CORE CURRICULUM COMPONENT APPLICATION

CORE COMPONENT AREA	Mathematics
COURSE TYPE	Existing Core
DEPARTMENT	Mathematics and Engineering
COURSE RUBRIC & NUMBER	MATH 1333
COURSE NAME	Contemporary Mathematics II
CATALOG DESCRIPTION	Topics may include introductory treatments of relations, functions, probability and statistics. Appropriate applications are included.
NUMBER OF SECTIONS OFFERED/FALL	3
NUMBER OF SECTIONS OFFERED/SPRING	2
EXTIMATED ANNUAL ENROLLMENT	150
COURSE LEVEL	Freshman
CONTACT PERSON (dept. representative)	Dr. Krista Cohlmia
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DEPARTMENT APPROVAL STATUS	**Approved** - Date **4/10/2013**
CORE COMMITTEE COMMENTS (REQUEST FOR ADDITIONAL INFORMATION)	
CORE COMMITTEE APPROVAL STATUS	Select One - Date Click here to enter a date.

Best practices and accreditation guidelines generally place the faculty in a position of responsibility for curricular decisions.

Indicate below how each learning objective will be supported, what strategies or activities will be used to introduce each objective and how student learning will be assessed.

***NOTE: Component Area Option –**

A. A minimum of 3 SCH must meet the definition and corresponding Core Objectives specified in one of the foundational component areas
B. As an option for up to 3 semester credit hours of the Component Area Option, an institution may select course(s) that:
   i. Meet(s) the definition specified for one or more of the foundational component areas; and
   ii. Include(s) a minimum of three Core Objectives, including Critical Thinking Skills, Communication Skills, and one of the remaining Core Objectives of the institution's choice.

#	THECB CORE OBJECTIVE "ICO"	PROGRAM GOALS/OUTCOMES	COURSE LEARNING OUTCOMES	KEY IDENTIFIERS	LEARNING EXPERIENCE	ASSESSMENT
1	**Critical Thinking Skills** - to include creative thinking, innovation, inquiry, and analysis, evaluation and synthesis of information. ***Must be addressed in all core curriculum courses***		Upon successful completion of this course, the student will be able to 1. apply arithmetic, algebraic, geometric, higher-order thinking, and statistical methods to modeling and solving real-world situations. 2. interpret mathematical models such as formulas, graphs, tables and schematics, and draw inferences from them.	1. The student will successfully solve stated problems using mathematical techniques taught in the class. 2. The student will provide meaningful interpretations based on their calculations.	Students will participate in group discussions, complete homework or quizzes, and take exams. The comprehensive departmental course final exam will be submitted for assessment.	This core objective will be assessed by an interdepartmental assessment committee using the Critical Thinking rubric.

2	**Communication Skills** - to include effective development, interpretation and expression of ideas through written, oral and visual communication. ***Must be addressed in all core curriculum courses***		Upon successful completion of this course, the student will be able to represent and evaluate information numerically, graphically, and symbolically.	The student will be able to write mathematical ideas in a clear and meaningful manner.	Students will participate in group discussions, complete homework or quizzes, and take exams. The comprehensive departmental course final exam will be submitted for assessment.	This core objective will be assessed by an interdepartmental assessment committee using the Communication rubric.
3	**Empirical and Quantitative Skills** - to include the manipulation and analysis of numerical data or observable facts resulting in informed conclusions ***Must be addressed in all Mathematic, Life and Physical Sciences, AND Social & Behavioral Sciences component area core curriculum courses. Optional for all other component areas.***		Upon successful completion of this course, the student will be able to: 1. solve equations, inequalities, formulas, applications, and variation problems. 2. analyze and graph linear equations and inequalities. 3. conceptualize functions and their graphs, and solve various applications involving functions. 4. convert to and from the metric system.	1. The student correctly solves equations, inequalities and formulas. 2. The student is able to properly graph linear equations and inequalities. 3. The student correctly creates functions and graphs. 4. The student correctly converts to and from the metric system. 5. The student correctly identifies	Students will participate in group discussions, complete homework or quizzes, and take exams. The comprehensive departmental course final exam will be submitted for assessment.	This core objective will be assessed by an interdepartmental assessment committee using the Empirical and Quantitative Skills rubric.

			5. identify the concepts of geometry and use formulas to find perimeters, circumferences, areas and volumes. 6. use counting techniques, permutations, combinations and probability. 7. identify and analyze statistics including mean, median, mode, range and statistical graphs.	and uses concepts from geometry. 6. The student correctly uses counting techniques. 7. The student correctly calculates and interprets basic statistical summaries.		
4	**Teamwork** - to include the ability to consider different points of view and to work effectively with others to support a shared purpose or goal. ***Must be addressed in all Communication, Life & Physical Sciences, and Creative Arts component area core curriculum courses. Optional for all other component areas.***					
5	**Social Responsibility**: to include intercultural competence, knowledge					

	of civic responsibility, and the ability to engage effectively in regional, national, and global communities ***Must be addressed in all Language, Philosophy & Culture, Creative Arts, American History and Government/Political Science, and Social & Behavioral Sciences component area core curriculum courses. Optional for all other component areas.***					
6	**Personal Responsibility** - to include the ability to connect choices, actions and consequences to ethical decision-making. ***Must be addressed in all Communication, Language, Philosophy & Culture, American History and Government/Political Science component area core curriculum courses. Optional for all other component areas.***					
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Critical Thinking Skills

To include creative thinking, innovation, inquiry, and analysis, evaluation and synthesis of information.

Must be addressed in all core courses

Communication Skills

To include effective development, interpretation and expression of ideas through written, oral and visual communication.

Must be addressed in all core courses

Empirical and Quantitative Skills

To include the manipulation and analysis of numerical data or observable facts resulting in informed conclusions.

Must be addressed in all core courses that satisfy the following requirements:

- Mathematics
- Life and Physical Sciences
- Social and Behavioral Sciences
- Some Component Area Options

Teamwork

To include the ability to consider different points of view and to work effectively with others to support a shared purpose or goal.

Must be addressed in all core courses that satisfy the following requirements:

- Communication
- Life and Physical Sciences
- Creative Arts
- Some Component Area Options

Social Responsibility

To include intercultural competence, knowledge of civic responsibility, and the ability to engage effectively in regional, national and global communities.

Must be addressed in all core courses that satisfy the following requirements:

- Language, Philosophy and Culture
- Creative Arts
- American History
- Government/Political Science
- Social and Behavioral Sciences
- Some Component Area Options

Personal Responsibility

To include the ability to connect choices, actions and consequences to ethical decision-making.

Must be addressed in all core courses that satisfy the following requirements:

- Communication
- Language, Philosophy and Culture
- American History
- Government/Political Science
- Some Component Area Options