TO: The Academic Senate

FROM: Committee on Instruction and Curriculum (CIC)


PURPOSE: For Action by the Academic Senate

ACTION REQUESTED: That the Academic Senate approve the New Certificate in Foundational Level General Science; effective Fall 2012.

BACKGROUND INFORMATION: CIC, after considering and discussing this proposal, approved it unanimously on 5/2/11. We believe that this certificate will be of service to elementary and middle school teachers who wish to focus on science education.
REQUEST FOR APPROVAL OF NEW CERTIFICATE IN FOUNDATIONAL LEVEL GENERAL SCIENCE

1. Departments: Biological Sciences, Chemistry & Biochemistry, Earth and Environmental Science, and Physics

2. Full and exact title of Certificate: Certificate in Foundational Level General Science

3. Purpose of the proposed aggregate of courses: This certificate program is designed for students who would like to teach middle school science and who currently have or plan to obtain their Multiple Subject teaching credential or a Single Subject teaching credential in a related field. This certificate program is being developed in response to the state’s new Added Authorization in Foundational Level General Science.

3. 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 Certificate:

Foundational Level General Science Certificate

The Foundational Level General Science certificate program is designed for students who would like to teach middle school science or would like to become K-5 science specialists. Credentialed teachers who complete this program and pass the Science CSET I and II exams qualify for the Foundational-level Added Authorization in Science.

Candidates for this program should have or plan to obtain their Multiple Subject teaching credential or a Single Subject teaching credential in a subject other than a science discipline. Students who complete this program will be well prepared to teach science at the K-8 level, will have completed the State required Methods Courses in Single Subject Science and will have the content knowledge required to pass the Science CSET I and II exams. The certificate consists of 20 units.

Required Courses
BIOL 3011 Foundational Biology (4)
BIOL 3012 Foundational Biology Laboratory (1)
CHEM 3011 Foundational Chemistry (4)
CHEM 3012 Foundational Chemistry Laboratory (1)
GEOL 3011 Foundational Earth Science (4)
GEOL 3012 Foundational Earth Science (1)
PHYS 3011 Foundational Physics (4)
PHYS 3012 Foundational Physics Laboratory (1)

4. List of new courses that were developed and existing courses that needed modification as a result of this new Certificate, if any, submitted along with this proposal:
None

5. Resource implications of the proposed new Certificate, if any: Additional funds may be needed in the Departments of Biological Sciences, Chemistry & Biochemistry, Earth & Environmental Science, and Physics each year in order to offer these courses. These
courses can be taught by our current faculty, so no additional office space will be required. Classroom space needs are limited as the lecture courses are online, and the labs meet only one evening per week. Grant money will be available to cover these costs for the 2011–2012 academic year.

6. Relationship of proposed program to requirements for teaching credentials, accreditation, and/or licensing. This coursework is part of the California Teaching Commission’s requirements for the Added Authorization in Foundational Level General Science. It does not include the required Methods in the Single Subject Classroom. It is designed to help teachers learn the content covered on the CSET 118 and 119 exams. Note that students who complete the Foundational Level General Science Certificate program will still need to pass the Foundational Level General Science CSET exams to establish subject matter competency for the credential.

7. Consultation with other affected departments and program committee:

a) The following department(s) has (have) been consulted and raise no objections: Biological Sciences, Chemistry, Earth and Environmental Science, Engineering, Mathematics, Physics, Teacher Education

The CSCI Curricular Committee and All Academic Departments and Programs at CSUEB were consulted using the Sharepoint Curriculum site and there were no objections.

b) The following department(s) has (have) been consulted and raised concerns: None

8. Certification of Department Approval by the chair and faculty.

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<th>Chair</th>
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<td>Michael Hedrick, Biological Sciences</td>
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<td>Ann McPartland, Chemistry &amp; Biochemistry</td>
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<td>Jeffery Seitz, Geological Sciences</td>
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<td>Jason Singley, Physics</td>
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9. Certification of College Approval by the dean and college curriculum committee.

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<th>Dean/Associate Dean</th>
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<td>Alan Monat</td>
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