California State University Channel Islands

NEW COURSE PROPOSAL

Courses must be submitted by October 15, 2012, and finalized by the end of that fall semester for the next catalog production.

Use YELLOWED areas to enter data.

DATE (*Change if modified and redate file with current date)*) 9/5/12; REV 10.3.12

PROGRAM AREA(S) BIOLOGY

1. Course Information. *[Follow accepted catalog format.]*

Prefix(es) (Add additional prefixes if cross-listed) **and Course No. BIOL 319**

Title: PLANT SYSTEMATICS AND IDENTIFICATION Units: 4

X Prerequisites BIOL 200

N/A Corequisites

No Consent of Instructor Required for Enrollment

Catalog Description (Do not use any symbols): **Identification and diversity of seed plants with an emphasis of the flora of California. Topics include principles of plant classification, evolution, and distribution, classical and modern systematics research methods, laboratory and field study of common North American plant families, and skills development for identification of species.**

Grading Scheme:

x A-F Grades

Credit/No Credit

Optional (Student Choice)

Repeatability:

Repeatable for a maximum of units

Total Completions Allowed

Multiple Enrollment in Same Semester

Course Level Information:

x Undergraduate

Post-Baccalaureate/Credential

Graduate

Mode of Instruction/Components (*Hours per Unit are defaulted*).

	Units	Hours per Unit	Benchmark Enrollment	Graded Component	CS & HEGIS # (Filled in by the Dean)
Lecture	3	1	24	X	
Seminar		1			
Laboratory	1	3	24	X	
Activity		2			
Field Studies					
Indep Study					
Other Blank					

Leave the following hours per week areas blank. The hours per week will be filled out for you.

3 hours lecture per week

3 hours lab per week

Is this course always delivered online? Yes_____ No__x__

2. Course Attributes:

General Education Categories: All courses with GE category notations (including deletions) must be submitted to the GE website: http://summit.csuci.edu/geapproval. Upon completion, the GE Committee will forward your documents to the Curriculum Committee for further processing.

A (English Language, Communication, Critical Thinking)

A-1 Oral Communication

A-2 English Writing

A-3 Critical Thinking

B (Mathematics, Sciences & Technology)

B-1 Physical Sciences

B-2 Life Sciences – Biology

B-3 Mathematics – Mathematics and Applications
B-4 Computers and Information Technology

C (Fine Arts, Literature, Languages & Cultures)

C-1 Art
C-2 Literature Courses
C-3a Language
C-3b Multicultural

D (Social Perspectives)
E (Human Psychological and Physiological Perspectives)
UDIGE/INTD Interdisciplinary
Meets University Writing Requirement
Meets University Language Requirement

American Institutions, Title V Section 40404: Government US Constitution US History
Refer to website, Exec Order 405, for more information: http://senate.csuci.edu/comm/curriculum/resources.htm
Service Learning Course (Approval from the Center for Community Engagement must be received before you can request this course attribute).

3. **Justification and Requirements for the Course.** (Make a brief statement to justify the need for the course)
A. Justification: BIOL 319 will introduce the concepts and practical applications of taxonomy and plant identification, and prerequisites are minimal. This is an elective course for biology majors and will be of wide interest to students in biology, ESRM, and anyone wishing to acquire skills in plant identification. In addition, federal and state natural resource, conservation, and wildlife agencies generally require 9 units of undergraduate botany, including plant taxonomy, for employment. This course will allow CI students to meet this requirement.

B. Degree Requirement:
Requirement for the Major/Minor
x Elective for the Major/Minor
Free Elective

Note: Submit Program Modification if this course changes your program.

