WILD 3820

Forest Plants: Identification, Biology, and Function

Credits: 3

Course Objectives

After taking this course, students should be able to enter a forest ecosystem in western North America and identify the principal plant species. Students should have the vocabulary and techniques to differentiate among the plants covered in the course and understand aspects of their evolution, taxonomy, and ecological function.

- Identification: The course covers approximately 144 species (generally 12 per week for each of the first twelve weeks) that are either widespread throughout western North America or which are narrowly distributed, but either important or unique, as well as the plant characters that allow identification of these 144 species.
- Taxonomy: The course covers the plant families and phylogeny of the 144 plant species.
- Function: The course introduces woody plant physiology and adaptations to forest conditions.
- Indicators: The course provides an introduction to indicator species or groups of species that will allow students to identify various moisture and nutrient conditions.

The course involves a considerable amount of memorization. The overarching goal is to prepare students for resource management careers in the West. Although the class does not specifically cover plant species found outside the West, the plant families represented serve as a good background for work or research anywhere in the northern temperate regions of the world.

Fees

The course fee of $28 covers lab materials and supplies (principally preparation of specimens).

Instructor

James A. Lutz
Phone: (435) 797-0478
Email: james.lutz@usu.edu
Office hours: By appointment, meetings to be held outside, or catch me on Zoom or Skype (james.a.lutz) anytime.

With Sunshine Brosi in Price and Lisa Boyd in Vernal.

Graduate TA: Josh Carrell
Email: joshdcarrell@gmail.com (mailto:sieperty@gmail.com)
Review sessions: Fridays in NR 217, 11am-1pm

Undergraduate TA: Bella Wetzler
Email: isabellai.wetzler@gmail.com (mailto:sieperty@gmail.com)
Review sessions: Thursdays in NR 217, 4-5pm

UTF: Jeff Chandler
Email: siepejeffrey.chandler@usu.edu (mailto:sieperty@gmail.com)
Web Site : http://website-wild3820.s3website-us-west-2.amazonaws.com/

The website, fully open access, hosts the written course materials (other than the "Woody Plants of Utah" text) and the detailed topics to be covered in lecture and lab. Prior to each class, the lectures will be updated for the current year and the PDF of the PowerPoint will be posted (on the 'Schedule' tab of the website). If the files on the website have the suffix of the current year, the files have been updated (usually by the Saturday before class). Prior to that time the lecture from the previous year is posted for your information. Prior to each lab session, PDF files for the lab PowerPoint and a key will be posted. Check that you are looking at the correct version of any particular document: if "2020" appears in the filename, it is last year’s file – this year’s files all have “2021” in the filename. You may need to clear your browser cache from time to time to get the correct version of files.

Evaluation

Performance is evaluated with quizzes, lab journals, a lab final exam on plant identification (during the last lab session, before Thanksgiving break) and a concepts and terminology exam during finals week. Quizzes and exams are closed-book.

The course has 100 total points. The point distribution is:

1) Biweekly quizzes (6) – 4 points each, 24 points total
2) Lab journal (11) – 1 point per lab, 11 points total
3) Lab final (plant identification) – 40 points
4) Final exam (concepts and terminology) – 25 points

Your overall numerical score for the course is the sum of those components. Final grades are curved, up only. Since 2014, the “curve” has resulted in adding about 5 to 9 points to your average.

Grade Scheme

The following grading standards will be used in this class:
<table>
<thead>
<tr>
<th>Grade</th>
<th>Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>100 % to 93.0%</td>
</tr>
<tr>
<td>A-</td>
<td>92.0 % to 90.0%</td>
</tr>
<tr>
<td>B+</td>
<td>89.0 % to 87.0%</td>
</tr>
<tr>
<td>B</td>
<td>86.0 % to 84.0%</td>
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<tr>
<td>B-</td>
<td>83.0 % to 80.0%</td>
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<td>C+</td>
<td>79.0 % to 77.0%</td>
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<td>C</td>
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<td>C-</td>
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<td>D</td>
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<td>F</td>
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**Assignment Details**

Each week students are expected to read the section on the assigned plants in the book ("Woody Plants of Utah") and read the detailed webpages for those species from the course website. These readings are the same for each week, so will generally not be announced explicitly.

**Lab Journals**

An important part of learning the plants is for each person to observe the specimens presented in lab and write their own thoughts about them. Lab journals can take many forms but must meet the following requirements:

1) The WILD 3820 lab journal must be dedicated to WILD 3820
2) The lab journal needs to have sufficient space to take notes on all 144 species in one or two notebooks – no loose pages
3) At a minimum, the journal entries for each plant should include:
   a. Five written repetitions of the Family, Genus, and species
   b. Three ecological facts about the plant
   c. A sketch of key portions of the plant labeled with identifying features

**Late Assignments or Missed Quizzes**

When students have pre-approved reasons for missing labs, lab journals can be turned in promptly for full credit; if labs are missed without pre-approval, lab journals can be turned in promptly for 50% credit. Lab journals more than six days late will receive no credit. When students have pre-approved reasons for missing lab quizzes, an appointment must be made to complete an alternate quiz. You must contact me prior to the start time of the lab / quiz you will be missing to get pre-approval. Pre-approved reasons include: family or medical emergencies, and unavoidable occupational requirements. See also, “Covid-19 Issues”, below.

