

SALISBURY UNIVERSITY DEPARTMENT OF MATHEMATICS & COMPUTER SCIENCE
 SYLLABUS (*Tentative*)
 MATH 480 *History of Mathematics*

Objective: What is mathematics? Where, when, and how did it originate? How did it develop to the status that it holds in our culture today? What has been the relationship between it and the general culture? To explore these questions is the objective of the course.

Prerequisite: MATH 202 or 210 (both recommended), completed with a grade of C or better.

Texts: *The History of Mathematics: A Brief Course*, 2nd edition, by Roger Cooke (ISBN 0-471-44459-6), Wiley, 2005; *A Concise History of Mathematics*, 4th revised edition, by Dirk J. Struik (ISBN 0-486-60255-9), Dover, 1987.

Topic	Weeks
<i>A Quick Overview</i> Surveying the history of mathematics from $-\infty$ through 1950.	2
<i>Details, I: The World of Mathematics and the Mathematics of the World</i> The origin and prehistory of mathematics; mathematical cultures; women mathematicians.	2
<i>Details, II: Numbers</i> Counting; calculation; ancient number-theory; numbers and number-theory in modern mathematics; number-systems; combinatorics.	2
<i>Details, III: Space</i> Measurement; Euclidean geometry; post-Euclidean geometry; modern geometries.	2
<i>Details, IV: Algebra</i> Problems leading to algebra; equations and algorithms; modern algebra.	2
<i>Details, V: Calculus and Analysis</i> The calculus; real and complex analysis; real analysis.	2
<i>Details, VI: Mathematical Inferences</i> Probability and statistics; logic and set-theory.	2
	14

EVALUATION

Classwork and homework	30 - 70%
Project	10 - 50%
Midterm examination	0 - 15%
Final examination	0 - 15%

**Graduate students might be assigned special homework and test problems or projects.