General Education Annual Course Assessment Form

Course Number/Title: CHEM 131B
GE Area: R

Results reported for AY 2014-2015 # of sections 2 # of instructors 2

Course Coordinator: Laura Miller Conrad and Elizabeth Pollom
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Department Chair: Karen Singmaster
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 will be able to distinguish science from pseudo-science.

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

The learning objective was assessed using exam questions in the FA 2014 and SP 2015 sections of CHEM 130A. In the fall, 69% of 49 total students showed mastery of the learning objective by attaining ≥70% on the problem that was assessed. In the spring, 92% of 60 total students showed a mastery of the learning objective by attaining ≥70% on the problem that was assessed.

FA 2014 question:

Increased consumption of unsaturated oils like olive oil is associated with increased [HDL] and decreased [LDL]. People initially promoted partially hydrogenated vegetable oils as being healthier than saturated animal fats. What is the problem with this claim?

SP 2015 question:

A friend is trying to lose weight, so he is on a low-carb diet. He tells you, however, that "the Internet said" he is allowed eat all the bacon he wants because it does not contain refined sugar. He says that he just got his cholesterol checked, and that he does not have increased cholesterol. He concluded, therefore, that he has no risk of heart disease from his new diet choice.

Why is total blood cholesterol concentration, alone, a poor measure of your friends’ heart disease risk.

a. Cholesterol is the product of glycogen break-down and is not affected by this new diet
b. Total blood cholesterol does not consider ratios of LDL and HDL in the blood

c. An increase in total blood cholesterol signifies a decrease in heart disease risk

d. Heart disease risk is linked to carbohydrates alone, not cholesterol

e. Cholesterol is the precursor to eicosanoids, so it can be regulated by Aspirin but not by a low-carb diet.

(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 are planned.

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.

Not applicable because writing requirement in Chem 131B, which is a capstone lab course, has a enrollment cap of 16 students.