

Field Dendrology

FOR 241A (CRN: 41506) 3 Credits

Fall 2018

Instructor: Dr. Rebecca Franklin
Office: PON 213
Office hours: Monday, 1:00 – 3:30
Wednesday, 10:00 – 12:30

Lab: Thursday
Location: Field sites in central OR
Time: 11:30 – 4:35

Email: rfranklin@cocc.edu
Phone: 541-330-4378

Lecture: Thursday
Location: CSB 202
Time: 4:45 – 5:45

Final Exam: Thursday Dec 13, 3:15 – 5:15
CSB 202

Required texts: Trees to Know in Oregon by Edward C. Jensen; Oregon State University Extension Service
Shrubs to Know in Pacific Northwest Forests by Edward C. Jensen; Oregon State University Extension Service

Optional Texts: Manual of Oregon Trees & Shrubs by Edward C Jensen (can read pp 1-36 prior to 1st class)
Western Trees Peterson Field Guides by Petrides.

Equipment:

- **Hardhat (required in lab)** *needed for subsequent forestry field classes.*
- Protective eyewear (optional) *needed for subsequent forestry field classes.*
- **Clipboard/storage clipboard**
- Rite-in-the-Rain notebook
- **2 or 3 large photo albums** (with removable 8 ½" x 11" magnetic pages)
- Herbarium **labels** –print these out
- **Plant press**- can be purchased from the Forestry Club.
- Camera- (digital camera on your phone is fine)
- **GPS unit** –this can be checked out from the tool room
- Loupe (hand lens) –this can be checked out from the tool room

Course Description: 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.

Course Outcomes: By the end of the term you will be able to:

- Correctly identify by scientific name between 85-100 species of trees and shrubs common to the Pacific Northwest (including leaves, twigs, bark, fruit and other common morphological characteristics) and
- Accurately key out species common to the Pacific Northwest using a dichotomous key.
- Gather, comprehend, and communicate scientific and technical information in order to explore ideas, models, and solutions and generate further questions.
- Apply scientific and technical modes of inquiry, individually, and collaboratively, to critically evaluate existing or alternative explanations, solve problems, and make evidence-based decisions in an ethical manner
- Assess the strengths and weaknesses of scientific studies and critically examine the influence of scientific and technical knowledge on human society and the environment

I know you have a lot on your plate right now: sometimes the road at college can get a little bumpy. Life happens! Each of you has the opportunity to take advantage of free counselling through the CAP center in the library (541-382-7200). I know many students who have taken advantage of it as the need arises and have found it quite helpful.

| Grade Structure: | <u>Item:</u> | <u>Points:</u> |
|-------------------------|--|--------------------------|
| | Professionalism/participation: | 50 |
| | Quizzes (9 quizzes, 30 pts/ea, lowest dropped): | 240 |
| | Midterm exam (50 spp, 2pt/ea): | 100 |
| | Midterm herbarium (35-40 spp, 2 pts/ea): | 70-80 |
| | Final exam (85-100 spp, 2pts/ea): | 170-200 |
| | Final herbarium (85-100 spp, 2.5 pts ea): | 220-250 |
| | Species reviews (2 opportunities, 5 pts ea): | 10 |
| | | ~850 - 900 points |

Grading standards:

| <u>Grade:</u> | <u>Percentage of total points:</u> |
|---------------|------------------------------------|
| A | 100 – 92 |
| A- | 91 – 89 |
| B+ | 88 – 87 |
| B | 86 – 81 |
| B- | 80 – 79 |
| C+ | 78 – 77 |
| C | 76 – 70 |
| D | 69 – 60 |
| F | 59 – 0 |

Assignments, collections and quizzes

General: If you miss a Lab Quiz, you will lose the points (30 pts. per Lab Quiz). Your lowest lab quiz will not count towards your grade. There will be **NO LAB QUIZ MAKE-UPS**. All exams will be returned to you as quickly as possible (typically within two weeks). Quizzes, midterm, and the final exam will be comprehensive.

Professionalism: Points acquired through professionalism include coming prepared to class with collection materials, textbooks, hard hats, appropriate clothing, and a positive attitude. You will lose points if you forget any of these items (especially hard hats), if you are disruptive (cell phones), or have unprofessional behavior during the lab period. This includes keeping the vans clean and free of your garbage.

