**Dendrology (51506)**

**NR-6 – Spring 2022**

**Instructor:**

Kayla Jo Rodriguez

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**Office hours:**

Tuesday 9-10 AM, Wednesday 12-1 PM, Thursday and Friday 8-9 AM, or by appointment

**Lectures:**

Tuesday’s 4-4:50 PM and Friday’s 9-9:50 AM, Room: FEM 8

**Labs:**

Friday’s 10 AM-12:50 PM, Room: FEM 8

**Course Overview:**

This class focuses on identification, classification, and distribution of common trees and shrubs found in the Western United States and major tree species of North America. The course emphasizes botanical nomenclature and proper identification using plant keys and field characteristics. This course is vital in that it provides a foundation for further academic study and careers in forestry, natural resources, outdoor recreation leadership and a host of related fields***.*** *You must be able to recognize the plants you are working with before you perform any type of management or inventory work on them.*

**Student Learning Outcomes & Objectives:**

*The primary learning outcomes for this course are:*

* NR-6 SLO1: Define and distinguish between common forest community types of the Western United States***.***
* NR-6 SLO2: Differentiate between species with similar morphology.
* NR-6 SLO3: Identify native tree and shrub species of California.

*The primary objectives will be:*

* Identify the common community types of the Western United States with particular emphasis on California.
* Research a specific plant and produce a visual exhibit.
* Create an herbarium of native plants.
* Use dichotomous keys and typical field guides to identify plants.
* Use scientific names of common plant species.

**Text and references:**

Required:

* Common Trees and Shrubs of the Southern Sierra Nevada (R.H. Gerstenberg)
  + This will be printed and handed out the first couple weeks of class. You will need this for lab most weeks.
* Trees and Shrubs of California (California Natural History Guides) ***$20-30***
  + [Trees and Shrubs of California (California Natural History Guides) (Volume 62): Stuart, John D., Sawyer, John O., Pickart, Andrea J.: 9780520221109: Amazon.com: Books](https://www.amazon.com/Shrubs-California-Natural-History-Guides/dp/0520221109)

*Recommended:*

* Botany in a Day: The Patterns Method of Plant Identification
  + [Botany in a Day: The Patterns Method of Plant Identification: Thomas J. Elpel: 8601400138540: Amazon.com: Books](https://www.amazon.com/Botany-Day-Patterns-Method-Identification/dp/1892784351/ref=asc_df_1892784351?tag=bingshoppinga-20&linkCode=df0&hvadid=80607997996060&hvnetw=o&hvqmt=e&hvbmt=be&hvdev=c&hvlocint=&hvlocphy=&hvtargid=pla-4584207577542310&psc=1)
* Field Guide To The Sierra Nevada
  + [Laws Field Guide To The Sierra Nevada (California Academy of Sciences): Laws, John Muir: 8587874256631: Amazon.com: Books](https://www.amazon.com/Sierra-Nevada-California-Academy-Sciences/dp/159714052X/ref=asc_df_159714052X/?tag=hyprod-20&linkCode=df0&hvadid=312057593249&hvpos=&hvnetw=g&hvrand=2578816765729819029&hvpone=&hvptwo=&hvqmt=&hvdev=c&hvdvcmdl=&hvlocint=&hvlocphy=9031867&hvtargid=pla-493315922850&psc=1)
* Calflora website: information on wild CA plants
  + [Calflora - Information on wild California plants](https://www.calflora.org/)
* Website for ID help: [Trees of the Sierra Nevada (csun.edu)](http://www.csun.edu/science/sierras/trees/frameset.html)
* *Handouts and supplemental reading made available on Canvas*

**Attendance**

You should come to every assigned class whether face-to-face on virtual- and be there on time. Arrival after roll is taken will be considered a tardy. Three tardies will count as one absence. *The success of this or any other course depends on the presence and active participation of each student.* It is the responsibility of the student to check on class meeting changes for the following week if a class session is missed. Contact the instructor in the event of an absence. The responsibility to drop the course for any reason, including lack of attendance, lies with the student. Late work should be made up within one week.

**Cancelled Class Policy**

If classes must be cancelled the instructor will attempt to post the announcement on the course electronic media site (CANVAS). A notice will be posted on the door of the classroom. Be aware that schedule modifications and field trips may be announced in classes by the instructor. It is the responsibility of the student to be present during classes and pay attention to such announcements and to check announcements on CANVAS daily.