**Attendance**

I expect students to attend or watch all lectures and attend the full lab section. Note that you will need to watch the second lecture (1:30 – 2:20, the “Lab Lecture”) before lab or you will not know anything about the plants in lab. You can watch the first lecture (12:30 – 1:20, the “Concepts Lecture”) either live or at another time. However, it’s recommended that you watch that lecture when it is broadcast, because I do make course announcements in that session. Lab attendance will be assessed at the end of each lab period when lab journals are submitted.

**Technology**

Please be courteous with your technology use so as not to distract other students.

**Covid-19 Issues**

Please follow all USU guidelines to minimize Covid-19 risks. If you have Covid-19 symptoms you should not come to class, and you should go get tested. You do not need pre-approval to miss a lab because you think you have Covid-19!
**Library Services**

All USU students attending classes in Logan, at our Regional Campuses, or online can access all databases, e-journals, and e-books regardless of location. Additionally, the library will mail printed books to students, at no charge to them. Students can also borrow books from any Utah academic library. Take advantage of all library services and learn more at libguides.usu.edu/rc. (http://libguides.usu.edu/rc)

**Classroom Civility**

Utah State University supports the principle of freedom of expression for both faculty and students. The University respects the rights of faculty to teach and students to learn. Maintenance of these rights requires classroom conditions that do not impede the learning process. Disruptive classroom behavior will not be tolerated. An individual engaging in such behavior may be subject to disciplinary action. Read Student Code Article V Section V-3 (https://studentconduct.usu.edu/studentcode/article5) for more information.

**University Policies & Procedures**

**COVID-19 Classroom Accommodations**

To ensure that you receive the appropriate accommodation for COVID-19 related challenges, the University requires you to fill out the COVID-19 Questionnaire (https://www.usu.edu/covid-19/questionnaire/index.php). Upon doing so, the University COVID CARE Team (https://www.usu.edu/covid-19/if-you-are-sick/care-team.php) will contact you to determine your needs and how to support you. The CARE Team will also contact your instructors and provide important direction on how best to accommodate your needs. For additional reference, please see USU's Attendance and Excused Absence (https://catalog.usu.edu/content.php?catoid=12&navoid=3160) policy and the COVID-19 Classroom Accommodations (https://www.usu.edu/covid-19/operations/accomodations) page.

**Academic Freedom and Professional Responsibilities**

Academic freedom is the right to teach, study, discuss, investigate, discover, create, and publish freely. Academic freedom protects the rights of faculty members in teaching and of students in learning. Freedom in research is fundamental to the advancement of truth. Faculty members are entitled to full freedom in teaching, research, and creative activities, subject to the limitations imposed by professional responsibility. Faculty Code Policy #403 (http://www.usu.edu/hr/files/uploads/Policies/403.pdf) further defines academic freedom and professional responsibilities.

**Academic Integrity – "The Honor System"**

Each student has the right and duty to pursue his or her academic experience free of dishonesty. To enhance the learning environment at Utah State University and to develop student academic integrity, each student agrees to the following Honor Pledge:

"I pledge, on my honor, to conduct myself with the foremost level of academic integrity."

A student who lives by the Honor Pledge is a student who does more than not cheat, falsify, or plagiarize. A student who lives by the Honor Pledge:

- Espouses academic integrity as an underlying and essential principle of the Utah State University community;
- Understands that each act of academic dishonesty devalues every degree that is awarded by this institution; and
- Is a welcomed and valued member of Utah State University.

**Academic Dishonesty**

The instructor of this course will take appropriate actions in response to Academic Dishonesty, as defined the University’s Student Code. Acts of academic dishonesty include but are not limited to:

- **Cheating:** using, attempting to use, or providing others with any unauthorized assistance in taking quizzes, tests, examinations, or in any other academic exercise or activity. Unauthorized assistance includes:
  - Working in a group when the instructor has designated that the quiz, test, examination, or any other academic exercise or activity be done "individually;"
  - Depending on the aid of sources beyond those authorized by the instructor in writing papers, preparing reports, solving problems, or carrying out other assignments;
  - Substituting for another student, or permitting another student to substitute for oneself, in taking an examination or preparing academic work;
  - Acquiring tests or other academic material belonging to a faculty member, staff member, or another student without express permission;
  - Continuing to write after time has been called on a quiz, test, examination, or any other academic exercise or activity;
  - Submitting substantially the same work for credit in more than one class, except with prior approval of the instructor; or engaging in any form of research fraud.

- **Falsification:** altering or fabricating any information or citation in an academic exercise or activity.

- **Plagiarism:** representing, by paraphrase or direct quotation, the published or unpublished work of another person as one's own in any academic exercise or activity without full and clear acknowledgment. It also includes using materials prepared by another person or by an agency engaged in the sale of term papers or other academic materials.

