

CORE CURRICULUM COMPONENT APPLICATION

CORE COMPONENT AREA	Mathematics
COURSE TYPE	Existing Core
DEPARTMENT	Mathematics and Engineering
COURSE RUBRIC & NUMBER	MATH 1332
COURSE NAME	Contemporary Mathematics I
CATALOG DESCRIPTION	Topics may include introductory treatments of sets, logic, number systems, and number theory. 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 <small>(REQUEST FOR ADDITIONAL INFORMATION)</small>	
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.

CORE CURRICULUM COMPONENT APPLICATION

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. <i>Must be addressed in all core curriculum courses</i>		Upon successful completion of this course, the student will be able to use the mathematics of logic to determine the truthfulness of statements.	The student correctly uses truth tables.	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		Upon successful completion of this course, the student will be able to represent and evaluate information	The student will correctly use topics from set theory.	Students will participate in group discussions, complete homework or quizzes, and take	This core objective will be assessed by an interdepartmental assessment committee using the

	<p>visual communication.</p> <p><i>Must be addressed in all core curriculum courses</i></p>		<p>numerically, graphically, and symbolically.</p>		<p>exams. The comprehensive departmental course final exam will be submitted for assessment.</p>	<p>Communication rubric.</p>
3	<p>Empirical and Quantitative Skills - to include the manipulation and analysis of numerical data or observable facts resulting in informed conclusions</p> <p><i>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.</i></p>		<p>Upon successful completion of this course, the student will be able to:</p> <ol style="list-style-type: none"> 1. identify concepts of sets. 2. describe and use different number systems. 3. identify the subsets of real numbers. 	<p>The student will correctly use topics from set theory; from number systems and from number theory.</p>	<p>Students will participate in group discussions, complete homework or quizzes, and take exams. The comprehensive departmental course final exam will be submitted for assessment.</p>	<p>This core objective will be assessed by an interdepartmental assessment committee using the Empirical and Quantitative Skills rubric.</p>
4	<p>Teamwork - to include the ability to consider different points of view and to work effectively with others to support a shared purpose or goal.</p> <p><i>Must be addressed in all Communication, Life & Physical Sciences, and Creative Arts component area core curriculum courses. Optional for</i></p>					

	<i>all other component areas.</i>					
5	<p>Social Responsibility: to include intercultural competence, knowledge of civic responsibility, and the ability to engage effectively in regional, national, and global communities</p> <p><i>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.</i></p>					
6	<p>Personal Responsibility - to include the ability to connect choices, actions and consequences to ethical decision-making.</p> <p><i>Must be addressed in all Communication, Language, Philosophy & Culture, American History and Government/Political Science component area core curriculum courses. Optional for</i></p>					

	<i>all other component areas.</i>					
7						
8						
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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