General Education Annual Course Assessment Form

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

Results reported for AY: 2016-2017
# of sections: 12
# of instructors: 5

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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 2: Students should be able to demonstrate ways in which science influences and is influenced by complex societies, including political and moral issues.

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

GE course instructors are constantly striving to engage students by making the content material directly applicable to their lives. This allows for many opportunities to assess SLO 2, since students are usually intrigued by the connection between humans, science, and navigating the socio-political landscape, most especially during this politically volatile academic year.

A few innovative examples that instructors have implemented in their courses to address SLO 2 are as follows:

- Students researched and described the role of restriction enzymes and cloning vectors in the biotech industry. They then reported back on the advantages and disadvantages of the use of transgenic plants and animals in written form as well as group share.

- The ethics of reproductive cloning as it applies to the conservation of endangered species was examined and applied to discussions and written findings.

- A research-based examination of global environmental issues such as climate change, pollution, resource overconsumption and the limitations of humans to reverse these problems was executed in class and online. The negative feedback between our exploitation
of natural resources and our own survival was specifically highlighted for students to support deeper connections between our political choices, our personal and communal moral imperatives, and how our behavior fits into the unspoken rules of our society.

Roughly 80 to 90% of students across all 12 sections and 5 instructors were able to master SLO2 with a grade C or better. As with many general education courses, the rate of students that failed to achieve a marginal level of mastery (C- or below), was around 10 to 15% per section. This was usually due to the students not participating in class and choosing to not submit the required assignments that were used for assessment, as opposed to the students failing specifically at mastering this SLO.

The most common struggle for instructors regarding the assessment of this SLO was class size. Due to the nature of the course, sections tend to be large from 60 to over 125 students. This does impact the ability of each instructor to more deeply examine beyond the already methods of assessment including pair share, multiple choice quizzes, and short writings.

(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.)

Graders were provided in some of the larger sections of Bio 10 during AY16/17. There was much positive feedback regarding this as it allowed for a deeper exploration of SLO2 through probing short answer and essay style questions that would be rendered impossible for a solo instructor. Instructors that had graders for AY 16/17 specifically requested, if budgets allowed, to have them again in AY17/18.

Additional changes mentioned by multiple instructors was a deeper exploration of fact based research. This included a more consistent use of primary literature in activities and further examination of the role of science in American society, government and politics. Most instructors have observed the current state of science in the United States over AY16/17 and are energized to ensure Bio 10 students are getting the tools they needs to find reputable information for themselves, think critically about the problem at hand, and – hopefully – apply this knowledge before making a decision about issues and events as they relate to science and the geo-political spectrum.

Lastly, Biology 10 – Online (Poffenroth) was submitted and approved for QM Certification over the summer, 2017. QM certification is an independent review of a course by fellow CSU faculty outside of SJSU. A QM Certified course has had its curriculum deeply audited for quality and its ability to support student success, engagement, and accessibility.

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.

Presently, this issue not applicable to our courses in Biological Sciences. Of the above areas listed, we have courses in Area R, S, and Z. None of these courses have sections over the 40 maximum students as mandated by University policy and are receiving adequate feedback. Area R may require more student demand in the future, however, we envision adding more sections rather than making larger sections. Area Z is capped at 25 students: our syllabi should demonstrate that students are meeting GE SLOs for writing as assignments are clearly documented.