General Education Annual Course Assessment Form

Course Number/Title ______METR115__________ GE Area _______________ R _______________

Results reported for AY ______2018/19______________ # of sections ______1_____ # of instructors ___1___

Course Coordinator: _______Frank Freedman (lecturer)______ E-mail: frank.freedman@sjsu.edu

Department Chair: ___Sen Chiao__________________  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 to <curriculum@sjsu.edu>, 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 GELO(s) were assessed for the course during the AY?

Student Learning Outcome #3 (SLO3): “A student should be able to apply a scientific approach to answer questions about the earth and environment.”

(2) What were the results of the assessment of this course? 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 2018-2019, this week was April 15-19.

The instructor of METR115 prepared an end-of-semester questionnaire to assess SLO#3 in the core GE class METR115. In all, the students were asked to provide answers to five questions:

- Describe fire-behavior triangle and its most variable aspect.
- Describe fire danger, pertaining to National Fire Danger Rating System
- How is fuel moisture determined?
- Why are wildfires in California so dangerous?
- Describe how animals affection fire behavior.

The responses to the above questions were graded individually, ranging from 0 (no questions correct) to 5 (all questions correct). The following table shows student scores for each class section.

<table>
<thead>
<tr>
<th>Course Section</th>
<th>Score 5</th>
<th>Score 4</th>
<th>Score 3</th>
<th>Score 2</th>
<th>Score 1</th>
<th>Score 0</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>3</td>
<td>5</td>
<td>7</td>
<td>8</td>
<td>8</td>
<td>0</td>
</tr>
<tr>
<td>% of Total</td>
<td>9.7</td>
<td>16.1</td>
<td>22.6</td>
<td>25.8</td>
<td>25.8</td>
<td>0</td>
</tr>
</tbody>
</table>
METR115 is a very recent addition to the department’s Area R courses, and this is the first time SLO3 has been assessed. From the data, it is seen that roughly half class answered the majority of questions correctly (3 or higher), with roughly a quarter answering all or all but one correctly (4 or 5). In reading through responses, it is clear that students made good, reasoned attempts to answer all questions, and overall their answers exhibited new knowledge about fire behavior that would not be known without taking the class. The percentages of students getting 4 or 5 was lower that we hoped, but we anticipate this will improve in future semesters as the class is refined.

Overall, the assessment shows good progress in students applying concepts of fire weather to meet SLO3 objectives.

(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.)

a. No modifications to the course or assessment schedule are planned. Some modifications to assessment activities based on the results of assessment of SLO3 will be considered, as described in items below.

b. We will consider how to craft an assessment activity so that it carries some weight for the student grades so that the students take the assessment seriously. While most of the answers to this assessment appeared reasonably thought through, more thorough answers to better gauge assessment should result if graded coursework and assessment were directly linked. This is something we are planning throughout out our GE assessment courses (METR10, METR12, METR112, METR113 and METR115).

c. We will develop assessment questions about the role climate change of fire behavior and how climate and forest management practices may influence fuel structures throughout the western US.

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 (GELOs), 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.

(5) If this course is in a GE Area with a stated enrollment limit (Areas A1, A2, A3, C2, D1, R, S, V, & Z), please indicate how oral presentations will be evaluated with larger sections (Area A1), or how practice and revisions in writing will be addressed with larger sections, particularly how students are receiving thorough feedback on the writing which accounts for the minimum word count in this GE category (Areas A2, A3, C2, D1, R, S, V, & Z) and, for the writing intensive courses (A2, A3, and Z), documentation that the students are meeting the GE GELOs for writing.

Feedback on writing is given to students after each assignment, with suggestions on how to improve. A noteworthy feature is that students tend to do well when there is a focused assignment (e.g. limiting wordiness), but not quite so well when they have to put it together in a longer assignment.