#### **BOTANY 65 Course Outline as of Summer 2011**

## **CATALOG INFORMATION**

Dept and Nbr: BOTANY 65 Title: SON CTY SPRING FLOWERS

Full Title: Sonoma County Spring Flowers

Last Reviewed: 5/14/2007

Units		Course Hours per Week		Nbr of Weeks	<b>Course Hours Total</b>	
Maximum	1.50	Lecture Scheduled	3.00	6	Lecture Scheduled	18.00
Minimum	1.50	Lab Scheduled	0	6	Lab Scheduled	0
		Contact DHR	4.00		Contact DHR	24.00
		Contact Total	7.00		Contact Total	42.00
		Non-contact DHR	0		Non-contact DHR	0

Total Out of Class Hours: 36.00 Total Student Learning Hours: 78.00

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: BIO 81.3

### **Catalog Description:**

Survey of the common wildflowers of Sonoma County. Emphasis on plant family recognition and species identification using dichotomous keys. Field trips required.

# **Prerequisites/Corequisites:**

### **Recommended Preparation:**

Eligibility for ENGL 100 or ESL 100

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

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

Description: Survey of the common wildflowers of Sonoma County. Emphasis on plant family recognition and species identification using dichotomous keys. Field trips required. (Grade or P/NP)

Prerequisites/Corequisites:

Recommended: Eligibility for ENGL 100 or ESL 100

Limits on Enrollment:

**Transfer Credit:** 

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

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

AS Degree: Area Effective: Inactive: CSU GE: Transfer Area Effective: Inactive:

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

**CSU Transfer:** Effective: Inactive:

**UC Transfer:** Effective: Inactive:

CID:

## **Certificate/Major Applicable:**

Not Certificate/Major Applicable

# **COURSE CONTENT**

# **Outcomes and Objectives:**

Upon completion of this course the student should be able to:

- 1. Explain the basic objectives and principles of plant taxonomy.
- 2. Describe the reproductive structures and processes in flowering plants.
- 3. Apply the methods of plant identification, including the use of dichotomous keys.
- 4. Define and describe ten major flowering plant families common to Sonoma County.
- 5. Describe the major adaptive responses in species of the local flora.

## **Topics and Scope:**

- I. Plant diversity and taxonomy
  - A. Overview of plant kingdom
  - B. Flowering plants
  - C. Basic principles of nomenclature and classification
- II. Reproductive biology of flowering plants
  - A. Flower structure and modifications
  - B. Pollination syndromes
  - C. Fruits and seeds
- III. Basic methods of floristics
  - A. Floras and dichotomous keys
  - B. Herbaria and online sources
  - C. Collecting, pressing, and preserving plant specimens
- IV. Flowering plant families of local importance
  - A. Dicot families
  - B. Monocot families
- V. Identification of common wildflowers

- A. Use of dichotomous keys
- B. Use of other resources
- VI. Flowering plant evolution and adaptation
  - A. Xeric adaptations- e.g. chaparral
  - B. Mesic adaptations- e.g. forests
  - C. Hydric adaptations- e.g. vernal pools

## **Assignment:**

- 1. Reading of handouts provided by instructor (10 pages per week)
- 2. Field trip reports, including species list
- 3. Quizzes
- 4. Identification of flowers

### 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.

Field trip reports

Writing 20 - 40%

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

Field work, Identification of flowers using dichotomous keys

Problem solving 20 - 30%

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

None

Skill Demonstrations 0 - 0%

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

Plant identification quizzes (4)

Exams 30 - 50%

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

None

Other Category 0 - 0%

## **Representative Textbooks and Materials:**

Plants of the San Francisco Bay Region, revised edition, Beidleman, L. and Kozloff, E., 2003, UC Press Pacific States Wildflowers, T.F. Nichaus, 1976, Houghton Mifflin

Instructor prepared materials