For additional information go to: ARTICLE VI. University Regulations Regarding Academic Integrity (https://studentconduct.usu.edu/studentcode/article6)
Sexual Harassment/Title IX

Utah State University is committed to creating and maintaining an environment free from acts of sexual misconduct and discrimination and to fostering respect and dignity for all members of the USU community. Title IX and USU Policy 339 (http://www.usu.edu/policies/339) address sexual harassment in the workplace and academic setting.

The university responds promptly upon learning of any form of possible discrimination or sexual misconduct. Any individual may contact USU’s Office of Equity (https://equity.usu.edu/) for available options and resources or clarification. The university has established a complaint procedure to handle all types of discrimination complaints, including sexual harassment (USU Policy 305 (http://www.usu.edu/policies/305/)), and has designated the Office of Equity Director/Title IX Coordinator as the official responsible for receiving and investigating complaints of sexual harassment.

Withdrawal Policy and "I" Grade Policy

Students are required to complete all courses for which they are registered by the end of the semester. In some cases, a student may be unable to complete all of the coursework because of extenuating circumstances, but not due to poor performance or to retain financial aid. The term ‘extenuating’ circumstances includes: (1) incapacitating illness which prevents a student from attending classes for a minimum period of two weeks, (2) a death in the immediate family, (3) financial responsibilities requiring a student to alter a work schedule to secure employment, (4) change in work schedule as required by an employer, or (5) other emergencies deemed appropriate by the instructor.

Students with Disabilities

USU welcomes students with disabilities. If you have, or suspect you may have, a physical, mental health, or learning disability that may require accommodations in this course, please contact the Disability Resource Center (DRC) (http://www.usu.edu/drc/) as early in the semester as possible (University Inn # 101, (435) 797-2444, drc@usu.edu (mailto:drc@usu.edu)). All disability related accommodations must be approved by the DRC. Once approved, the DRC will coordinate with faculty to provide accommodations.

Students who are at a higher risk for complications from COVID-19 or who contract COVID-19 may also be eligible for accommodations.

Diversity Statement

Regardless of intent, careless or ill-informed remarks can be offensive and hurtful to others and detract from the learning climate. If you feel uncomfortable in a classroom due to offensive language or actions by an instructor or student(s) regarding ethnicity, gender, or sexual orientation, contact:

- Division of Student Affairs: https://studentaffairs.usu.edu (https://studentaffairs.usu.edu/), (435) 797-1712, studentservices@usu.edu (mailto:studentservices@usu.edu), TSC 220
- Student Legal Services: https://ususa.usu.edu/student-association/student-advocacy/legal-services (https://ususa.usu.edu/student-association/student-advocacy/legal-services), (435) 797-2912, TSC 326,
- Access and Diversity: http://accesscenter.usu.edu (http://accesscenter.usu.edu/), (435) 797-1728, access@usu.edu (mailto:access@usu.edu); TSC 315
- Multicultural Programs: http://accesscenter.usu.edu/multiculture (http://accesscenter.usu.edu/multiculture), (435) 797-1728, TSC 315
- LGBTQA Programs: http://accesscenter.usu.edu/lgbtqa (http://accesscenter.usu.edu/lgbtqa/), (435) 797-1728, TSC 3145
- Provost’s Office Diversity Resources: https://www.usu.edu/provost/diversity (https://www.usu.edu/provost/diversity/), (435) 797-8176

You can learn about your student rights by visiting:

The Code of Policies and Procedures for Students at Utah State University: https://studentconduct.usu.edu/studentcode (https://studentconduct.usu.edu/studentcode/)

Grievance Process

Students who feel they have been unfairly treated may file a grievance through the channels and procedures described in the Student Code: Article VII (https://studentconduct.usu.edu/studentcode/article7).

Full details for USU Academic Policies and Procedures can be found at:

- Student Conduct (http://www.usu.edu/studentconduct)
- Student Code (https://studentconduct.usu.edu/studentcode/)
- Academic Integrity (https://studentconduct.usu.edu/studentcode/article6)

Emergency Procedures

In the case of a drill or real emergency, classes will be notified to evacuate the building by the sound of the fire/emergency alarm system or by a building representative. In the event of a disaster that may interfere with either notification, evacuate as the situation dictates (i.e., in an earthquake when shaking ceases or immediately when a fire is discovered). Turn off computers and take any personal items with you. Elevators should not be used; instead, use the closest stairs.

Mental Health
Mental health is critically important for the success of USU students. As a student, you may experience a range of issues that can cause barriers to learning, such as strained relationships, increased anxiety, alcohol/drug problems, feeling down, difficulty concentrating and/or lack of motivation. These mental health concerns or stressful events may lead to diminished academic performance or reduce your ability to participate in daily activities. Utah State University provides free services for students to assist them with addressing these and other concerns. You can learn more about the broad range of confidential mental health services available on campus at Counseling and Psychological Services (CAPS) (https://counseling.usu.edu).

Students are also encouraged to download the “SafeUT App” (https://healthcare.utah.edu/uni/programs/safe-ut-smartphone-app) to their smartphones. The SafeUT application is a 24/7 statewide crisis text and tip service that provides real-time crisis intervention to students through texting and a confidential tip program that can help anyone with emotional crises, bullying, relationship problems, mental health, or suicide related issues.