the CDC recommends that those with high risk of severe illness talk with their health care providers. If you are sick, please stay in, avoid being around others as much as possible, and contact your health care provider for any symptoms that are worsening, moderate to severe, or concerning to you. For more information about vaccination or to self-report an illness and receive support, visit [http://studenthealth.utk.edu/CommunityHealth](http://studenthealth.utk.edu/CommunityHealth). For more information about COVID-19, visit [http://studenthealth.utk.edu/covid-19](http://studenthealth.utk.edu/covid-19).

**KEY CAMPUS RESOURCES FOR STUDENTS**

- **974-HELP** (developed to help distressed or distressing students reach their academic goals and to help maintain a safe community and learning environment for all students)
- **Center for Career Development** (Career counseling and resources, HIRE-A-VOL job search system)
- **Computer Labs**
- **Course Catalogs** (Listing of academic programs, courses, and policies)
- **COVID-19 Information and Support** (Visit the site for a list of resources)
- **Herbert Virtual Learning Commons** (Academic support, tools for individual study, wellness resources, and study groups)
- **Hilltopics** (Campus and academic policies, procedures and standards of conduct)
- **Judith Anderson Writing Help Center** (Writing support, navigating the writing process, and writing guides)
- **OIT HelpDesk** (865) 974-9900
- **Schedule of Classes/Timetable**
- **Student Counseling Center** (Visit the site for a list of services)
- **Student Health Center** (Visit the site for a list of services)
- **Student Success Center** (Academic support resources)
- **Study Spaces** (Check out this [Map of Quiet Indoor and Outdoor Study Spaces on Campus](http://studenthealth.utk.edu/covid-19) to learn where you can find a distraction-free spot to attend online classes.)
• **Undergraduate Academic Advising** (Advising resources, course requirements, and major guides)
• **University Libraries** (Access to library resources, databases, course reserves, and services)

This document is subject to change at any time at the discretion of the instructor.
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.

<table>
<thead>
<tr>
<th>Week</th>
<th>Date</th>
<th>Topics to be Covered</th>
<th>Assignments Due</th>
</tr>
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<tbody>
<tr>
<td>1 R</td>
<td>8/24</td>
<td>First day of class: Syllabus and Introductions&lt;br&gt;The What, Why, and When of “Native Plants in the Landscape”</td>
<td>Online Reading</td>
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<tr>
<td>2 T</td>
<td>8/39</td>
<td><em>Plant Walk: Main Campus</em></td>
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<tr>
<td>R</td>
<td>8/31</td>
<td>Plant Communities and Ecological Succession</td>
<td>Online Reading</td>
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<tr>
<td>3 T</td>
<td>9/05</td>
<td><strong>Field Study 1: UT Arboretum, Oak Ridge</strong></td>
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<tr>
<td>R</td>
<td>9/07</td>
<td>Site Analysis</td>
<td>Online Reading</td>
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<tr>
<td>4 T</td>
<td>9/12</td>
<td><strong>Field Study 2: Knoxville Botanical Garden</strong></td>
<td>Field Report 1</td>
</tr>
<tr>
<td>R</td>
<td>9/14</td>
<td>History of the Mound and Native American Interpretive Garden on UT's Agriculture Campus&lt;br&gt;<em>Guest Speaker: TBD</em></td>
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<tr>
<td>5 T</td>
<td>9/19</td>
<td>EXAM 1</td>
<td></td>
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<tr>
<td>R</td>
<td>9/21</td>
<td>Creating an Ecologically Connected Master Plan&lt;br&gt;<em>Guest Speaker: TBD</em></td>
<td>Field Report 2</td>
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<tr>
<td>6 T</td>
<td>9/26</td>
<td><strong>Field Study 3: Residential Garden, Knoxville</strong></td>
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<tr>
<td>R</td>
<td>9/28</td>
<td>Considerations for Site Preparation, Establishment, Succession, and Management</td>
<td>Plant Community Project; Online Reading</td>
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<tr>
<td>7 T</td>
<td>10/03</td>
<td><strong>Field Study 4: Seven Islands State Birding Park, Kodak</strong></td>
<td>Field Report 3</td>
</tr>
<tr>
<td>R</td>
<td>10/05</td>
<td>Considerations when Creating and Managing Meadows and Prairies</td>
<td>NLD Project Task 2</td>
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<tr>
<td>8 T</td>
<td>10/10</td>
<td><strong>No Class – Fall Break</strong></td>
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<tr>
<td>R</td>
<td>10/12</td>
<td>Southern Grasslands&lt;br&gt;<em>Guest Speaker: TBD</em></td>
<td>Field Report 4</td>
</tr>
<tr>
<td>9 T</td>
<td>10/17</td>
<td>Nonnative Invasive Species&lt;br&gt;<em>Guest Speaker: TBD</em></td>
<td>Online Reading</td>
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<tr>
<td>R</td>
<td>10/19</td>
<td>Considerations when Creating and Managing Shrublands and Woodlands</td>
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<td>10 T</td>
<td>10/24</td>
<td>EXAM 2</td>
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<td>Event Description</td>
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<td>11</td>
<td>R</td>
<td>10/26</td>
<td>Plant Walk: Ag Campus</td>
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<td>T</td>
<td>10/31</td>
<td>Field Study 6: Overhill Gardens, Vonore</td>
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<td>R</td>
<td>11/02</td>
<td>Group Studio Time</td>
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<tr>
<td>12</td>
<td>T</td>
<td>11/07</td>
<td>Group Studio Time</td>
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<td></td>
<td>R</td>
<td>11/09</td>
<td>Rescuing Knoxville’s Indigenous Flora</td>
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<td>[Tentative] Alternative Field Study</td>
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<td>13</td>
<td>T</td>
<td>11/14</td>
<td>Field Study 7: Knoxville Botanical Garden and Arboretum</td>
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<td></td>
<td>R</td>
<td>11/16</td>
<td>Working with Municipalities, HOAs, and other Governing Bodies</td>
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<td>14</td>
<td>T</td>
<td>11/21</td>
<td>EXAM 3</td>
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<td></td>
<td>R</td>
<td>11/23</td>
<td>No Class – Thanksgiving Break</td>
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<tr>
<td>15</td>
<td>T</td>
<td>11/28</td>
<td>Field Study 8: Lakeshore Park Wetlands</td>
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<td></td>
<td>R</td>
<td>11/30</td>
<td>Special Topics: Alpine, Bog, and Rock Gardens</td>
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<tr>
<td>16</td>
<td>T</td>
<td>12/05</td>
<td>Group Presentations – Landscape Project</td>
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<td>TBD</td>
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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.