### Natural Science SLO Committee Minutes 3/16/2010

Meeting was held on March 16 at 1:00pm in room LS101

Attendees: Jean Shankweiler, Amy Grant, Nancy Freeman, Jim Noyes, Margaret Steinberg, Susana Prieto, William Keig (CEC)

Each department present gave a report on how the program-level SLO was progressing in their department.

### **Biology – Nancy Freeman**

The program-level assessment and rubric had been developed at a previous flex day. For biology, it was a feature common to all biology classes, the use of a microscope. The rubric was already developed by the faculty at flex day, so a date was set for all classes to run the assessment. Nancy sent reminders the week of the assessment. Once the data was collected, the faculty collected to evaluate the SLO result at the Assessment of Student Learning week in the fall. The process did expose a few things, such as faculty presenting the assessment in different ways, and the expectations for biology majors vs non-majors. The time for faculty discussion was important, and when to assess was an important discussion for the department. The results have already been submitted.

## **Earth Science – Jim Noyes**

The Earth Science program SLO is the Nature of Science and assessing the student's ability to identify the elements of the scientific method. Jim has done a few preliminary assessments in which students stated the hypothesis, test, observations, and so on in science articles. He found that the students often identified the right information but listed it in multiple places (for example, listing the results of the "test" with a description of the "test" itself), so it was not entirely clear which category they thought information belonged in. The department spent last semester developing the assessment tool: choosing articles and writing statements based on the articles. Now students match each statement with an element of the scientific method (or <none of the above>). The department plans to use a pre-test at the beginning of the semester and a post-test at the end.

### **Chemistry – Amy Grant**

Chemistry is assessing laboratory safety in all classes. The instructors are being asked to count the number of times they must give warnings to students about wearing googles. Amy developed tally sheets and personalized them for each section and distributed to faculty. She noted that she had results from most full-time instructors, but not many results from part-timers. It was suggested she send reminders. They plan to assess 3-4 weeks into the semester and again at the end of the semester to see if student awareness improves.

# Allied Health Science – Margaret Steinberg

The Anatomy/Physiology/Microbiology classes plan to do the microscope assessment, just as the Biology classes. It will be done a little later in the semester, since the topic sequence is different for this set of classes. They will assess at the end of March. Margaret will send reminders.

#### **Physics – Susana Prieto**

Physics plans to assess word problem solving for their program assessment. They are trying to get an assessment that includes most of what is already done. Physics 11 is only conceptual and may prove difficult to include in the assessment. Physics is the one program in the department that has a number of classes taught only by part-timers.

#### **Compton – William Keig**

Bill was able to speak to what the Astronomy Department at Compton has planned. They are going to assess how well students can find a star with a telescope. The astronomers at ECC had discussed assessing the scientific method. Margaret asked if he could deliver hard copies of the SLO for Anatomy/Physiology/Microbiology to the CEC instructors. He agreed and asked for an electronic copy of the report form. Jean will send that.

Adjourned at 1:40pm Submitted: jms 3/17/2010