**Important Dates:**

**Jan 21** – Last day to drop full-term class for a full refund

**Jan 28** – Last day to drop a full-term class to avoid a “W” in person

**Jan 30** – Last day to drop a full-term class to avoid a “W” on WebAdvisor

**March 11** – Last day to drop a full-term class (letter grade after this date)

**Academic Dishonesty, Plagiarism &Cheating:**

Students at Reedley College are entitled to the best education that the college can make available to them, and they, their instructors, and their fellow students share the responsibility to ensure that this education is honestly obtained. Because cheating, plagiarism, and collusion in dishonest activities erode the integrity of the college each student is expected to exert an entirely honest effort in all academic endeavors. Academic dishonesty in any form is a very serious offense and will incur serious consequences. Refer to the college catalog for further details surrounding actions that will be implemented regarding academic dishonesty. Plagiarism is the adoption or reproduction of the ideas or words or statements of another person without due acknowledgment. Cheating is the act or attempted act of taking an examination or performing an assigned, evaluated task in a fraudulent or deceptive manner, such as having improper access to answers to gain an unearned academic advantage. Cheating can take the form of the storing of information in graphing calculators, pagers, cell phones, and other electronic devices. Therefore, no items of any kind may be on the desktop, including water bottles, during testing. Students may not wear hats/caps during testing. Incidents of cheating and plagiarism may result in a variety of sanctions and penalties, which may range from a failing grade on a particular examination, paper, project, or assignment in question to a failing grade in the course at the discretion of the instructor and depending upon the severity and frequency of the incidents.

**Accommodations for students with disabilities:**

If you have a verified need for an academic accommodation or materials in alternate media (e.g., Braille, large print, electronic text, etc.) per the Americans with Disabilities Act (ADA) or Section 504 of the Rehabilitation Act please contact me as soon as possible. A formal counseling assessment to determine the appropriate accommodation is required before any accommodation(s) can be made. The counseling center facilitates the process.

**Required PPE for Field Trips:**

We will be walking (probably a lot). Outdoor labs require walking in sometimes rough terrain and being near water bodies. Trails may have heavy brush. Weather may include high winds, rain, or heat on some specific cases. You should dress appropriately with proper clothing (jeans or other heavy pants for leg protection), boots (required), eye protection (recommended), and raingear if needed. During severe weather, we may conduct lab indoors with plant specimens collected over the semester. *YOU WILL NOT BE ALLOWED TO PARTICIPATE IN FIELD LABS WITHOUT PROPER LEG AND FOOT PROTECTION (NO SHORTS, SANDLES, FLIPS, CHACOS, BIRKS, ETC).*

**COVID19 and the Spring Semester:**

**The College will now require that students, faculty, and staff wear a facial covering while indoors in any campus building, including classroom and lab spaces, the cafeteria (except when eating or drinking), the library, the residence hall, the gym, hallways, restrooms, elevators, and any on-campus offices with more than one occupant.**

**Reedley College will continue to sanitize each classroom and office space daily, provide hand sanitizer and disinfecting wipes in classrooms, offices, and common space, and the college will continue the use of CDC-recommended air filters and 100% air intake on our HVAC systems.**

