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WAUBONSEE
COMMUNITY COLLEGE

Where futures take shape

Preparing Students in Two-year Colleges for Geoscience Degrees and Careers

I have been teaching Earth Science, Geology, Astronomy and Geography full time at Waubonsee Community College for 10 years. As most of my teaching is the General Education *Survey of Earth Science* class, a 3-credit lecture course covering physical geology, oceanography, meteorology and astronomy, I don't have many, or know of many, geoscience majors in my classes, although I have identified several over the years using various techniques, four of which are described below.

In order to try to systematically identify future geoscience majors in my classes, I have recently added a required 'syllabus quiz' on the class Blackboard site that all students have to complete at the beginning of the semester. The primary goal of the syllabus quiz is to make sure the syllabus is read and understood. In addition, I have two open-ended questions that ask the student what they plan to major in and what their career goals are. It obviously begins to form a bond with the student by showing interest in their career goals, but it also helps me to identify early in the semester potential geoscience 'majors' (since we do not have a formal Associate's degree in geology in Illinois) and can mentor them during the semester and beyond. I also make some kind of comment on each student's submission to demonstrate my interest in them, even if they are not potential geoscience 'majors'.

I am the campus representative for the Geological Society of America, which provides me with appropriate and visually attractive posters that I display in the Earth Science / Geology hallway. I initially thought that it would only be a nice wall display, but I was able to identify a future geoscience major with that poster a couple of years ago. She approached me after class (she was in my Physical Geology class at the time) about wanting to attend the GSA meeting in Seattle, and what it would involve. She ultimately attended the convention, met with representatives from many schools she was considering transferring to, and ultimately chose the University of Hawaii to study volcanology. She has since changed her major to Social work, but it was the GSA posters that identified her geoscience interests to me. I have also used the free advertising materials provided to me to entice future majors.

There is an Honors Program at Waubonsee Community College, in which high performing and motivated students can take any class as an Honors class, and complete an Honors project, in return for a financial compensation and a notation on their diploma if they complete more than 5 classes as Honors classes. I always encourage honors projects that have a true research component, as opposed to the typical research paper. Examples of some of these honors research projects include analyzing a year of data from our AS1 seismometer (for a Physical Geology class), analyses of water table fluctuations of monitoring wells that we have in the wetlands on our campus (for an Environmental Geology class), and a project from the Spring 2012 semester studying the screenwash from the 2004 Aurora Mastodont Project (for a Survey of Earth Science class). The project that analyzed the data from the AS1 seismometer was entered into a regional STEM poster competition, and won 2nd place in the Technology Division. The Aurora Mastodont Project screenwash analyses Honors Project was entered into this year's STEM Poster competition, and she won first place in the Earth Science/Physical Science/Chemistry Category. I typically get 1 honors student per academic year, probably

because of the requirement of 3.75 GPA to participate in the Honors program. There are typically 75 honors students per semester, college wide.

I have participated in a weeklong program sponsored by our Counseling Department 'Major Decisions Week' in which faculty volunteer to discuss job opportunities and careers in their disciplines. The first year, the Earth Sciences presentation was not included in the printed advertising because of its late addition, and there were only 4 attendees. I would like to add that one of those attendees is now planning to transfer to study Environmental Geology at Southern Illinois University, and another attendee is now our Earth Science Laboratory Assistant and is planning on continuing her studies in physical geography.