TO: The Academic Senate

FROM: The Committee on Academic Planning & Resources

SUBJECT: Five-Year Review of the Department of Geological Sciences

ACTION REQUESTED: Approval of the Program Review of the Department of Geological Sciences and continuation of the program without modification.

BACKGROUND INFORMATION:

The Department of Geological Sciences, residing in the School of Science, offers undergraduate BA/BS degrees, a BS degree in Environmental Sciences (jointly with Biology, Chemistry and Geography), a Single Subject Teacher Credential Program in General Science Breadth and Concentration in Geosciences, and a graduate MS degree. The department has been involved in the development of the General Education Clusters in Science and has been involved in the General Education Cluster in the Social Sciences.

On February 1, 2001 the Department Chair, Dr. Nancy Fegan, met with CAPR to discuss their Five-Year Program Review. Horacio Ferriz, Professor from the Geology Department at California State University Stanislaus, visited and reviewed the department on May 31, 2000. The Department of Geological Sciences submitted the following documents to CAPR as part of their 1995-2000 Program Review.

- Self-Study and Planning Document
- Outside Reviewer’s Report
- Department Response to the Outside Reviewer’s Report
- Appendix of Departmental Information
  - Department Statistics
  - Department Mission Statement
  - Learning Outcomes established for core undergraduate geology courses

Program Review:

Dr. Horacio Ferriz, Assistant Professor of Geology at CSU Stanislaus and an Engineering Geologist with 20 years experience, completed an outside review of the Department of Geological Sciences on May 31, 2000. His report included many general comments about the department’s programs, faculty, the support staff, students, recruitment, and future opportunities. Dr. Ferriz also included an appendix entitled, An Outlook and Current Trends in the Practice of Geology for use in future planning.

Dr. Ferriz commented on how capable the faculty is and how hard they are working to run the Geology Department with so few faculty members. He was very impressed with the Chair, Nancy Fegan’s dedication to her job and the department. He also pointed out that the department
is in a transition period in which the "new guard" is being given the responsibility to carry on the functioning of the department.

Dr. Ferriz was quite urgent about the need for planning for the approaching retirement of Mr. Garbutt, the Instructional Support Technician who has 30 years experience with the department’s collection of mineral, rock, and fossil specimens. He suggested seeking NSF funding for an overlap period for the next technician so Mr. Garbutt can pass along as much of his knowledge as possible to the next person who takes this position.

Dr. Ferriz made the observation that the faculty is spread very thinly, by recent retirements, between the responsibilities of offering courses for the undergraduate and graduate Geology degrees and offering general education courses. As a result of this, Dr. Ferriz suggests that more effort be put into attracting students to the major by developing active recruitment strategies.

The reviewer made the suggestion that the Calculus requirement be increased to bring the undergraduate Geology major closer to other comparable department’s requirements nationwide. He also suggested that developing concentrations in the graduate program might help focus graduate student’s interests and to help them choose a career path in the field of Geology.

Overall, the reviewer was quite complimentary of the operation of the Geology Department. He also encouraged continued planning for the future and emphasized the need for a clear long-term vision of the Department.

**Departmental Response:**

The faculty thought highly of Dr. Ferriz’s review and in the year since, they have been working toward and considering many of his suggestions. The department is looking into expanding the Calculus requirement for the undergraduate major. They concur with Dr. Ferriz that the department needs to plan for the future in terms of attracting more students and hiring additional faculty members.

The main area in which the Geology Department is lacking is in the area of Sedimentary (soft rock) Geology, an area that has become much more important over the last 10 years in the field of Geology. The department is currently using a lecturer position to teach five courses in this area and the one-year contract offered to the lecturer has an impact for obtaining a tenure-track person to take these responsibilities. Planning with and without the hiring of such a person is important.

**CAPR Recommendations:**

CAPR recommends approval of the Five-Year Program Review of the Department of Geological Sciences and continuation of the program without modification. CAPR also suggests that realistic future plans for the department be developed while taking into consideration the amount of current faculty.

The Department of Geological Sciences is scheduled to conduct its next Five-Year Program Review in 2004-5.