General Education Annual Course Assessment Form

Course Number/Title: ANTH 160 Reconstructing Lost Civilizations  
GE Area: R

Results reported for AY 2013-2014  
# of sections: 7  
# of instructors: 3

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Department Chair: Chuck Darrah  
College: Social Sciences

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?

   Student Learning Objective #3: Within the particular scientific content of the course, a student should be able to demonstrate an understanding of the methods and limits of scientific investigation.

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

   This critical SLO was judged by the instructors to have been problematic in the past and extra effort was applied based on previous assessments to address the content and delivery of related learning materials. A special focus on hypothesis formulation and testing was implemented. Instructors sought to build a broader framework for student comprehension of the scientific method uniformly across sections. Instructors agreed that shortcomings in comprehension of scientific method interfered with effectively teaching the other SLOs for the course, in particular, how theories of human interaction with environment were interpreted. In part this is due to most students in ANTH160 having a limited background in scientific-based courses.

   The instructors built a framework for understanding the interactions of civilizations and their environments through lectures, readings, and select videos. These methods of delivery served as a platform for critical discussions and writing assignments on how the scientific method was applied and exposed some of the limitations scientific investigations must overcome. The class discussions addressed the concept of hypothesis formulation and testing in the context of environment/human exchanges. Both course content and assessment criteria centered on the scientific development and testing of hypotheses.

   Examples include: The texts present multiple theories concerning the role played by environment in human evolution and migrations; the role of global warming during the Neolithic on cultural development; the impacts of environmental change on the decline of civilizations (i.e. prolonged drought and Mayan collapse), or the necessary conditions for the rise of agriculture in human history. Students were given assignments requiring a critical assessment of the scientific evidence used to support the varied hypotheses.

   Assessment of content knowledge and conceptual understanding in all sections followed a three point evaluation strategy: 1. group discussions, 2. written essays and term papers addressing specific cases, 3. Objective questions and one or more essays on the Final exam that required students to analyze the hypotheses presented in the films shown in class. For example, the Film: Stone Age Atlantis, uses high tech approaches to reconstruct past environments. Students observed the combining of traditional archaeology with forensics, virtual reality, and geophysics to collect multiple data sets associated with a single scientific
problem—ancient global warming. Students were then asked to assess the data and the conclusions being derived by scientists in terms of implications for the present.

Overall, instructors judged that the emphasis on hypothesis formulation played a significant role in student performance on understanding scientific processes and that students communicated the process of scientific method effectively. The close alignment between the discussions, readings, and final assessments allowed students to demonstrate comprehension. This finding held even though instructors used different films. The use of student-driven analysis of the scientific approach to case studies of their own choosing enabled students to be creative in their thinking about the relevant connections between environment and human societies. Instructors felt that by the end of the semesters students could effectively communicate the process of scientific method and creatively think about the types of data sets used by archaeologists bearing on questions about the human-environment interaction, including limitations, such as, fragmentary evidence, incomplete data sets, and different interpretations. Statistical reasoning, however, continues to be a weak area for students. There also appear to be persistent misunderstandings regarding the limits of scientific processes.

(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.)

Modifications will be minor and more in the character of sustaining a focus on scientific method than on changes. For the coming academic year emphasis will again be placed on this critical SLO as it is considered by the instructors to be a keystone for the other SLOs of the course. Course content and aligned assignments addressing scientific methods will be made more robust in the hope that it will have a significant impact on the assessment of the other SLOs of the course. Instructors will increase the use of statistics in the context of scientific reasoning. The exact approach has yet to be determined. Term papers and final exam questions will again be used to assess student proficiency.

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?

I have reviewed the assignments and their use in assessment with the GE coordinator and can confirm that they are tightly connected to the SLO and very well developed. Likewise, this is a course taught by a stable team of instructors who agree in advance on the assessment assignments and the interpretation of findings, so I am satisfied that the sections are offered consistently.