4. **Student Learning Outcomes.** List in numerical order. Please refer to the Curriculum Committee's "Learning Outcomes" guideline for measurable outcomes that reflect elements of Bloom's Taxonomy: *http://senate.csuci.edu/comm/curriculum/resources.htm*. The committee recommends 4 to 8 student learning outcomes, unless governed by an external agency (e.g., Nursing).
Upon completion of the course, the student will be able to:
- Describe the biological basis of plant classification
- Recognize the major plant families of North America by sight
- Recognize ecologically and economically important California plant species by sight
- Identify unknown plant species using dichotomous keys
- Employ diverse taxonomic resources for plant identification, including electronic and print media, reference materials, and herbarium collections
- Discuss current questions in plant evolution and classification

5. **Course Content in Outline Form.** *[Be as brief as possible, but use as much space as necessary]*

Origin of angiosperms
Flowering plant relationships
History of classification
Methods in plant systematics
Plant morphology
Breeding systems and isolation mechanisms
Species concepts & speciation
Hybridization & polyploidy

Plant population genetics
Plant variation and ecotypes
Plant idenfication terminology

Introduction to taxonomic keys
Taxonomic resources & informatics
Plant biogeography and floristics
Plant rarity and endangerment
California flora
Ferns and fern allies (lab)
Gymnosperms (lab)
Basal angiosperms (lab)
Magnoliid families (lab)
Caryophyllid families (lab)
Eurosid families (lab)
Euasterid families (lab)
Monocot families (lab)

Does this course content overlap with a course offered in your academic program? **Yes** **No** x
If YES, what course(s) and provide a justification of the overlap.

Does this course content overlap a course offered in another academic area? **Yes** **No** x
If YES, what course(s) and provide a justification of the overlap.

Overlapping courses require Chairs' signatures.

6. Cross-listed Courses (*Please note each prefix in item No. 1)*

A. List Cross-listed Courses (Signature of Academic Chair(s) of the other academic area(s) is required).
List each cross-listed prefix for the course: N/A

B. Program responsible for staffing: Biology

7. References. *[Provide 3 - 5 references]*

Judd, W.S., C.S. Campbell, E.A. Kellogg, P.F. Stevens, and M.J. Donoghue. 2007. *Plant Systematics: A Phylogenetic Approach*, 3e. Sinauer Associates, Sunderland, MA.

Baldwin, B.G., D.H. Goldman, D.J. Keil, R.W. Patterson, and T.J. Rosatti, eds. 2012. *The Jepson Manual: Vascular Plants of California*, 2e. University of California Press.

Harris, J.G. and M.W. Harris. 2001. *Plant Identification Terminology: An Illustrated Glossary*, 2e. Spring Lake Publishing.

Zomlefer, W.B. 1994. *Guide to Flowering Plant Families*. University of North Carolina Press

8. Tenure Track Faculty Qualified to Teach This Course.

Amy Denton

9. Requested Effective Date:
First semester offered: Spring 2014

10. New Resources Requested. Yes No X
If YES, list the resources needed.

A. Computer Needs (data processing, audio visual, broadcasting, other equipment, etc.)

no new resources required

B. Library Needs (streaming media, video hosting, databases, exhibit space, etc.)
no new resources required

C. Facility/Space/Transportation Needs
no new resources required

D. Lab Fee Requested (please refer to Dean's Office for additional processing) **Yes** **No** X

E. Other
none

11. Will this new course alter any degree, credential, certificate, or minor in your program? Yes **No** x
If, YES attach a program update or program modification form for all programs affected.
Priority deadline for New Minors and Programs: October 1, 2012 of preceding year.
Priority deadline for Course Proposals and Modifications: October 15, 2012, of preceding year.
Last day to submit forms to be considered during the current academic year: April 15th.

Amy Denton 5 September 2012

Proposer of Course (Type in name. Signatures will be collected after Curriculum approval) Date

Approval Sheet

Program/Course: BIOL 319

If your course has a General Education Component or involves Center affiliation, the Center will also sign off during the approval process.

Multiple Chair fields are available for cross-listed courses.

The CI program review process includes a report from the respective department/program on its progress toward accessibility requirement compliance. By signing below, I acknowledge the importance of incorporating accessibility in course design.

Program Chair		
	Signature	Date
Program Chair		
	Signature	Date
Program Chair		
	Signature	Date
General Education Chair		
	Signature	Date
Center for International Affairs Director		
	Signature	Date
Center for Integrative Studies Director		
	Signature	Date
Center for Multicultural Engagement Director		
	Signature	Date
Center for Civic Engagement Director		
	Signature	Date
Curriculum Chair		
	Signature	Date
AVP		
	Signature	Date