**LECTURE SCHEDULE**

|  |  |  |  |
| --- | --- | --- | --- |
| **Week** | **Date** | **Lecture Topic** | **Lab** |
| **1** | Jan. 11 | Course Introduction | Assignment of Projects and Collecting Plant Specimens |
| Jan. 14 | Nomenclature and Classification |
| **2** | Jan. 18 | Vegetative morphology | Dichotomous keys |
| Jan. 21 | Reproductive morphology |
| **3** | Jan. 25 | Habitat, Range, &Variation | Leaves and twigs *on campus* |
| Jan. 28 | Gymnosperms and Conifer basics |
| **4** | Feb. 1 | **Exam 1** | **Kings River (campus)** |
| Feb. 4 | Riparian area & Herbs |
| **5** | Feb. 8 | Oak Woodlands | **Edison Point (Lab 1 quiz)** |
| Feb. 11 |
| **6** | Feb. 15 | **Lab quiz 2** | **Lincoln Day** |
| Feb. 18 | **No Class** |
| **7** | Feb. 22 | Shrubs | **Squaw Valley (Lab quiz 3)** |
| Feb. 25 |
| **8** | March 1 | Pines | **Sequoia Lake (Lab quiz 4)** |
| March 4 |
| **9** | March 8 | Firs and Cypress | **Open lab (Lab quiz 5)** |
| March 11 | Cedars, Spruce, and Hemlocks |
| **10** | March 15 | Sequoias | **Sequoia Lake (Lab quiz 6)** |
| March 18 | Junipers and Desert species |
| **11** | March 22 | Coastal species | **Squaw Valley (Lab quiz 7)** |
| March 25 |
| **12** | March 29 | Foothill species | **Presentation Day (Lab quiz 8)** |
| April 1 |
| **13** | April 5 | Lower Montane | **Huntington Lake (Lab quiz 9)** |
| April 8 |
| **14** | April 12 | **No Classes** | **Spring Break** |
| April 15 |
| **15** | April 19 | **Lab quiz 10** | **No Lab** |
| April 22 | **No class (NR Field studies)** |
| **16** | April 26 | Upper Montane | **Open lab (Lab quiz 11)** |
| April 29 |
| **17** | May 3 | Review | **Sequoia Lake (General Grant hike)** |
| May 6 | **Lab quiz 12** |
| **18** | May 10 | **No Class** | **Open lab** |
| May 13 | Final Exam |
| **20** | May 17 | **Finals Week. Lab ID Exam time TBD** | |
| May 20 |

**Notes:**

1. ***This schedule is tentative***. Poor weather or conditions (i.e. high winds, floods, and snow) may cause safety concerns and rescheduling to different days. Also, sometimes logistics for getting

access to different sites will cause changes in the schedule.

2. Attendance for field trips not required, but highly recommended.

**Student Evaluation:**

Students will need to spend time outside of class to review course materials, complete lab assignments, and to prepare for exams and presentations. All assignments and lab reports must be submitted one week after being assigned unless otherwise agreed upon. *Late assignments and reports will receive a full grade-mark reduction per week and assignments more than 3 weeks late will be given a zero mark.* Reasons other than bereavement or authenticated illness are normally not admissible justification for missing scheduled exams. Should a student miss an exam, it is the responsibility of the student to contact the instructor as soon as possible.

**Herbarium plant collection. Due Date: May 6**

You will prepare a herbarium collection of 30 specimens over the course of the semester. Proper press and mounting procedures will be demonstrated in lab. Collected specimens should be of good quality, pressed flat and dried. Once specimens are pressed and dried, they should be mounted on good quality paper for inclusion in a loose-leaf binder or similar collection system. Mounted specimens should be arranged to show the distinguishing characteristics of the leaves, buds, and twigs. On the front side of each mounted specimen, an herbarium label (including correct scientific name, common name, location and elevation of live specimen, and the date of collection) as well as a species range map will be required.

Specific instructions for the herbarium collection will be provided to you in class. Collections will be graded on accuracy, completeness, and neatness.

**Plant Presentation: April 1st**

Each student will prepare a short Powerpoint presentation on a selected species, using class references and whatever additional library resources you prefer. Your primary objective is to briefly describe the species, its silvics, and range. You should then focus the major portion of the presentation on the morphological characteristics necessary to identify the species. Your secondary objective is to make comparisons or contrasts to other species with which the plant may be easily confused. Your presentation should conclude with a list of references. The total presentation time for your project should not exceed 7 minutes.

Along with the presentation, you will be expected to prepare a display board at least 30 by 36 inches in size. Include plant parts, pictures, illustrations, and drawings. You should make this display attractive and educational so it may be useful to teach others about your plant.

**Grading Scale:**

|  |  |
| --- | --- |
| Herbarium | 250 |
| Plant Presentation | 100 |
| Lab ID Quizzes (10/12 graded) | 300 |
| Exam 1 | 100 |
| Final exam | 50 |
| Final lab ID | 200 |
| **Total** | **1000** |

A = 900-1000

B = 800-899

C = 700-799

D = 600-699

F = 0-599

***Please communicate with me if you will be late, absent, or have issues regarding class attendance. We can work something out- but only if you allow me to help you.***

***Please meet me halfway this semester*. *If you have questions regarding grading, class content, or simply are having any trouble understanding something- please come talk to me.***

***We are all here to learn and I am here to help! :)***