General Education Annual Course Assessment Form

Course Number/Title: METR 10/Weather & Climate  GE Area: B1

Results reported for: AY 11-12  # of sections: ~12  # of instructors: ~7

Course Coordinator: Alison Bridger (as dept chair)  E-mail: Alison.Bridger@sjsu.edu

Department Chair: Alison Bridger  College: Science

Instructions: Each year, the department will prepare a brief (two page maximum) report that documents the assessment of the course during the year. This report will be electronically submitted, by the department chair, to the Office of Undergraduate Studies, with an electronic copy to the home college by September 1 of the following academic year.

Part 1

To be completed by the course coordinator:

(1) What SLO(s) were assessed for the course during the AY?

SLO#2: “Students should be able to demonstrate ways in which science influences and is influenced by complex societies, including political and moral issues”. Raw data is stored in the chair’s office/assessment data shelf (COADS).

This is the first time that SLO#2 has been assessed.

(2) What were the results of the assessment of this course? What were the lessons learned from the assessment?

In a department assessment retreat in January 2012, faculty discussed assessment at all levels, including in GE. Faculty decided to have an “assessment week” in which assessment activities would be conducted in all GE classes in one week (April 9-12, 2012). Faculty also developed a set of questions to assess the SLOs. We designed one question to address SLO#1 in both our core GE classes, MET 10 and MET 12.

In MET 10, the following question was posed: “Explain how a “Spare the Air Alert” is an example of a connection between science and society”.

Data was gathered from four of five sections of MET 10 & MET 12 (the online section of MET 10 did not participate in this activity). Answers were graded in three categories: “meets expectations”, “does not meet expectations”, or “partial” (typically indicating that the student had an incomplete understanding, but was not clueless). In the four sections (138 responses), 61 met expectations (44%), 25 did not meet expectations (18%), and 52 were partial (38%). More concisely, 82% of the students had at least some (correct) sense of the answer, whereas only 18% did not meet the learning outcome. In this latter group, there were some students who had clearly never heard of a “Spare the Air Alert”. In writing this report, it is not clear how many students had never heard of these alerts before taking our class, versus how many students might have been absent from class
on the day it was discussed! A sizeable number of students confused the “Spare the Air” Bay Area alert with global pollution issues.

Our interpretation is that the majority of students (113 of 138) did meet the learning outcome, at least partially. It is not clear whether instructors actively taught to this assessment question or not – it will be useful to determine this at the faculty discussion. We believe that our teaching in all sections of this course is being largely successful in teaching students about “how our physical world works” and about complex interactions between science and everything else.

(3) What modifications to the course, or its assessment activities or schedule, are planned for the upcoming year? (If no modifications are planned, the course coordinator should indicate this.)

One aspect of this assessment exercise that did not work is that instructors were given the option of delivering it in-class or take-home. We believe that an acceptable answer to our prompt involves some time to think (at least for most students), so in future we will recommend that this be a take-home exercise (e.g., for extra credit).

Part 2

To be completed by the department chair (with input from course coordinator as appropriate):

(4) Are all sections of the course still aligned with the area Goals, Student Learning Objectives (SLOs), Content, Support, and Assessment? If they are not, what actions are planned?

The chair is satisfied that this course is being delivered with full and appropriate attention to all area “B” goals, SLOs, content, support, and assessment.