Quizzes: Quizzes are generally given in the field and can include **any** samples collected prior to that point in time. They are generally given at the start of the field portion of the lab but can be given after new plants for that week have been collected. Quizzes are open book and you may use your own plant collection and notes. Students are not allowed to share materials during quizzes. Quizzes consist of the instructor displaying six samples either by pointing to a live sample, using a pressed sample or verbalizing specific characteristics about a sample. The instructor may use various plant parts such as fruit/cones, flowers, leaves or stems as quiz items. The students will have 2-3 minutes per sample. You will be accountable for the **correctly spelled scientific name of the family, genus and species** as well as the **alpha code and common name**. The following are required for each species identified:

- Family name: all caps (e.g. ACERACEAE)
- Genus: italicized/underlined & first letter capitalized (e.g. *Acer*)
- Species: italicized/underlined & all lowercase letters (e.g. *glabrum*)
- Varieties included with species where appropriate (e.g. *var. douglasii*)
- Alpha code: all caps (e.g. ACGL)
- Common name: lower case except for proper nouns (e.g. Douglas maple)

Each line is worth one point. A line is counted wrong if misspelled, containing wrong information or if punctuation is wrong or missing, including the use of hyphens. You will be given a blank answer sheet to complete.

Species Review Presentations: You will be required to present a total of 2 different species on 2 different days, explaining the important characteristics to the class during the field or last hour of in-class lecture time. This review should be 1 to 2 minutes long using your notes taken about the plant during the class time that same day. Names are drawn at random. Each review will be 5 points for a total of 10 points: don't miss this easy opportunity for points!

Extra credit: Gain a maximum of 1 point per week (10 points for the term) for spell checking and checking for updates of plant names (and alpha codes) on the species list for that week.

Cheating Policy: Any evidence of cheating on tests (i.e., obtaining answers from other students, from a text or other classroom material) or duplicate work being turned in will result in the students involved receiving an F or zero points for the test or assignment. The second occurrence will result in an F for the class.

Approximately the last hour of our day will be in class to revisit the collected samples and work on plant presses and collections. This is a mandatory portion of the class.

Herbarium (pressed + labeled plant collection)

Plant Collection: During this course you will create a plant collection. This collection will display the leaves of trees and shrubs that we have studied during the term. Your collection should contain pressed and dried samples on 8 ½" x 11" photo album sheets (or larger if you desire).

Each sample sheet should include the **pressed sample**, a completed **herbarium label** and a page number that coincides with the table of contents. See sample herbarium label below. The collection must also have a **table of contents** listing all species (scientific name) alphabetically **by family, genus and species including page number** (only assign page #s when all samples are compiled at the end of the quarter). You will also have a list of **three identifying features** of each sample on the back of each sheet.

Neatness and correctness are important components of this term project. Expect to collect between 85 and 100 samples. Your collections will likely require two photo albums. Grading will consist of 25 points for the table of contents (¼ point per error), 25 points for presentation, one point per sample, one point per label (¼ point per error).

Total collection point of 200-250 depending on the number of samples. No points will be given for samples beyond those collected in class. I will typically require around 98% of the plants collected to be in the book. For example, if we collect 88 plants, you will be accountable for turning in at least 85 for maximum credit.

Your collection will consist of the following:

- A cover page with your name, the title of your collection and the term you made the collection
- A table of contents alphabetized by family, genus and species with page numbers listed
- Numbered pages with only one specimen to a sheet (a single sheet constitutes both front and back of the page)
- The front of each sheet should contain the pressed specimen and a completed herbarium label
- The back of each sheet should contain a list of ~3 key identifying characteristics for that species and may include an additional pressed sample where appropriate.

Example label:

| Herbarium of Oregon Plants | | |
|--|--|-------------------------------|
| Scientific Name: <i>Pseudotsuga menziesii</i> | Family: PINACEAE | |
| Common Name: Douglas-fir | Alpha Code: PSME | |
| Location: N42°23' W122°17' Willamette National Forest, <u>Hackleman Creek</u> . | | |
| Habitat: Mixed conifer – western hemlock, Pacific silver fir, Pacific yew | | |
| Altitude: 3000' | Collected by: Rebecca S. Franklin | Date: October 30, 2014 |

Midterm herbariums are due at the midterm exam; final herbariums are due the week before finals week at the end of lab. (They can be turned in early, and make excellent study aids).

For a detailed step by step guide to making an herbarium please see the “Herbarium Instructions” link on Blackboard!

PREPAREDNESS AND POLICIES → Read this thoroughly!

