

CALIFORNIA STATE POLYTECHNIC UNIVERSITY, POMONA
ACADEMIC SENATE

ACADEMIC PROGRAMS COMMITTEE

REPORT TO

THE ACADEMIC SENATE

AP-033-156

Physics, B.S.—Integrated Science Option

General Education Committee

Date: 04/03/2016

**Executive Committee
Received and Forwarded**

Date: 05/18/16

Academic Senate

**Date: 05/25/16
First Reading**

BACKGROUND: The Department of Physics and Astronomy is proposing a new Option in Integrated Science under its Bachelor of Science in Physics. This program balances a solid foundation in physics with courses in other areas of science in order to meet the requirements for a Single Subject Teaching Credential in Physics, as set forth by the California Commission on Teacher Credentialing. The rationale for offering such a specialized program is that California has a documented need for qualified physics teachers, but the standard physics program that Cal Poly Pomona had traditionally offered does not include the balance of coursework in other fields that aspiring teachers need under state rules (so that they can teach introductory general science courses as well as specialized high school physics courses). Consequently, aspiring physics teachers must first complete a four-year degree in physics and then take nearly a year of additional science courses (primarily in geology and biology) BEFORE they can begin a credential program. This program will streamline the path to a teaching credential, meeting an important workforce need of the state while reducing the cost of training teachers and the time that students must invest.

RESOURCES CONSULTED:

Faculty

Department Chairs

Associate Deans

Deans

Office of Academic Programs

DISCUSSION:

Before reaching the Academic Programs Committee, this program was reviewed by the College Curriculum Committee in the College of Science as well as the Dean of Science and the Office of Academic Programs. The Academic Programs Committee then conducted campus-wide consultation, as well as its own review of the program. No comments were received by the Academic Programs Committee.

RECOMMENDATION:

The Academic Programs Committee recommends approval of the Integrated Science Option under the Bachelor of Science in Physics.