

## GE CRITERIA APPROVAL FORM

*Course Number and Title: Math 230 Logic and Mathematical Reasoning*

*Faculty member(s) proposing Course: Ivona Grzegorzcyk, Prof. of Mathematics, Nikolaos Diamantis, Assistant Prof. of Mathematics*

**Indicate which of the following GE would be satisfied by this course by marking an “X” on the appropriate lines.** Courses may be placed in up to *two* GE categories as appropriate. Upper Division Interdisciplinary GE courses (UDIGE) may be placed in two GE categories in addition to the UDIGE category.

<b>GE Category</b>	
<input type="checkbox"/>	A1: Oral Communication
<input type="checkbox"/>	A2: English Writing
<input checked="" type="checkbox"/>	A3: Critical Thinking
<input type="checkbox"/>	B1: Physical Sciences—Chemistry, Physics, Geology, and Earth Sciences
<input type="checkbox"/>	B2: Life Sciences—Biology
<input checked="" type="checkbox"/>	B3 Mathematics—Mathematics and Applications
<input type="checkbox"/>	B4 Computers and Information Technology
<input type="checkbox"/>	C1 Art
<input type="checkbox"/>	C2: Literature
<input type="checkbox"/>	C3a: Language
<input type="checkbox"/>	C3b: Multicultural
<input type="checkbox"/>	D: Social Perspectives
<input type="checkbox"/>	E: Human Physiological and Psychological Perspectives
<input type="checkbox"/>	Upper Division Interdisciplinary GE
Lab Included?      Yes      _____      No      _____	

Please provide a brief explanation of how the proposed course meets *each* of the criteria for the selected GE categories.

A3

- Analysis of statements of common language in a critical and rigorous manner.
- Introduction to inductive and deductive logic in a variety of everyday and scientific situations.
- Formal assessments of the logical soundness of statements and justifications.
- Abstracting information from common language and other forms of written, oral and symbolic communication of ideas.

- Common fallacies in inductive and deductive reasoning

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B3

- Using logic to expressing and analyzing abstract mathematical ideas
- Mathematical proofs and problem solving.