

## Course-Level Student Learning Outcome (SLO) Assessment Plan

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Division/Department: Math & Physics Division

Course to be assessed for SLOs in Fall 2010: MTH 092

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1. What student learning outcomes (SLOs) will you assess in Fall 2010? Please identify at least 2 course goals (CG), relevant general education goals (GEG), and/or applicable program goals (PG) from your ECC Course Outline SLO Assessment Summary Sheet.
    - SLO #1: CG 1: Demonstrate knowledge of the fundamental concepts and theories from algebra and geometry.
  2. For each SLO given above, what assessment methods (rubrics, assignments, tests, classroom assessment techniques, portfolios, surveys, etc.) will you implement in Fall 2010 to gather evidence of student learning related to the outcome? Identify each type of assessment method included below in your lists – direct (D) or indirect (I)? student learning outcome (SLO), process (P), input (In), or context (C)? summative (S) or formative (F)? qualitative (QL) or quantitative (QN)? Objective (Obj) or subjective (Subj)?

Assessment methods to be used to assess SLO #1 and #2:

- (1) We plan to continue to blue-print the MTH 092 cumulative final exam. The blueprinting results from academic year 2009 – 2010 will be used to improve the blue-printing process of this academic year. Multiple choice questions on the final exam will determine the extent of student acquisition of various MPOs from MTH 092. This assessment method is D, SLO, S, QN, and Obj.
- (2) At the end of the semester, each faculty member who taught one of the selected sections will be asked to submit a sheet with the following information for each student in their section: student name, student ID, grade earned, number of absences, and whether the student used the Online Homework package. Using this information, we plan to assess the following:
  - (a) if there is a correlation between number of absences and final grade. This assessment method is I, P, S, QN, and Obj.

- (b) if there is a correlation between using the Online Homework package and final grade. This assessment method is I, P, S, QN, and Obj.
- (3) An anonymous student questionnaire will be administered in all selected sections. The questionnaire will ask questions that relate to the students' attitudes toward math, their classmates, and their professor. It will also address the students' perception of their progress and standing in the class. The responses will be analyzed to determine whether there is a significant correlation between students' attitudes toward math, their feelings towards their classmates and professor, and their final grades in MTH 092. This assessment method is I, In, S, QN, and Subj.
3. For each SLO given above, identify *when* each assessment method will be used in the course in Fall 2010; e.g., draw up a timeline for the course which indicates when every SLO assessment method named above will be used throughout the semester (Week 1 – Week 16).

Timeline for all assessment methods:

- (a) **November:** Student questionnaire will be administered to the students in the 10 sample sections. The results will be tabulated and analyzed by the two course coordinators, Eman Aboelnaga and Barbara Satterwhite, and SLOAT support member Alvin Williams.
- (b) **Week of December 20:** The instructors of the sample sections will be instructed to submit to the two course coordinators a complete list of all their students, their student IDs, their final grade for the course, # of absences in the class, and if the student participated in Online Homework for the course. The coordinators will then organize this data into an Excel spreadsheet, which will be sent to Alvin Williams to have a statistical analysis done.
- (c) **Week of December 20:** The results of the MTH 092 multiple choice questions from the final exam will be sent to Alvin Williams to have a statistical analysis done.
4. How many sections of the course or how many students will be involved in using these assessment instruments and collecting SLO assessment data in Fall 2010? Please identify your sample size by number of classes (sections of the course) or number of students. (REMEMBER: A 5% error margin in your analysis is ensured if you sample 278 out of 1000 students, 217 out of 500 students, 184 out of 350 students, 132 out of 200 students, 80 out of 100 students, or 44 out of 50 students. – taken from p. 48 of *Assessing Student Learning: a common sense guide*, 2<sup>nd</sup> edition by Linda Suskie)

10 sections of MTH 092 in Fall 2010 with approximately 30 students in each section (a total of approximately 300 students) will be involved in data collection.

5. Using ~~representative random~~ sampling, which sections or which students will be involved in using these assessment instruments and collecting SLO assessment data in Fall 2010?

<i>Eman Aboelnaga</i>	<i>Sections 006 and 028</i>	<i>~60 students</i>
<i>Barbara Satterwhite</i>	<i>Sections 009 and 012</i>	<i>~60 students</i>
<i>Susan Gaulden</i>	<i>Sections 011 and 019</i>	<i>~60 students</i>
<i>Nasser Moheb</i>	<i>Sections 003 and 014</i>	<i>~60 students</i>
<i>Gordon Nanton</i>	<i>Section CW2</i>	<i>~30 students</i>
<i>Shohreh Andresky</i>	<i>Section 3WC</i>	<i>~30 students</i>