

CALIFORNIA STATE POLYTECHNIC UNIVERSITY, POMONA

ACADEMIC SENATE

ACADEMIC PROGRAMS COMMITTEE

REPORT TO

THE ACADEMIC SENATE

AP-017-212

New Minor in Science Education

Academic Programs Committee

Date: 02/09/2022

**Executive Committee
Received and Forwarded**

Date: 03/23/2022

Academic Senate

**Date: 04/13/2022
First Reading**

BACKGROUND:

The proposed Minor in Science Education from the Liberal Studies Department is open to all undergraduates in any major at California State Polytechnic University, Pomona. The minor program has two goals: 1) to provide CPP students who are pursuing teaching to obtain a supplemental authorization in Introductory Science which will allow them to teach science up to 9th grade; and 2) to prepare CPP students pursuing elementary education the opportunity to practice science education. The minor includes all the coursework that the State of California requires for an Introductory Science Authorization to teach either biology/chemistry or physics/geology. The proposed new 30-unit minor contains 9 units of core education courses in liberal studies and ethnic and women's studies, and 21 units of elective courses of which students will choose one of two plans (biology/chemistry plan or physics/geology plan).

RESOURCES CONSULTED:

Department Chairs

Associate Deans

Dr. Christina Chávez-Reyes, Chair of Liberal Studies Department

Dr. Sandy Dixon, Chair of Ethnic and Women's Studies Department

Dr. Angel Valdes, Chair of Biological Sciences Department

Dr. Jonathan Nourse, Chair of Geological Sciences Department

Dr. Gregory Barding, Chair of Chemistry and Biochemistry Department

Drs. Alex Small and Nina Abramzon, Co-Chairs of Physics and Astronomy Department

DISCUSSION and RECOMMENDATION:

The Liberal Studies department proposed this new Science Education minor, which is designed to help prepare students for teaching science in K-9. This minor would provide a distinctive pathway for elementary and middle school teachers to be able to teach science up to the 9th grade with equity-minded science teaching and learning. The core courses of the minor will prepare students to teach science through the lenses of diversity, equity, and inclusivity, which is critical given the diversity of learners in California. The 21 units of elective courses will provide a solid foundation of the material necessary for an Introductory Sciences Authorization required by the State of California. Students will determine (along with their advisor) which pathway they will choose based on their needs and interests.

All department chairs and associate deans were consulted. Further, consultation requests were sent to chairs of Liberal Studies, Ethnic and Women's Studies, Biological Sciences, Chemistry and Biochemistry, Geological Sciences, and Physics and Astronomy, because these departments offer courses that would be included in the minor. In addition, the AP committee contacted CEMaST (Center for Mathematics and Science Teaching) because they are involved in the teacher education program on our campus. The AP committee received two comments from faculty that were very positive and supportive of the minor. No other comments were received.

The Academic Programs Committee recommends approval of the Minor in Science Education.