Santiago Canyon College

Mathematics Department

Math 140, College Algebra

Fall 2011

Student Learning Outcome Assessment

Math 140 Student Learning Outcomes (Spring 2010)

1. Use algebraic, numerical, and graphical processes to manipulate and analyze equations, inequalities, and functional relationships.

2. Formulate and analyze mathematical models for a variety of real-world phenomenon and use mathematical and technological tools to determine the veracity of the model.

COURSE SLO ASSESSMENT REPORT, SCC

Department: ___*Mathematics*___ Course: ___*Math 140, College Algebra*___

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
Use algebraic, numerical, and graphical processes to manipulate and analyze equations, inequalities, and functional relationships.	1) Randomly select 5 exams from each section. 2) Score #3 on each exam using the attached 5-point rubric. 3) Success = 3, 4, or 5	A total of 40 exams were scored. Score # % 1 8 20.0% 2 4 10.0% 3 12 30.0% 4 9 22.5% 5 5 17.5%	70% of the students scored 3, 4, or 5 on this question about computing the average rate of change and interpretation of the same. This is an acceptable result, but the same percentage as Spring/Summer 2011. Most of the papers scored 1 were either blank or demonstrated no understanding or effort.	1) Inform department of results 2) Include results in information disseminated to Math 140 instructors in subsequent semesters.

Math 140 College Algebra, Fall 2011, SLO Assessment

Five-Point Rubric

<http://www.mvhs.fuhsd.org/i-heng_mccomb/par/writing/general/hhsdept/am.htm>

5 Exemplary; Complete Understanding

- Work at a very high level of proficiency.
- Clear, insightful, thorough, discerning and demonstrates an in-depth understanding.
- Polished, refined and consistently well-crafted.
- Contains no significant factual errors.

4 Thoughtful; clear understanding

- Work at an above average competency level.
- Work shows thoughtful grasp of the content studied.
- Contains illustrative material that is supportive.
- Contains no significant factual errors.

3 Developing; literal

- Work at an average competency level.
- Demonstrates a grasp of the whole, but is simplistic or literal.
- Some effort evident, yet it does not meet all specifications of the challenge.
- Contains some factual errors that represent a flawed understanding of the topic

2 Limited; barely acceptable

- Work barely meets the basic requirements of the challenge.
- Work shows minimal understanding of the content's key ideas.
- Limited and is carried out with little commitment to precision and excellence.
- Contains significant factual errors.

1 Minimal; unacceptable

- Work at a very low competency level.
- Little or no understanding of the challenge or the task.
- Disjointed and unorganized.
- Contains many significant factual errors.

Assessment Cycle – Math 140, College Algebra

All SLOs should be assessed at least once within a three-year cycle. A complete assessment cycle includes: gathering assessment data, analyzing assessment data, sharing results within the department or discipline, and reporting results. In the matrix below, indicate the term in which each of your course SLOs will be assessed (inclusive of the entire assessment cycle).

SLO	Data Gathered	Data Analyzed	Data Shared Improvement Dialogue	Results Reported	Changes Implemented
SLO 1 Use algebraic, numerical, and graphical processes to manipulate and analyze equations, inequalities, and functional relationships.	Fall 2011	Spring 2012	Spring 2012	Spring 2012	Fall 2012
SLO 2 Formulate and analyze mathematical models for a variety of real-world phenomenon and use mathematical and technological tools to determine the veracity of the model.	Spring 2012	Fall 2012	Fall 2012	Fall 2012	Spring 2013