

General Education Annual Course Assessment Form

Course Number/Title: METR12/Global Warming

GE Area: B1

Results Reported for: AY 14-15

of sections: 2

of instructors: 2

Course Coordinator: Alison Bridger (as dept chair)

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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. The report will be electronically submitted by the department chair to the Office of Undergraduate Studies, with an electronic copy to the home college by October 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.

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

The department philosophy, instituted at a faculty retreat in January 2012, is to hold an "assessment week", during which all GE classes would be assessed. In AY 2014-2015, this week was April 6-10.

The faculty prepared two questions to assess SLO#2 in the core GE class MET-10. First the students were given the following preface to the questions:

"Measurements show that levels of CO₂ are increasing in both the atmosphere and the ocean. Over 95% of Climate Scientists believe that this is due to human activities, and also that substantial climate changes will result. Consequently, Climate Scientists want to warn society about the problem, and also want to discuss what to do about it. Recently, however, the governor of Florida banned the use of the term "climate change" in various official documents and meetings.

This is an example of science trying to influence society and also of science being influenced (via the governor's office). There are obviously political and moral issues in this case."

Given that preface the students were then asked to answer the two questions:

1. Explain (if you can!) why it is reasonable for science (i.e., Climate Scientists) to try to influence society in this case (minimum 3-4 sentences)
2. Explain (if you can!) why it is reasonable for the Governor's office to try to influence science ((i.e., Climate Scientists) in this case (minimum 3-4 sentences)

Data was gathered for two sections of MET 12, both “live” sections. The two sections had two different instructors.

The answers were graded in summer of 2015 and are tabulated below. The meaning of the scores is: “2” indicates that the student answered both questions, at least adequately; “1” indicates that the student answered one of the two questions at least adequately; “0” indicates that the student could answer neither adequately.

Section	Responses	2	1	0
A	12	6(50%)	6(50%)	0(0%)
B	33	13(39%)	20(61%)	0(0%)
Sum	45	19	26	0
Percent		42%	58%	0%

In these sections, a reasonable fraction (42%) of the students fully met the expectations of SLO #2. But more than half (58%) only partially met the expectations. Zero students were unable to meet the expectations at all, which is encouraging. Further analysis of the students who received a grade of 1 indicates that only one student answered question 2 adequately but not number 1.

There were several different reasons given by students that were inadequate to question #2. The two primary reasons were: it is a government’s responsibility to avoid panic and therefore withhold information, and combating climate change would be too costly. Other reasons included religion, bribes, and avoiding rebellion. Some answered the wrong question (i.e. government using science to influence society). The number in section B that cited economic reasons is most likely the reason that a greater percentage of wrong answers occurred in that section. It is apparent that the instructor offered economics as a reason that some people (including Florida’s governor) deny climate change, and asked the students to think critically about whether that was a valid reason. Some were able to and included that in their acceptable answers, while others were not.

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

a. None planned

(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.

a. The course meets the area Goals, Student Learning Objectives (SLOs), Content, Support, and Assessment.