Bemidji State University

MATH 5820: History of Mathematics

A. COURSE DESCRIPTION

Credits: 3
Lecture Hours/Week: 0
Lab Hours/Week: 0
OJT Hours/Week: *
Prerequisites: None
Corequisites: None
MnTC Goals: None

Historical investigation and presentation of the sources and growth of mathematical knowledge and principles, including Peano's axioms, the Axiom of Choice, and Russell's Paradox. Prerequisite: Consent of instructor.

B. COURSE EFFECTIVE DATES: 11/19/1997 - Present

C. OUTLINE OF MAJOR CONTENT AREAS

1. Mathematics in the ancient world
2. Greek mathematics
3. Mathematical development in the far east
4. Mathematics in medieval Europe
5. The development of algebra and calculus in the renaissance
6. The development of analysis, abstract algebra, geometry and probability and statics in the eighteenth and nineteenth centuries
7. Modern developments

D. LEARNING OUTCOMES (General)

1. gain an understanding of the development of mathematical concepts and methods over time.
2. make connections between the culture of a civilizations and the mathematics they developed.
3. communicate mathematical ideas and understanding effectively.
4. develop an appreciation for the many people who contributed to the subject of mathematics over time.
5. exhibit advanced communication skills in both classroom discussions and their written work.

E. Minnesota Transfer Curriculum Goal Area(s) and Competencies

None

F. LEARNER OUTCOMES ASSESSMENT

As noted on course syllabus

G. SPECIAL INFORMATION

None noted