Assessment Report for a GE Outcome

**Area:** Mathematics

**Outcome Text:** Given the description of real-world problem, students construct correct equations and/or inequalities to represent the problem and determine the correct solution or set of solutions.

**Semesters Reported:** Spring 2012, Fall 2012

**Inferences:** Data was extracted from three mathematics courses in Spring: MATH 130, 180, and 190. In addition to these three courses, MATH 050 was also considered in the Fall. The average proficiency rate for these courses (not including 050) were very similar for both Spring and Fall terms, at 68.5% and 66.1% respectively. The rate was much lower for MATH 050 at 47.7%. These rates are low, likely due to a number of factors. For many students, MATH 050 (Elementary Algebra) is the first mathematics course they take at the College, and they may not be prepared for the amount of time they will need to devote to mastering the material relative to high school. The significant improvement in higher-level courses may simply be a consequence of experience. Other issues may relate to the fact that many students do not have a good command of the language and may misunderstand the problems.

**Action Plan:** Rather than taking any specific action as far as changes to instructions, we ought to first identify whether or not our inferences are correct. We should try and identify some of the specific factors which lead students to perform as poorly as they have. Past experience has shown that this particular skill is difficult for many students to master, so it is possible that performance will remain unchanged, even with focus and effort towards improving student proficiency.

**Resource Requests—Local:** No additional physical or financial resources are required. However, we may need to allocate additional meeting time towards meeting this outcome.

**Resource Requests—External:** None.