

CALIFORNIA STATE POLYTECHNIC UNIVERSITY, POMONA

**ACADEMIC SENATE**

**ACADEMIC PROGRAMS COMMITTEE**

**REPORT TO**

**THE ACADEMIC SENATE**

**AP-029-212**

**Program Review for BS Geology and MS Geology**

**Academic Programs Committee**

**Date: 03/02/2022**

**Executive Committee  
Received and Forwarded**

**Date: 03/23/2022**

**Academic Senate**

**Date: 04/13/2022  
First Reading  
05/04/2022  
Second Reading**

## BACKGROUND:

As part of the University's planning cycle for academic programs, a self-study was prepared by the Department of Geological Sciences. Two external review teams visited the department, one for the BS review and one for the MS review. The BS external team, consisting of Dr. Joan E. Fryxell from California State University, San Bernardino and Dr. Gregory J. Holk from California State University, Long Beach, "visited" the department virtually on March 11, 2020. The MS external team, consisting of Dr. Thomas Anderson from University of Pittsburgh and Dr. Doug Yule from California State University, Northridge visited the department on May 2, 2016.

After their visits, reports were prepared and submitted by the external reviewers, after which both the Department and Dean prepared responses. The AP Committee has reviewed these responses.

## RESOURCES CONSULTED:

Dr. Jonathan A. Nourse, Chair, Department of Geological Sciences  
Dr. Alison Baski, Dean, College of Science

## DISCUSSION and RECOMMENDATION:

The external reviewers were very positive in their appraisal of the department. They noted that the program's vision, mission, and values align with the College and University. They also noted that the program has successfully implemented many of the suggestions outlined in the previous program review.

Furthermore, the programs are student-centered, and students expressed satisfaction with both programs. Both external reviews praised the department faculty's varied expertise and its inclusive and collegial atmosphere; the reviewers further commented that these aspects of the department attract high-quality, motivated, and active students, including a high number of underrepresented students, into both programs. Additionally, the BS reviewers commended the department on its continued commitment to research and other scholarly activities, including student advising and mentorship, considering the faculty's extreme teaching load and dedication to service to the department, College, and University. The MS reviewers also commended the department on its successful implementation of the Geology MS program, of which the reviewers asserted was comparable to or more vibrant than other Geology MS programs offered at other CSUs, considering the limited number of faculty in the department.

The reviewers also addressed challenges in the department, such as the need for the following: tenure track lines to support the growth of the programs; bottleneck courses; space issues; offering online/hybrid delivery of GE courses; and financial issues encountered, such as higher tuition in comparison to other CSU Geology MS programs, because of self-supported model of the Geology MS program.

The reviewers made recommendations in most of these areas and the department met to review these recommendations and develop their post self-study action plans.

The Department and Dean's office were in broad agreement with the reviewers' comments and suggestions. Both the BS and MS action plans are divided into short-term priorities and long-term priorities. For the BS program in the short term, the department will focus on the following categories: Student learning and assessment; faculty recruitment; student success; and operating budget. For the MS program in the short term, the department will focus on the following categories: Operating budget, faculty recruitment, program curriculum, and student success. With respect to the long-term priorities, for both the BS and MS programs the categories are program curriculum and student success related to program curriculum.

The department's proposed actions are well-articulated and require few resources on behalf of the college but do require university resources and faculty time. Within the BS and MS action plans, the department has a clear vision for the development of hybrid and online GE courses to increase FTES enrollment; faculty recruitment; recruitment and retention of Geology majors; increasing accessibility and inclusivity in department-hosted fieldwork events; and increasing more space and support for faculty and student scholarship.

In addition, and of significant note, the department has two top priorities listed in the action plans, one for the BS program and one for the MS program. For the BS program, the top priority is "to work with CPP administration to find a way to offer a combined BS+MS 5-year degree program that is fully state-supported." For the MS program, the top priority is to "work with CPP administration to return the graduate program to a fiscally sound, state-support funding model." The department would like to emphasize that the self-supported operating model of the MS program has been an issue for the Geological Sciences faculty since Fall 2012. The self-support model resulted in the high cost of tuition for students, which is a substantial barrier to student recruitment and inclusivity, but has also created an excessive workload for the faculty.

The proposed actions are reasonable, but it is important to mention that the hiring of tenure-track faculty and the funding mechanisms for the MS program and proposed combined BS+MS 5-year degree program, are decisions made at the Provost level, not the College level. To its credit, the department has offered detailed analyses and outlined solutions to address the department's financial needs through teaching high-enrollment GE courses with high SFR alongside the lower SRF graduate courses and through the recommended state-supported BS+MS 5-year degree program. The Dean will advocate for the department and recognizes the challenges faced by the department due to the self-support model of the MS program and heavy faculty workload. To add, the Dean also encourages the department to actively pursue improving the accessibility and inclusivity of department-hosted fieldwork events to increase student participation. The Dean is in support of the actions listed in the plans and looks forward to working with the department in achieving both short-term and long-term goals.

The Academic Programs Committee commends the Department of Geological Sciences on their good work, both in the operation of their BS and MS programs and in the preparation of thorough and thoughtful reviews that highlight issues of critical importance to both the department, the College, and the campus as a whole.