

CALIFORNIA STATE UNIVERSITY CHANNEL ISLANDS

COURSE MODIFICATION PROPOSAL

DATE: 7 NOVEMBER 2005

PROGRAM AREA BIOLOGY

1. **Catalog Description of the Course.** *[Follow accepted catalog format.]*
(If Cross-listed please submit a form for each prefix being modified)

OLD

Prefix BIOL Course# 499 Title Senior Capstone Colloquium
 Units (1)
 1 hours lecture per week
 x Prerequisites BIOL 492, 494 or 497
☐ Corequisites
 Description Oral and written presentation of completed or work-in-progress projects of BIOL 492, 494, or 497 courses. Graded credit/no credit.

☐ Gen Ed Categories
☐ Lab Fee Required
☒ Graded CR/NC
☐ Repeatable for up to units
☐ A - Z

NEW

Prefix BIOL Course# 499 Title Senior Capstone in Biology
 Units (3)
 3 hours lecture
☒ Prerequisites Consent of Instructor
☐ Corequisites
 Description Integration of previous coursework, knowledge and skills as they apply to specific topics in Biology and the impact of biological science on society. Emphasis will be placed on analysis of scientific literature, problem solving and oral and written communication skills.

☐ Gen Ed Categories
☐ Lab Fee Required
☐ Graded CR/NC
☒ A - Z
☐ Repeatable for up to units

2. **Mode of instruction**

Existing

	Units	Hour Per Unit	Benchmark Enrollment	CS# Units (filled out by Dean)
Lecture	<u>1</u>	<u>1</u>	<u>20</u>	<u> </u>
Seminar	<u> </u>	<u> </u>	<u> </u>	<u> </u>
Laboratory	<u> </u>	<u> </u>	<u> </u>	<u> </u>
Activity	<u> </u>	<u> </u>	<u> </u>	<u> </u>

Proposed

	Units	Hour Per Unit	Benchmark Enrollment	CS# Units (filled out by Dean)
Lecture	<u>3</u>	<u>1</u>	<u>20</u>	<u> </u>
Seminar	<u> </u>	<u> </u>	<u> </u>	<u> </u>
Laboratory	<u> </u>	<u> </u>	<u> </u>	<u> </u>
Activity	<u> </u>	<u> </u>	<u> </u>	<u> </u>

3. **Course Content in Outline Form if Being Changed.** *[Be as brief as possible, but use as much space as necessary]*

OLD

It varies according to students' presentation topics.

NEW

Course content will vary depending on expertise of the instructor

4. **Justification and Learning Objectives for the Course.** (Indicate whether required or elective, and whether it meets University Writing, and/or Language requirements) *[Use as much space as necessary]*

OLD

This is a capstone course taken by Biology majors who have carried out service learning and senior projects in BIOL 492, 494 or 497. In this course, students will work independently or as a team to synthesize the information obtained from their projects with the ideas and knowledge learned from classrooms and present their work to an audience in a comprehensive and professional manner. This course is used as one of the summative indicators to assess student-learning outcomes.

Students completing this class should be equipped with the knowledge and skills to:

NEW

This course will be required for all Biology majors. In this course, students will synthesize information obtained from previous course work and apply this knowledge to analysis of specific topics in Biology. Emphasis will be placed on analysis of scientific literature. The role of biological science on societal issues will be addressed. Students will be required to communicate in written and oral forms. This course will be used as one of the summative indicators to assess student-learning outcomes.

Students completing this class should be equipped with the knowledge and skills to:

1. Collect and organize information obtained from a specific project.
2. Systematically research and critically examine background information for a specific project.
3. Apply appropriate tests and measures to examine collected data.
4. Critically interpret data obtained from a specific project.
5. Discuss their own findings in the context of related research in the same or similar field.
6. Synthesize the information obtained from their projects with the ideas and knowledge learned from classrooms.
7. Present a specific project from conception to completion in a comprehensive and professional manner.

1. Discuss and critique scientific journal articles.
2. Apply knowledge and skills from previous coursework to interpret scientific literature
3. Identify topic appropriate research materials
4. Write a paper that synthesizes information from multiple sources
5. Report on a topic in oral form
6. Discuss societal issues related to biological science

5. References. *[Provide 3-5 references on which this course is based and/or support it.]*

OLD They vary according to students' presentation topics.

NEW References will vary depending on topic chosen by the instructor.

6. Indicate Changes and Justification for Each. *[Check all that apply and follow with justification. Be as brief as possible but, use as much space as necessary.]*

- ☒ Course title: Title was changed to better reflect the new design of this course.
- ☐ Prefix/suffix
- ☐ Course number
- ☒ Units: Students in Biology used to fulfill their capstone requirement by taking 2 units from BIOL 492, 494 and 497 and one unit of BIOL 499. Now students will fulfill their capstone by taking this 3 unit capstone course.
- ☐ Staffing formula and enrollment limits
- ☒ Prerequisites/corequisites: BIOL 492, 494 and 497 will not longer be linked/needed for this course
- ☒ Catalog description: see below
- ☒ Course content: see below
- ☒ References: as indicated on form, reference will vary by topic
- ☐ GE
- ☐ Other

Justification

Previously, students in Biology satisfied their capstone requirement by taking 2 units from either BIOL 492, 494 or 497 and then registered for 1 unit of BIOL 499 (Biology capstone colloquium) to present their findings. We have found that this approach has not produced a true culminating experience in Biology and has resulted in very uneven experiences for students involved in the capstone. Because of this, we are proposing to redesign BIOL 499 into a capstone course that all Biology majors would take and would reinforce and build upon their prior educational experiences at CSUCI.

7. If this modification results in a GE-related change indicate GE category affected and Attach a GE Criteria Form:

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)** ☐
- UD Interdisciplinary** ☐

8. New Resources Required. YES ☐ NO ☒

If YES, list the resources needed and obtain signatures from the appropriate programs/units on the consultation sheet below.

- a. Computer (data processing), audio visual, broadcasting needs, other equipment)
- b. Library needs
- c. Facility/space needs

9. Will this course modification

n alter any degree, credential, certificate, or minor in your program? YES ☒ NO ☐

If, YES attach a program modification form for all programs affected.

A biology program modification has been submitted.

Nancy Mozingo

Proposer of Course Modification

7 November 2005

Date

Approvals

Program/Course:

Program Chair

Date

General Education Chair

Date

Curriculum Committee Chair

Date

Dean

Date