General Education Annual Course Assessment Form

Course Number/Title: Math 19 - Precalculus  
GE Area: B4

Results reported for AY: 2014 - 2015  
# of sections: 12  
# of instructors: 9

Course Coordinator: Marilyn Blockus  
E-mail: marilyn.blockus@sjsu.edu

Department Chair: Bem Cayco  
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: Mathematical Concepts courses should prepare the student to arrive at conclusions based on numerical and graphical data.

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

   Assessment data was collected from 12 of the 13 sections of Math 19 offered during the 2014 – 2015 academic year.

   Using embedded questions on the final exam, we found that 61.5% of the 616 students who took Math 19 performed at the C level or higher on questions related to SLO 3. This is slightly below the typical performance of about 67% of Math 19 students performing at the C or better level in the past.

   Sample questions used for this assessment:

   1. The half-life of radium-226 is 1600 years. Suppose we have a 28-mg sample. (a) Find and graph a function that models the mass remaining after t years. (Round rate r to three significant figures.) (b) How much of the sample will remain after 4500 years? (Round your answer to the nearest whole number.)

   2. Refer to the graph of function f given below to answer the following (on the exam, the graph is given): (a) domain of f, (b) range of f, (c) minimum value of f, (e) is f one-to-one? (f) sketch the graph of f(x – 2).

   3. The graph of y = f(x) is shown below (the graph is given on the exam). (a) Find f(2), (b) Find f⁻¹(3), (c) Find the intervals on which f(x) is decreasing, (d) Find the coordinates of the local minimum, (e) Find the range.
(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.)

We have not planned any modifications to the course or assessment activities or assessment schedule for Math 19.

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, all sections of Math 19 are still aligned with the B4 area goals.

(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.

This does not apply to Math 19 in Area B4.