Proposed Revision of GE SLOs for Natural Sciences
February 12, 2009

Background
By early 2008, several science faculty members had come to feel that some of the current General Education Student Learning Outcomes for the Natural Sciences were not as useful or amenable to assessment as they might be. As a result, the department’s faculty discussed revisions to the outcomes at department meetings during the spring semester 2008. A set of three new outcomes were developed, and these were subsequently approved by a unanimous vote of the department’s four full-time faculty members and five of its adjunct faculty members during the fall semester 2008.

Rationale for change
Although the proposed outcomes (below) are similar to the current ones, the science faculty believes they are superior for two reasons. First, a student’s assessment of whether or not observations support a conclusion is now linked directly to his or her ability to communicate that assessment to others. Second, the problem-solving outcome has now been broadened so that both computational and non-computational problem solving can be considered. The science faculty feels these are more broadly useful outcomes for general education students and that they will be easier to assess.

Proposed GE Student Learning Outcomes for the Natural Sciences
C1 Demonstrate a basic knowledge of a scientific discipline’s major facts and concepts;
C2 Determine whether or not a proposed explanation, experimental result, or observation is consistent with a scientific hypothesis for a natural phenomenon and effectively communicate that understanding to others;
C3 Correctly formulate, solve, and interpret the results of a variety of problems relevant to a natural science.

Request for approval
We (the science faculty) request that the Curriculum Committee review the three proposed outcomes listed above and, if the committee agrees that they are appropriate for students taking natural science courses, that it approve substituting them for the current GE SLOs for natural science. If committee members have questions or concerns about this proposal, please contact Bill Hirt at x5255 or hirt@siskiyous.edu.

On behalf of the science faculty,

Bill Hirt
Chair, Department of Natural Sciences