TO: The Academic Senate

FROM: Committee on Instruction and Curriculum (CIC)

SUBJECT: General Biology Option in BA Biological Sciences

PURPOSE: For Action by the Academic Senate.

ACTION REQUESTED: That the Academic Senate approve the General Biology Option in the BA Biological Sciences; effective Fall, 2012

BACKGROUND INFORMATION: At its meeting on March 7, 2011, CIC voted unanimously to approve the attached proposal. The justification for the proposal is clearly stated in the document itself.

(see 10-11 CAPR 12)
REQUEST FOR APPROVAL OF OPTION IN GENERAL BIOLOGY, B.A. BIOLOGICAL SCIENCE

Department: Biological Science

Full and exact title of the Option, along with the degree and major program under which the option will be offered: Option in General Biology, B.A. Biological Science

Full and exact title of the Minor: N/A

Options already existing under the major program for which the new aggregate of courses is proposed: Option in Biology Education, B.A. Biological Science

Purpose of the proposed aggregate of courses: The goal of the B.A. General Biology Option is to provide a solid background in biology as well as general science breadth appropriate for students planning careers in natural history programs, health-related vocations, or seeking generalized biology training. This new option will organize the Biological Science B.A. into two Options: General Biology and Biology Education. The General Biology Option is designed to be more closely aligned with the established Biology Education Option and provides a far more streamlined set of courses than the former Biological Science B.A. without options.

List of all requirements including the courses, by catalog prefix number, title, and units of credit, as well as total units to be required under the proposed option.

MAJOR REQUIREMENTS (B.A. Biological Science)

Option in General Biology

The Option in General Biology for the B.A. Biological Science consists of 90 units. The B.A. Biological Science degree requires a total of 180 units. The
University requires 72 units of GE. However, the B.A. Biological Science with the Option in General Biology can incorporate up to 16 units of GE into the major.

I. Physical Sciences and Mathematics Core (32 units)
   A. Chemistry (12 units)
      • CHEM 1601-2 Basic Chemistry for the Health Sciences (4, 4) [GE Areas B1, B3, B5]
      • CHEM 3400 Introductory Biochemistry (4)
   B. Physics (12 units)
      • PHYS 2701-2-3 Introductory Physics I, II, III (4, 4, 4)
   C. Mathematics (8 units)
      • MATH 1304 Calculus I (4) [GE Area B4]
      • STAT 3031 Statistical Methods in Biology (4)

II. Biological Sciences Core (37 units)
   • Lower Division (15 units)
      • BIOL 1401 Molecular and Cellular Biology (5)
      • BIOL 1402 Plant Biology (5)
      • BIOL 1403 Animal Biology (5)
   • Upper Division Core (22 units)
      • BIOL 3110 Principles of Ecology (4)
      • BIOL 3121 Principles of Genetics (5)
      • BIOL 3122 Principles of Developmental Genetic Analysis (4)
      • BIOL 3130 Principles of Evolutionary Biology (4)
      • BIOL 3151 Principles of Animal Physiology (5)

III. Upper Division Electives (21 units)
   • Any upper division biology course can be applied, except BIOL 3020.
   • Can include a maximum of 8 units from departments outside of Biological Science but not more than one course per department. Approved courses are listed below.
      - Earth & Environmental Science: GEOL 3400, ENSC 4140, ENSC 4200
      - Philosophy: PHIL 3151, PHIL 3152, PHIL 3153 [GE Area C4]
   • Consultation with a faculty advisor is strongly recommended to review the suitability of this degree program for the desired professional goal.

7. For a new option, list of all requirements including courses, by catalog prefix, number, title, and units of credit, as well as total units to be required for the major in which the proposed option is to be included.
   Same as detailed above. The Option in General Biology will replace the existing B.A. in Biological Science as written in the current catalog. A student pursuing a B.A. Biological Science can thus select either the Option in General Biology or the Option in Biology Education.

8. List of new courses that were developed and existing courses that needed modification as a result of this new Option or Minor, if any, submitted along with this proposal: N/A

9. RESOURCE IMPLICATIONS of the proposed new Option or Minor, if any: N/A

10. Consultation with other affected departments and program committee:
    a) The following department(s) has (have) been consulted and raise no objections:
All Departments in the College of Science were consulted via the CSCI Curricular Committee and raised no objections. All Academic Departments and Programs at CSUEB were consulted using the Sharepoint Curriculum site and there were no objections.

b) The following department(s) have been consulted and raise concerns:  None.

11. Certification of DEPARTMENT APPROVAL by the chair and faculty.
   Chair: Original signed by Michael Hedrick          Date: 1/7/2011

12. Certification of COLLEGE APPROVAL by the dean and college curriculum committee.
   Dean/Associate Dean: Original signed by Alan Monat  Date: 2/8/11