**General Education Annual Course Assessment Form**

**Course Number/Title:** 107, Prehistoric Life

**GE Area:** R

Results reported for AY _2013-14_ # of sections _6_ # of instructors _1_

**Course Coordinator:** Robert Miller (Jonathan Hendricks on sabbatical) E-mail: Robert.b.miller@sjsu.edu

**Department Chair:** Robert Miller

**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 will be able to distinguish science from pseudoscience.

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

Since this SLO was last formally evaluated in 2011, we have modified the essay used for this objective and added a quiz designed to specifically address science and pseudoscience, and better resolve student success.

In 2013-2014, students wrote two, 2.5-page essays for the class. For one essay, students chose a scholarly article and both summarized the article in their own words and critically evaluated the validity of their sources of information. The instructor gauged whether students knew the difference between science and pseudoscience, and could identify primary sources of scientific information, by the articles they chose. Depending on the section, approximately 90-94% of students found articles that were truly scholarly (i.e., from scientific journals).

A more direct approach to quantifying student knowledge of the difference between science and pseudoscience was the implementation of a quiz that directly addressed this SLO. The questions were individually tallied for the best detail concerning the data (see table below):

<table>
<thead>
<tr>
<th>Question Title</th>
<th>Total</th>
<th>% Correct</th>
</tr>
</thead>
<tbody>
<tr>
<td>Of the following, which would be the best source of direct scientific information?</td>
<td>241</td>
<td>0.83</td>
</tr>
<tr>
<td>The scientific method consists of several steps, which includes the formation of a hypothesis, which means...</td>
<td>241</td>
<td>0.94</td>
</tr>
<tr>
<td>A theory is well-defined, and describes one possibility of how or why something occurs. (T/F)</td>
<td>241</td>
<td>0.90</td>
</tr>
<tr>
<td>Which of the following is NOT pseudoscience?</td>
<td>241</td>
<td>0.75</td>
</tr>
<tr>
<td>Which of the following is NOT indicative of Pseudoscience?</td>
<td>241</td>
<td>0.92</td>
</tr>
</tbody>
</table>
(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.)

In light of the quiz results, it appears the students could use a more expanded lecture about the wide spectrum of pseudoscience they encounter on a regular basis (see results for question 4). Otherwise, the results indicate a good overall understanding of the SLO during 2013-2014 and no major changes are planned in the near future.

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?

All sections are still aligned with Area R goals and student learning objectives. No action is planned.