General Education Annual Course Assessment Form

Course Number/Title: Biology 10, The Living World  
GE Area: B2

Results reported for AY: 2017-2018  
# of sections: 13  
# of instructors: 5

Course Coordinator: Mary Poffenroth  
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Department Chair: Dr. Jeff 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?

Across all instructional faculty, there was a 10 to 20% failure rate on SLO 3. This is a common occurrence in Bio 10, a non-majors general education course that serves almost 1,000 students per year. Many of those failures are attributed to non-submission. Even with this failure rate, at least 70% of students in each section were able to achieve competence with a grade C or higher in the varied assessment tools used.

Many instructors used digital based adaptive learning platforms such as McGraw Hill and Cengage to keep the assessments of quantitative and analytical reasoning fresh. Biology 10 serves such an enormous amount of students each year, it can be challenging for individual instructors – especially those with no grader – to maintain a steady stream of innovative, academically robust content. Publisher resources help to alleviate some of that burden. The themes of genetics, DNA, and climate change modeling were common among all faculty in the topics associated with this assessment. However, there is still great reservations among some faculty that the large class size prevents the deep interaction necessary to push the average student into true mastery of SLO3. Those faculty that were vocal about these reservations have also committed to working towards alternate solutions and applying different pedagogical practices to compensate.
(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.)

Many instructors still struggle with getting students to use reputable resources and discern between trustworthy sources. A few of the instructional faculty have committed to creating stronger rubrics and devoting more time to the cultivation of this crucial skill. All instructors expressed the importance of sourcing reputable materials as a hallmark of SLO 3 – the methods of science, but are concerned their efforts are not producing the desired results. A sampling of the proposed modifications include: increased robustness of grading rubrics, redesign of slide decks, and an increased focus on resources throughout the entire term. Lecturer Poffenroth is currently working close with JoVE, a peer reviewed video based journal organization, to attempt a zero materials cost version of Biology 10 to launch in Winter or Spring 2019.

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?

Yes

(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.

N/A