

Clark College Geoscience

Bob Mackay

Clark College is a two-year community college in Southwest Washington within the Portland Oregon metropolitan area. It was founded in 1933 and presently has an average enrollment of about 8,000 FTE students.

Approximately 30 % of the Clark College student population intends to transfer to a college or university to complete a Bachelors degree. Clark College presently has two geoscience departments: Geology and Meteorology. Both departments are part of the larger Physical Science and Engineering division which also includes Astronomy, Chemistry, Physics, and Engineering departments. The workload for our fulltime faculty is 15 contact hours per week.

The Geology and Meteorology departments serve approximately 300 and 120 students respectively each year. Most of these students take our introductory courses to fulfill their general science distribution requirements. We do have 15 to 25 students each year who plan on completing a four-year degree in a geoscience related field including Geology, Meteorology, Oceanography, Environmental Science, and Engineering.

Our primary strengths are:

- 1) Our introductory courses are laboratory-based courses giving our students solid interactive hands-on and heads-on experiences.
- 2) Our classes are quite popular, typically filling early in the registration process.
- 3) We have small class sizes (~40 students) to allow us the opportunity to get to know each student as a person.
- 4) Our physical science division is rather small (~20 faculty) so that we can easily interact with each other and share exciting information and new developments from our specific disciplines. In theory this helps expose students in Physics and Chemistry to geoscience career possibilities. In fact, since I teach both Physics and Meteorology I often use examples from the geosciences in my Physics class and sometimes “recruit” Meteorology students.
- 5) For a community college, we have a very strong college foundation with excellent community support. This helps us fund equipment purchases, travel, or special projects even when state budgets are tight.

Our primary weakness is that we presently do not have an organized effort to promote geoscience to our students. Many students take our courses, learn great things about the world around them, and generally become uplifted with their new knowledge and insights about the Earth. Some students get so excited that they actually explore geoscience career options. However, if we could reach a critical mass of students truly interested in geoscience related careers, then we might actually develop a community of geoscience students. This core student community would likely help develop even more interest and growth in geoscience careers. We actually may have such a critical mass of students but many are interested in different aspects of geoscience. That is, we may not have a critical mass of future Geologists, Atmospheric Scientists, Environmental Scientists, or geoscience Engineers taken alone, but collectively such a critical mass of students interested in studying Earth as a career may exist. Breaking through the boundaries between the different geoscience disciplines may very well be a key component to strengthening geoscience programs at two-year colleges as well as colleges and universities with smaller programs.