- 1. Many labs will occur outdoors** – being appropriately prepared for lab is an expectation. This means being adequately dressed for the conditions, and having any required equipment indicated by the instructor. Required field clothes for this course include long pants, closed-toe shoes, and hardhat. **Cold, wet, snowy weather may occur during labs throughout the ENTIRE duration of this class –be prepared!**
- 2. Attendance and missing labs and quizzes:** Effective learning in this course is heavily dependent on your presence in class. You are expected to attend both lab and lecture. Excessive absenteeism WILL affect your grade. If you miss class, it is your responsibility to notify me in person or by phone message and to make arrangements to make up lab work or assignments missed due to an absence (in some cases of emergency this may not be possible). If you are going to miss an exam I need to know about it in advance even if it is the day of the exam. Leave a message! Important because **there will be NO MAKE UP EXAMS without prior notice!**
- 3. Final Exam:** The date, time and location of your final exam is printed here in the syllabus. You will be made aware of this information on the first day of class, which gives you 2 ½ months advance notice as to when and where the final will be taking place. Exam time is not something that is subject to negotiation to fit student’s convenience or personal plans. Exam times will be changed only for serious and compelling reasons, by petition and consent of instructor and department chair. **NOTE: seasonal jobs which begin before the end of finals week, or specialized training provided by agencies which occurs during finals week, does not constitute a serious and compelling reason. Discuss these conditions with your employer prior to accepting a job or agreeing to attend training.**
- 4. Learning Environment Behavior: Sexual harassment** in any form is not tolerated by COCC – refer to the posting on the Ponderosa bulletin board for definitions and assistance with sexual harassment complaints. **Professionalism:** students are expected to behave professionally at all times during class, extending all courtesies and considerations expected in a public forum. Breaches of professional conduct will affect your grade. This includes the use of vulgar language, any form of harassment or disruption of classmates, and the use of **cell phones** in the classroom. Failure to prevent your cell phone from ringing, vibrating, beeping, or otherwise disrupting the class will affect your professionalism grade. **First offense:** warning. **Second offense:** loss of points. **Third offense:** loss of full letter grade, or removal from the course. If you have questions regarding this policy or would like further clarification, please do not hesitate to see me.
- 5. Tobacco use: Tobacco use of any kind** is not permitted in COCC buildings, in the vans, or during field labs. If you cannot refrain from smoking or chewing during class, you will be asked to leave. **Violations of the tobacco policy will be treated under the professionalism policy spelled out above.**
- 6. ADA Statement:** Students with documented disabilities who may need accommodations, who have any emergency medical information the instructor should know of, or who need special arrangements in the event of evacuation, should make an appointment with the instructor as early as possible, no later than the first week of the term. Students any also wish to contact the COCC Disabilities Services Office in Boyle Education Center, Anne Walker awalker@cocc.edu, 541-383-7743.
- 7. Insurance Statement:** Students are not covered by medical insurance while on campus or involved in college classes and activities. Students are responsible for their own medical and dental insurance coverage. Information on student insurance coverage can be obtained at the student health center in Grandview or at the cashier in the Boyle Education Center. If you have specific questions or concerns regarding student insurance coverage you should discuss them with the Instructor.
- 8. Plagiarism Statement:** All students are expected to practice the highest standards of academic honesty. Cheating on assignments, quizzes or exams or plagiarizing other people’s work is unacceptable and may lead to a failing grade. Plagiarism is using, borrowing or stealing someone else’s words or ideas without giving appropriate credit to the original author. This includes copying definitions and sentences from textbooks, other student’s papers, the Internet or any other source. Students are expected to complete all assignments independently, unless it is a designated group project.
- 9. Physical Contact:** Due to the nature of this course, students are advised that physical contact between the instructor and student, or student to student may occur during class and lab. If you have concerns about these requirements, you are encouraged to discuss these with the instructor prior to the next class session to determine if appropriate alternative assignments exist. If you do not think you will be able to participate to the extent required by the course, you are encouraged to drop the course within the appropriate deadlines in order to obtain a refund.
- 10. Civil Rights:** COCC is an affirmative action, equal opportunity institution. Beth Wickham bwickham@cocc.edu 383-7290.

| Wk | Date | Thursday LAB | possible Thursday CLASS activities... |
|-------------|--------------|---|---|
| 1 | Thu 09/27 | COCC How to key species out, what to look for when ID-ing plants... <i>No quiz</i> | Review syllabus, course expectations Plant terminology Herbarium instructions |
| 2 | Thu 10/04 | Bend urban/ornamental trees Quiz in field | Species review presentations Group work on plant family characteristics |
| 3 | Thu 10/11 | Suttle Lake (<i>guest: botanical illustrator</i>) Quiz in field | Species review presentations |
| 4 | Thu 10/18 | Hackleman Creek Quiz in field | Species review, focus on Betulaceae: on Blackboard |
| 5 | Thu 10/25 | Sawyer Park Quiz in field | Species review presentations |
| 6 | Thu 11/01 | Toad Creek → Midterm Exam ← | In-class peer review of plant collections Midterm Herbarium DUE |
| 7 | Thu 11/08 | Tombstone Pass (25mph curve) Quiz in field | Midterm Review Discuss midterm herbarium |
| 8 | Thu 11/15 | Santiam Pass + Toad Creek Quiz in field | Review of genus <i>Abies</i> |
| 9 | Thu 11/22 | Thanksgiving Break Self-directed Lab (Identify 3 new species) Online Quiz | |
| 10 | Thu 11/29 | Pine Mountain Quiz in field | Species review presentations |
| 11 | Thu 12/06 | Field Review (Sahalie Falls / Santiam Pass / Shevlin Park / COCC / weather depending...) Quiz in field | Review for final Final Herbarium DUE |
| Finals Week | | FINAL EXAM: Thursday, DECEMBER 14th, 3:15am-5:15pm, PON 206 | |

