General Education Annual Course Assessment Form

Course Number/Title: Biology 21  GE Area: B2 and B3

Results reported for AY 2014 – 2015  # of sections: 4  # of instructors: 1

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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?

Two activities were used to assess SLO 3: Your Lung Capacity and Pineapple Enzymes. In the “Your Lung Capacity” activity students were asked to use a spirometer to measure their own tidal volume (TV), expiratory reserve volume (ERV), and inspiratory reserve volume (IRV). Disposable BioFilters were provided to each student to help decrease the chances of spreading any air borne illness. After students got their spirometer results, they were then asked to calculate their residual volume and total lung capacity. Students then anonymously marked down their age, biological gender, height and their results on a clipboard stationed at the spirometer for others to use in the next section of graphing. Students were then asked to interpret their own data, compare it to the predicted vital capacity, and graph their results along side a few of the anonymous students of the same biological gender to see if there was a correlation between age and height. Of the 839 students, 92% achieved a grade C or higher on this activity.

The second activity, Pineapple Enzymes, allowed students to use the scientific method to compare the results of their experiment using fresh and canned pineapple on a petri dish of Jell-O. Students created three sections on their petri dish; one for the fresh pineapple chunk, one for the canned pineapple chunk and one for the control. Before proceeding with the experiment, they had to draft a hypothesis and null hypothesis for the outcome and have it checked by a lab ISA. After 45 minutes, they recorded their observations of how the Jell-O reacted, or didn't react, with each of their variables. They then needed to provided reasoning, based on our work with enzymes, of what
mechanisms were behind the digestion results they were observing. Of the 839 students, 87% achieved a grade C or higher on this activity.

(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.)

No modifications to the course are planned at this time.

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. There is only one instructor for this course.

(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 - This course is an Area B2/B3 course.