### **BOTANY 60 Course Outline as of Spring 2000**

## **CATALOG INFORMATION**

Dept and Nbr: BOTANY 60 Title: FIELD BOTANY

Full Title: Field Botany Last Reviewed: 1/28/2019

Units		Course Hours per Week		Nbr of Weeks	<b>Course Hours Total</b>	
Maximum	4.00	Lecture Scheduled	3.00	17.5	Lecture Scheduled	52.50
Minimum	4.00	Lab Scheduled	3.00	17	Lab Scheduled	52.50
		Contact DHR	0		Contact DHR	0
		Contact Total	6.00		Contact Total	105.00
		Non-contact DHR	0		Non-contact DHR	0

Total Out of Class Hours: 105.00 Total Student Learning Hours: 210.00

Title 5 Category: AA Degree Applicable

Grading: Grade or P/NP

Repeatability: 00 - Two Repeats if Grade was D, F, NC, or NP

Also Listed As:

Formerly: BOTANY 30A

#### **Catalog Description:**

Survey of the vegetation and flora of Northern California. Includes the identification and ecology of component species and methods of vegetation and floristic study. Field trips required.

# **Prerequisites/Corequisites:**

#### **Recommended Preparation:**

Completion of or concurrent enrollment in ENGL 100 or ESL 100.

#### **Limits on Enrollment:**

#### **Schedule of Classes Information:**

Description: Survey of the vegetation and flora of Northern California. Includes the identification and ecology of component species and methods of vegetation and floristic study.

Field trips required. (Grade or P/NP)

Prerequisites/Corequisites:

Recommended: Completion of or concurrent enrollment in ENGL 100 or ESL 100.

Limits on Enrollment: Transfer Credit: CSU; Repeatability: Two Repeats if Grade was D, F, NC, or NP

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

AS Degree: Area Effective: Inactive:

C Natural Sciences Fall 1981

CSU GE: Transfer Area Effective: Inactive:

B2 Life Science Fall 1981 B3 Laboratory Activity

**IGETC:** Transfer Area Effective: Inactive:

**CSU Transfer:** Transferable Effective: Fall 1981 Inactive:

**UC Transfer:** Effective: Inactive:

CID:

# Certificate/Major Applicable:

Not Certificate/Major Applicable

# **COURSE CONTENT**

### **Outcomes and Objectives:**

Students completing Botany 60 will:

- 1. Define the nature of scientific inquiry.
- 2. Describe principles of plant classification.
- 3. Describe basic vegetative and reproductive morphology of seed plants, including associated vocabulary.
- 4. Define the environmental factors influencing plant distribution.
- 5. Describe the physiography and climate of California.
- 6. Describe the geological history of the California flora and vegetation.
- 7. Describe the evolution and adaptation of the California flora.
- 8. Define the principles of ecological succession.
- 9. Demonstrate methods of vegetation classification with specific reference to California.
- 10. Describe the major vegetation types (communities) of California, including the ecology and taxonomy of the dominant component species.
- 11. Describe the methods of plant taxonomy.
- 12. Define the major plant families represented in the California flora.
- 13. Demonstrate methods of plant identification, including use of herbaria and dichotomous keys.
- 14. Demonstrate basic methods of vegetative and floral survey and assessment.

# **Topics and Scope:**

- 1. Plant diversity and classification.
- 2. Reproductive biology and adaptations of seed plants.
- 3. California environment: physiography, climate, geology.
- 4. Plant ecology: distribution and evolution.

- 5. Factors influencing plant distribution in California: environmental tolerances and evolutionary history.
- 6. Major evolutionary trends in California flora and vegetation.
- 7. Development of current vegetation patterns: role of ecological succession.
- 8. Major Northern California vegetation types:
  - a. Coastal grasslands and scrublands
  - b. Coastal forests
  - c. Woodlands
  - d. Chaparral
  - e. Riparian and wetland types
  - f. Montane types
- 9. Major methods of floristic study.
- 10. Principle families of the California flora
- 11. Identification of dominant species of perennials and wildflowers in Sonoma County and the North Bay.
- 12. Methods of floristic and vegetational analysis.

#### **Assignment:**

- 1. Read text and other assigned reading.
- 2. Response papers.
- 3. Plant collections.
- 4. Field surveys and analysis.

#### 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.

Lab reports, Essay exams, Response papers

Writing 10 - 20%

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

Field work, Quizzes

Problem solving 15 - 35%

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

Field work, Plant collection

Skill Demonstrations 15 - 30%

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

Multiple choice, Matching items, Completion

Exams 20 - 40%

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

None		Other Category 0 - 0%
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**Representative Textbooks and Materials:**CALIFORNIAS CHANGING LANDSCAPES: Barbour, M. et al., 1993, CNPS
PLANTS OF THE SAN FRANCISCO BAY REGION: Kozloff, E. and Beidleman, L., 1994, Sagen Press