Preview your field guides and the slides of each species **prior** to the lab so that you are already familiar with what we will be exploring in the field!

CENTRAL OREGON COMMUNITY COLLEGE CONSENT AND LIABILITY WAIVER

PART A

Revised 6/26/09 Term _____ Year _____

The undersigned student (PART A) and/or parent/guardian (PART B) do hereby consent to and grant permission for (name of student) who desires to participate in field trips during _____ (name of course) which the student is enrolled in with CENTRAL OREGON COMMUNITY COLLEGE ("COCC").

Student participation in the field trip may require a low to moderate level of physical exertion on their part and may involve inherent risk of physical injury as well as possible damage to personal property. By signing this consent and liability waiver, student and/or parent/guardian acknowledges these potential risks.

In consideration of allowing the above-named student to participate in said activity, the student and/or parent/guardian does hereby release and discharge COCC, its employees, agents, officers, and directors for any and all claims, demands, causes of action, damage, loss of services, costs and expenses in any way resulting from any and all injury to person or property arising directly or indirectly out of the student's participation in the above activity.

Further, the student and/or parent/guardian agrees to indemnify and hold forever harmless COCC, its employees, agents, officers and directors from any and all injuries, damages, costs, attorney's fees whatsoever which may arise out of the student's participation in the above activity.

The student and/or parent/guardian further consents and authorizes the representatives of COCC, on the student and/or parent/guardian's behalf, to obtain any necessary medical treatment or hospitalization or such other care necessary for the health and welfare of the named student, and the student and/or parent/guardian agrees to be responsible for and pay the costs of such medical treatment or hospitalization. **If there is any medical information that COCC needs to know to assist in obtaining the necessary care, it is the student's and/or his/her parent/guardian's responsibility to disclose this information to the instructor of the course prior to the first field trip.**

This release of liability and indemnification agreement shall be binding on the heirs, successors and personal representatives of the student and/or parent/guardian.

I have read the foregoing release of liability and the indemnification agreement and acknowledge that the provisions are contractual and not a mere recital, and I understand I am bound by the terms hereof by placing my signature hereon.

Student Signature

DATE: _____

Printed student name

Students under the age of 18 must have his/her parent or guardian read and sign Part B on the reverse side of this form.

CENTRAL OREGON COMMUNITY COLLEGE FIELD TRIP PERMISSION and MEDICAL RELEASE FORM**PART B****(FOR STUDENTS UNDER THE AGE OF 18 ONLY)**

Revised 6/26/09

_____ (class), a course in which _____ (student's name) is registered, includes field trips. Registered students under the age of 18 must submit this completed form prior to the commencement of the first field trip in order to participate.

The student's parent or legal guardian must complete the remainder of the form.

Name of parent or guardian: _____

Relationship to student: _____

Home Phone: Cell Phone: _____

Name of business and phone number: _____

Name, location, and phone number of student's doctor: _____

I give permission for my child to participate in field trips related to the class listed above.

I have read the foregoing release of liability and the indemnification agreement (PART A on the reverse side of this form) and acknowledge that the provisions are contractual and not a mere recital and I understand I am bound by the terms hereof by placing my signature hereon.

In the event of an apparent or real emergency, in which medical treatment or hospitalization of my child may be necessary, after effort to contact me at the telephone numbers above, the undersigned parent or guardian does hereby authorize and appoint COCC, through its agents, to obtain any medical treatment or hospitalization of the above named child as they believe necessary and proper for the immediate care and welfare of said child. I do further authorize and direct any medical doctor or hospital to render any and all treatment believed necessary and proper for the immediate care and welfare of the above named child and the undersigned agrees to pay for such medical treatment and expenses incurred on behalf of such child and shall hold COCC harmless from any and all liability, claims, judgments, and costs incurred in or as a result of any such medical treatment or hospitalization.

Parent or guardian signature: _____ Date: _____

Parent or guardian printed name: _____

NOTES:

1. Students who are emancipated minors must submit documentation stating such.
2. It is the student's responsibility to submit this form to the instructor prior to the field trip.
3. It is the instructor's responsibility to carry this form during the field trip.