

General Education Annual Course Assessment Form

Course Number/Title: [METR 112/Global Climate Change](#) GE Area: [R](#)

Results reported for: [AY 13-14](#) # of sections: [3](#) # of instructors: [2*](#)

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#1: "A student should be able to demonstrate an understanding of the methods and limits of scientific investigation". Raw data is stored in the chair's office/assessment data shelf \(COADS\).](#)

- (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. During AY 13-14, this was the week of April 14-18, 2014. In the meeting, faculty developed a set of questions to assess the SLOs. We designed a question to address SLO#1 in our SJSU Studies class MET 112 \(Global Climate Change\).](#)

[In MET 112, the following question was posed: "How do we use proxy methods to determine temperatures over the past millions of years, and what are the shortcomings of these methods?" Faculty also discussed the elements that would be needed in a student's response in order to qualify as "meeting" the SLO.](#)

[Data were gathered in four sections \(one faculty member declined/refused to gather data in two additional sections\) of MET 112 offered in Spring 14. Data gathered in the online section were not analyzed due to technical difficulties, so this report is based on the work of just two instructors in three sections. Answers were graded against the rubric of: "+1"=meets LO, "0"=partially meets the LO, "-1"=does not meet the LO. Results are tabulated below.](#)

Section	Responses	+1	0	-1
A	28	9 (32%)	13 (46%)	6 (21%)
B	23	9 (39%)	8 (35%)	6 (26%)
C	9	5 (56%)	4 (44%)	0 (0%)
Sum	60	23	25	12
Percent		38%	42%	20%

First, a reminder that data from two sections/one instructor are missing, data from the online class could not be analyzed, and data from one section are suspect (reasons confidential). So we are down to a single instructor/two sections. The tabulated results are disappointing. Only roughly 1/3 of students fully met the LO, despite the fact that the assessment exercise was conducted about 2/3 through the semester, by which time the material should have “sunk in”. Although 80% of students at least partially met the LO, it is clear that a significant fraction either did not fully understand the material, or were not able to write a convincing response.

It is interesting that this year we asked students to write in-class, whereas before this was conducted as a take-home exercise. When done at home, we have found that some responses are clearly copied from the interweb, so this year we opted for an in-class mode. We may therefore be running into one of two problems: (a) the students did not understand the material; or (b) the students can’t explain themselves through their writing very well. It would be difficult to tease out which is which – without losing considerable class time. A final and related issue is that it’s just possible the instructor never used the word “proxy” in lecture, in which case many of the students may have been seeing it for the first time. Again – difficult to know.

Overall, 80% students at least partially met the LO, but the fraction who fully met the LO is too low. This exercise has provided some useful insight into the ways we are being effective (or not) – as opposed to the ways we *think* we are being effective.

(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.)

The faculty will discuss the results above in an assessment meeting in Fall 14, and will seek ways to improve our overall performance relative to this SLO and across all sections and instructors.

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 “R” goals, SLOs, content, support, and assessment.