

**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	Course Hours Total	
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:**

<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:
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<b>CSU Transfer:</b>	Effective:	Inactive:
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<b>UC Transfer:</b>	Effective:	Inactive:
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**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%
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**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%
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**Skill Demonstrations:** All skill-based and physical demonstrations used for assessment purposes including skill performance exams.

None	Skill Demonstrations 0 - 0%
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**Exams:** All forms of formal testing, other than skill performance exams.

Plant identification quizzes (4)	Exams 30 - 50%
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**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:**

- 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

