General Education Annual Course Assessment Form

Course Number/Title: Biology 10             GE Area: B2

Results reported for AY 2014–2015  # of sections: 10  # of instructors: 4

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Department Chair: Dr. Jeffrey Honda  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 SLO(s) were assessed for the course during the AY?

   SLO 3: Students should be able to use the methods of science, in which quantitative, analytical reasoning techniques are used.

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

   Assessment of SLO 3 was done in a variety of ways in this course. The most prominent three assignments were: Microbial Life Identification, Vascular Plant Identification, and The Scientific Method: Polar Ice Caps.

   The Microbial Life Identification and Vascular Plant Identification were two similar assignments that asked students to research and identify a set of 10 organisms based on images alone. For visually impaired students, accommodations were made to ensure they too could benefit from successfully completing the assignment. Students were required to use dichotomous keys and online research to identify each organism’s genus and species. Out of the 845 students who took Biology 10, roughly 74% had a grade C or better on the Microbial Life Identification activity and roughly 84% had a grade C or better on the Vascular Plant Identification activity.

   The Scientific Method: Polar Ice Caps was an activity that had students examine real NASA satellite imagery data of the polar ice caps, with accommodations being made for visually impaired students. The visual data was accompanied by 40 years of measurement data on the size of the polar ice caps. Students were then asked to follow the scientific method. Based on their observations of the data provided, they were required to deduce a hypothesis and create an experiment to test that hypothesis. They were required to be very specific in their experimental methodology, based on their independent research, and were instructed that they had a limitless budget to work with. Students were also asked to include specific ideas on how they could
disseminate their findings to fellow scientists and the global community. Out of 845 students, 92% had a grade C or higher on this assignment.

(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 online section, taught by Poffenroth, will continue to be part of the Chancellor’s CSU Course Match Program, which allows students from any CSU to enroll in the course for credit. *Write, Present, Create: Science Communication for Undergraduates* was also added to the curriculum to help support student’s in their research activities, such as those used to assess SLO3 and their literature review papers.

**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?

To the best of my knowledge all sections are aligned with respect to area goals, SLOs, content, support and assessment. While there are many instructors for this course, there is a course coordinator involved with all sections to ensure that they maintain consistency across all sections.

(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 SLOs for writing.

NA-Biol 10 is an Area B3 course