

Mathematics Program Assessment Plan for Fall2010-Spring2011 Cycle

I. Program Student Learner Outcomes to be Assessed

PSLO #1

Demonstrate proficiency in fundamental mathematical skills such as differentiation and integration of elementary and transcendental functions (single and multivariable), and application of related concepts.

PSLO #3

Demonstrate proficiency in the use of logical reasoning and critical thinking to construct proofs and solve problems.

PSLO #4

Demonstrate mastery of the notions of vector spaces, linear transformations, matrices and their determinants, and applications in solving linear systems.

PSLO #7

Demonstrate effective use of technology tools to support mathematical reasoning and solve mathematical problems arising from a variety of application domains.

II. Assessment Tool Instruments to be Used

Embedded course student learner outcome based questions in:

1. Tests
2. Projects
3. Portfolios
4. Cumulative Final Examination

III. Rubrics to be used

Scoring Rubric Scheme I

If the student:

- Shows neither the mathematical concept nor the process in arriving at a wrong solution to a problem, then the student earns 0% of the total score of the question

- Shows only the mathematical concept or process in arriving at a wrong solution to a problem, then the student earns 25% of the total score of the question
- Shows neither the mathematical concept nor process in arriving at a correct solution to a problem, then the student earns 50% of the total score of the question
- Shows only the correct process or the mathematical concept in arriving at a correct solution to a problem, then the student earns 75% of the total score of the question
- Shows both mathematical concept and process in arriving at a correct solution to a problem, then the student earns 100% of the total score of the question

Scoring Rubric Scheme II

Score	Criteria
3	Response to each component of the problem is complete and accurate. All instructions followed completely.
2	Response to most but not all components of the problem is complete. Some errors were made.
1	Response to all components of the problem only partially correct.
0	Response unrelated to all components of the problem. Nothing is correct.

Overall Rating

Average % of any chosen scoring scheme	Overall Rating	Student Status
90-100%	3 - Excellent	Proficient
70-89%	2 – Good (or Satisfactory)	
50-69%	1 – Fair (or Needs Improvement)	Not Proficient
0 – 49%	0 – Poor (or Unacceptable)	