

**BOTANY 64 Course Outline as of Fall 2005****CATALOG INFORMATION**

Dept and Nbr: BOTANY 64 Title: NORTHERN SIERRA PLANTS

Full Title: Plants of the Northern Sierra

Last Reviewed: 1/25/2021

Units		Course Hours per Week		Nbr of Weeks	Course Hours Total	
Maximum	2.00	Lecture Scheduled	6.00	2	Lecture Scheduled	12.00
Minimum	1.00	Lab Scheduled	0	1	Lab Scheduled	0
		Contact DHR	28.00		Contact DHR	56.00
		Contact Total	34.00		Contact Total	68.00
		Non-contact DHR	0		Non-contact DHR	0

Total Out of Class Hours: 24.00

Total Student Learning Hours: 92.00

Title 5 Category: AA Degree Applicable

Grading: Grade or P/NP

Repeatability: 39 - Total 2 Times

Also Listed As:

Formerly: BIO 81.15

**Catalog Description:**

Introduction to the plants and plant communities of the Sierra Nevada north of Lake Tahoe, emphasizing the taxonomy and ecology of the ferns, conifers and flowering plants. Students repeating the course will be required to do a field project.

**Prerequisites/Corequisites:****Recommended Preparation:**

Eligibility for ENGL 100 or ESL 100

**Limits on Enrollment:****Schedule of Classes Information:**

Description: Introduction to the plants and plant communities of the Sierra Nevada north of Lake Tahoe, emphasizing the taxonomy and ecology of the ferns, conifers and flowering plants.

Students repeating this course will be required to do a field project. (Grade or P/NP)

Prerequisites/Corequisites:

Recommended: Eligibility for ENGL 100 or ESL 100

Limits on Enrollment:

Transfer Credit: CSU;  
Repeatability: Total 2 Times

## **ARTICULATION, MAJOR, and CERTIFICATION INFORMATION:**

<b>AS Degree:</b>	<b>Area</b>		Effective:	Inactive:	
<b>CSU GE:</b>	<b>Transfer Area</b>		Effective:	Inactive:	
<b>IGETC:</b>	<b>Transfer Area</b>		Effective:	Inactive:	
<b>CSU Transfer:</b>	Transferable	Effective:	Spring 1989	Inactive:	Summer 2011
<b>UC Transfer:</b>		Effective:		Inactive:	

### **CID:**

### **Certificate/Major Applicable:**

Major Applicable Course

## **COURSE CONTENT**

### **Outcomes and Objectives:**

Upon completion of this course, the student will be able to:

1. Identify the major plant indicator species within the habitats studied.
2. Explain the basic plant characteristics useful in plant identification.
3. Demonstrate knowledge of the use of plant identification resources, including dichotomous keys. Compare and contrast these various resources.
4. Explain the major ecological factors affecting the distribution of plant species and their association into plant communities.
5. Differentiate the major vegetation characteristics of the principle plant communities of the Northern Sierra.

NOTE: items # 4 and 5 are the primary basis for a research paper. The student will select, research, and write a 4-6 page paper on a specific topic in these areas.

6. Demonstrate knowledge of how to develop an appropriate record of field activities (field journal).
7. For repeating students, develop and perform a field project while in the Northern Sierra relating to the flora of the region.

### **Topics and Scope:**

1. Overview of the geology, soils, climate, and physiography of the Sierra Nevada.
2. Survey of the principle plant life forms common to the Sierra Nevada.
3. Taxonomy of the major plant species characteristic of the Northern Sierran communities.
4. Correlation of ecological factors with major Northern Sierran vegetation types.
5. Biological characteristics of the indicator plant species.
6. Identification of vascular plant species using manuals and other resources.

7. Develop and submit for evaluation an appropriate record of field activities (field journal).
8. Repeating student must also do a field project relating to the flora and/or the ecology of the region.

**Assignment:**

1. Maintain field journal
2. Ecology or vegetation paper.
3. Demonstrate the use of the dichotomous key (Weeden, "A Sierra Nevada Flora").
4. Repeating students submit a written report on their field project.

**Methods of Evaluation/Basis of Grade:**

**Writing:** Assessment tools that demonstrate writing skills and/or require students to select, organize and explain ideas in writing.

Term papers, Field journal. Project report for repeat students.

Writing  
40 - 60%

**Problem Solving:** Assessment tools, other than exams, that demonstrate competence in computational or non-computational problem solving skills.

None

Problem solving  
0 - 0%

**Skill Demonstrations:** All skill-based and physical demonstrations used for assessment purposes including skill performance exams.

Use of dichotomous key & other plant ID resources.

Skill Demonstrations  
10 - 30%

**Exams:** All forms of formal testing, other than skill performance exams.

None

Exams  
0 - 0%

**Other:** Includes any assessment tools that do not logically fit into the above categories.

Attendance and participation.

Other Category  
10 - 30%

**Representative Textbooks and Materials:**

- "A Sierra Nevada Flora": Weeden, Wilderness Press, 1996  
 "Plants of the Tahoe Basin": Graf, CNPS Press, 1999