

COURSE SLO ASSESSMENT REPORT, SCC

Department: Mathematics Course: 170—Pre-Calculus

Year: 2011 Semester: Fall

1) Outcome to be assessed	2) Means of assessment and criteria of success	3) Summary of data collected	4) Analysis of data	5) Plan of action/what to do next
<p>1. Use algebraic, numerical and graphical processes to manipulate and analyze equations, inequalities, and functional relationships</p>	<p>Pre-Calculus students in Fall 2011 were given a 2.5 hour final exam with 24 questions. . Four problems addressing SLO #1 were evaluated with the following rubric:</p> <p>Advanced: The concepts are clearly understood and work was shown in a complete, logical and correct manner.</p> <p>Competent: The concepts are mostly understood and work was shown in a complete, logical and mostly correct manner.</p> <p>Emerging: At least half of the concepts were understood, though some errors were made and/or the work was insufficient.</p> <p>Deficient: Less than half of the concepts were understood and/or serious errors were made.</p>	<p>A random sample of 10 exams from each of three sections was chosen, so 30 exams out of 72 were assessed.</p> <p>The first question was a logarithmic equation. The percents in order of ACED were 17, 33, 10, and 40 with 50% of students competent or better.</p> <p>The second question was a system of non-linear equations. The percents were 43, 23, 13, and 20 with 66% of students competent or better.</p> <p>The third question was a trigonometric equation. The percents were 20, 33, 17, and 30 with 53% of students competent or better.</p> <p>The fourth question was a rational inequality. The percents were 17, 13, 7, and 63 with 30% competent or better.</p>	<p>The results of the first three questions were similar across sections. The last question varied from 60% competent or better to 10% competent or better. Success seems dependent on how much the instructor stresses that material.</p>	<p>Information about the results of assessment is sent out each semester along with information about the final exam. The rational inequality is specifically mentioned because it is covered early in the semester and students need to be reminded of the concepts. This semester, I might send out an additional email stressing that one question because the skills are needed in Calculus.</p> <p>These results are being sent out to the department and will be discussed in a department meeting.</p>