Kent Core Learning Outcomes Assessment Plan

Course number, title (credit hours): 14002, Basic mathematical Concepts II, 4 credit hours

Department/School: Mathematical Sciences

Proposed Kent Core Category: (please check appropriate box)

- ☐ Composition
- ☒ Mathematics and Critical Reasoning
- ☐ Humanities and Fine Arts
  - ☐ Humanities
  - ☐ Fine Arts
- ☐ Social Sciences
- ☐ Basic Sciences
- ☐ Additional

A sample syllabus must accompany the plan.

I. Kent Core learning objectives	**II. Ohio Transfer Module learning objectives**	**III. What corresponding learning outcomes are included in this course?**	**IV. What method(s) will be used to assess student learning?**	**V. What evidence of this assessment will be presented annually for the five-year Kent Core review of this course?**
Acquire critical thinking and problem solving skills	Evaluate arguments in a logical fashion; competence in analysis and logical argument	Students will be able to understand the concepts necessary to find perimeter and area of polygons as well as surface area and volume for polyhedra. Students will find the mean, median, mode, variance and standard deviation of the data.	Students will solve a set of problems embedded in the final that are the same across all campuses	Every year the faculty will evaluate the proportion of correct responses and will adjust the course as/if appropriate
Apply principles of effective written and oral communication	Communicate effectively			
Broaden their imagination and develop their creativity				
Cultivate their natural curiosity and begin a lifelong pursuit of knowledge				
Develop competencies and values vital to responsible uses of information and technology				

MATH 37

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Engage in independent thinking, develop their own voice and vision, and become informed, responsible citizens	Engage in our democratic society; be active and informed citizens; develop a disposition to participate in and contribute to our democracy			
Improve their understanding of issues and behaviors concerning inclusion, community and tolerance	Acquire an understanding of our global and diverse culture and society			
Increase their awareness of ethical implications of their own and others' actions				
Integrate their major studies into the broader context of a liberal education				
Strengthen quantitative reasoning skills				
Understand basic concepts of the academic discipline	Employ the methods of inquiry characteristic of natural sciences, social sciences and the arts and humanities			

MATH 38

ASSURANCES:

By submitting this proposal, we assure that:

1. The faculty members who teach this course have agreed to the learning outcomes and assessment methods.
2. Assessment results will be reviewed annually by the faculty and submitted to the University Requirements Curriculum Committee.
3. Modifications to the course and/or assessment plan will be based on the annual review.

Department Chair/School Director (or designee) Signature

11-18-12
Date

MATH 39

SYLLABUS

MATH 14002 – Basic Mathematical Concepts II

(4 Credit Hours)

Catalog Information:

Basic Concepts of probability, statistics, and geometry. This course may be used to satisfy the LERs.

Prerequisite: MATH 14001.

Text: *Mathematics for Elementary Teachers: A Contemporary Approach,* by Musser, Burger, & Peterson

Topics:

- Statistics (4 days)
  - types of graphs used to display data
  - measures of central tendency and variation
- Probability (7 days)
- Plane Geometry (9 days)
- Solid Geometry (8 days)
- Euclidean Constructions (9 days)
- Coordinate Geometry (8 days)
- Transformation Geometry (5 days)

Review for tests (4 days)

Tests (4 days)

Review for Final Exam (1 day)

MATH
40