

Discipline: Agriculture	Sub-discipline: Forestry/Natural Resources
General Course Title: <b>Dendrology / Native Plant Identification</b>	Min. Units: <b>3 Semester</b>
Proposed Suffix: <b>L</b>	
<p>Course Description:  The study of botanical characteristics, taxonomy, morphology, and community relationships of the major tree and shrub associations in California and the Western United States. Includes discussion of commercial uses and geographic ranges of these plants. Laboratory required.</p>	
Required Prerequisites or Co-Requisites <sup>1</sup>	
Advisories/Recommended Preparation <sup>2</sup>	
<p>Course Objectives: <i>At the conclusion of this course, the student should be able to:</i></p> <ul style="list-style-type: none"> <li>• Identify the major tree, shrub, herbaceous, and grass species found in California plant communities.</li> <li>• Use dichotomous keys and typical field guides to identify plants.</li> <li>• Use scientific names of common plant species</li> <li>• Identify the common community types of the Western United States with particular emphasis on California.</li> <li>• Determine basic ecological and habitat requirements of common tree, shrub, herbaceous, and grass species.</li> <li>• Use library, Internet, and other resources including computers to research and write a scientific paper illustrating the life history and identification of an assigned tree or shrub species.</li> <li>• Identify the value, uses, and geographic range of common trees and shrubs in the Western United States.</li> <li>• Work in small groups to collect, mount, identify, and compile plant collections.</li> </ul>	
<p>Course Content:</p> <ol style="list-style-type: none"> <li>1. Introduction <ol style="list-style-type: none"> <li>a. Tree and plant morphology</li> <li>b. Stems and leaf arrangement</li> <li>c. Fruit and Cones</li> <li>d. Root types and functions</li> </ol> </li> <li>2. Tree and plant physiology <ol style="list-style-type: none"> <li>a. Growth</li> <li>b. Reproduction</li> <li>c. Photosynthesis</li> <li>d. Nutrient and water uptake</li> </ol> </li> <li>3. Classification <ol style="list-style-type: none"> <li>a. Naming plants (Genus and Species)</li> <li>b. Using plant keys</li> </ol> </li> </ol> <p><b>Dendrology / Native Plant Identification (Content Continued)</b></p>	

<sup>1</sup> Prerequisite or co-requisite course need to be validated at the CCC level in accordance with Title 5 regulations; co-requisites for CCCs are the linked courses that must be taken at the same time as the primary or target course.

<sup>2</sup> Advisories or recommended preparation will not require validation but are recommendations to be considered by the student prior to enrolling.

4. Plant Communities of California
  - a. Klamath Region
  - b. Pinyon-Juniper
  - c. Sub-alpine Forests
  - d. Red Fir/Lodgepole
  - e. Redwood Forest
  - f. North Coast Coniferous
  - g. Douglas Fir Forest
  - h. Closed Cone Forest
  - i. Valley Riparian
  - j. Foothill Woodland
  - k. Chaparral
  - l. Mixed Conifer
  - m. Giant Sequoia Groves

Laboratory Activities: Individual Laboratory Activities are designed to support course objectives.

Methods of Evaluation: Lecture  
 Comprehensive Quizzes and Exams  
 Written Critical Thinking Scenarios  
 Problem Analysis and Solution  
 Research and Term Papers

Methods of Evaluation: Laboratory  
 Laboratory Skill Validation by Observation  
 Laboratory Reports  
 Laboratory Research Projects and Reports  
 Laboratory Skill Practicum Exams

Typical Textbooks, Manuals, or Other Support Materials

- California Forests and Woodlands, Johnston, 1994
- A Sierra Nevada Flora, Weeden, 1999
- Trees and Shrubs of California, Calif. Natural History Guides, 2001
- Trees of North America, Golden Books 1986
- Conifers of California, Lanner, 1999
- Pacific States Wildflowers, Peterson Guides, 1976
- Online plant reference [www.Calflora.org](http://www.Calflora.org)

**Statewide Articulation: CPSLO-FNR 208, articulated to other universities as specific equivalent by individual community colleges, additional statewide course equivalency articulation currently underway, also currently transfers as lower division elective**

FDRG Lead Signature:

Date:

Mark E. Bender, PhD CSU Stanislaus

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**Internal Tracking Number**