

CALIFORNIA STATE UNIVERSITY CHANNEL ISLANDS

COURSE MODIFICATION PROPOSAL

PROGRAM AREA BIOLOGY

1. Catalog Description of the Course. *[Include the course prefix, number, full title, and units. Provide a course narrative using underline for deletions and CAPITALS for additions including prerequisites/corequisites. If any of the following apply, include in the description: Repeatability (May be repeated to a maximum of ___ units); time distribution (Lecture ___ hours, laboratory ___ hours); non-traditional grading system (Graded CR/NC, ABC/NC). Follow accepted catalog format.]*

BIOL/CHEM 343 FORENSIC SCIENCE (3)

Three hours lecture per week

A survey of the various chemical and biological techniques used in obtaining and evaluating criminal evidence. Topics include: chromatography, mass spectroscopy (LC-MS, GC-MS); atomic absorption spectrometry; IR, UV, fluorescence and X-ray spectroscopies; fiber comparisons; drug analysis; arson/explosive residue analysis; toxicological studies; blood typing; DNA analysis; population genetics; firearm identification; and fingerprint analysis. Lab fee required.

Gen Ed: BI, B2 and Interdisciplinary

2. Mode of instruction

No changes are proposed here.

<u>Existing</u>			<u>Proposed</u>		
Units	Hours Per Unit	Benchmark Enrollment	Units	Hours per Unit	Benchmark Enrollment
Lecture	_____	_____	Lecture	_____	_____
Seminar	_____	_____	Seminar	_____	_____
Laboratory	_____	_____	Laboratory	_____	_____
Activity	_____	_____	Activity	_____	_____

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

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

5. 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
- Prefix/suffix
- Course number
- Units
- Staffing formula and enrollment limits
- Prerequisites/corequisites
- Catalog description
- Course content
- References
- x GE
- Other

According to our GE document that was passed as a Senate Resolution:

Courses in the B category explore the scope and major concepts of mathematics and/or scientific disciplines. In the sciences, the intent is to present the principles and concepts which form the foundations of living or non-living systems. The focus of all courses in Category B is on the presentation and evaluation of evidence and argument, the appreciation of use/misuse of data, and the organization of information in quantitative, technological or other formal systems. Students are introduced to the principles and practices that underscore mathematical and scientific inquiry (logic, precision, hypothesis generation and evaluation, experimentation and objectivity) and gain an understanding of the process by which new knowledge is created, organized, accessed, and synthesized.

Students improve their reasoning skills (critical thinking, problem-solving, decision making, analysis and synthesis), and apply information and technology to the understanding of complex and diverse problems in mathematics and the sciences. They become aware of the influence and significance of mathematics and the sciences in world civilization.

All Category B courses shall:

- Promote the understanding and appreciation of the methodologies of math or science as investigative tools and the limitations of mathematical or scientific endeavors
- Present mathematical or scientific knowledge in a historical perspective and the influences of math or science on the development of world civilizations, both past and present
- Apply inductive and deductive reasoning processes and explore fallacies and misconceptions in the mathematical or scientific areas.

Category B-2 Life Sciences—Biology courses shall:

- Present the principles and concepts that form the foundation of living systems.

The Biology faculty is asking for BIOL 343 to be removed as a course that satisfies the B2 category. The biology faculty have reviewed the content of this course and believe that the biology content is restricted mainly to techniques used for biological analysis and does not address principles and concepts that form the foundation of living systems. Thus it does not meet the requirements listed above as a B2 course.

6. If this modification results in a GE-related change indicate GE category affected:

A (English Language, Communication, Critical Thinking)	
B (Mathematics & Sciences)	Delete from B2
C (Fine Arts, Literature, Languages & Cultures)	
D (Social Perspectives)	
E (Human Psychological and Physiological Perspectives)	

7. Consultation

Attach consultation sheets from all program areas, Library, and others (if necessary)

8. If this course modification will alter any degree, credential, certificate, or minor program in your program attach a program modification.

____Ching-Hua Wang____ 8 Dec 2003_____
 Proposer of Course Modification Date