History of Mathematics
(MATH 4123)
Fall 2006

Professor: Paul Bailey

Office: WIL 228

Office Hours: MTWRF 11 am to 12 noon; TR 1 pm to 2 pm

Web Site: `http://www.saumag.edu/pbailey`

Email: `plbailey@saumag.edu`

Books: *An Introduction to the History of Mathematics*, 6th edition, by Howard Eves
Journey through Genius: The Great Theorems of Mathematics by William Dunham

Grade Components

Problems:	25%
Quizzes:	25%
Midterms:	25%
Final:	25%

Reading and homework exercises will be assigned daily, to be accomplished before the next class. The purpose of these exercises is practice; they will not be collected or graded.

Problem sets will be assigned periodically, to be due in one week. The write up of each problem should state both the problem and then the solution. It should be neat and legible, using words in complete sentences, where appropriate.

You may discuss the problems from the problem sets with other members of the class and other interested students or faculty, under these conditions:
(a) any help from others must be noted in the solutions, and the originator of any idea must be so credited;
(b) your solutions must be completely understood by you and written *in your own words*.
Any violation of rules **(a)** or **(b)** is academic dishonesty.

Quizzes will be given weekly, on Friday. There will be two midterm examinations, one the first week of October and the other the second week of November. The final examination is scheduled for Wednesday, December 13, 2006, at 8:00 am.

Approximate Syllabus

Week	Beginning	Historic Topic	Mathematical Topic	Reading
Week 1	Aug 28	Prehistoric	Bases	Eves 1
Week 2	Sep 4	Egypt and Babylonia	Regular Triples	Eves 2
Week 3	Sep 11	Greece 500 BC	Mystical Numbers	Eves 3
Week 4	Sep 18	Greece 400 BC	Constructible Points	Eves 4; Dunham 1
Week 5	Sep 25	Greece 300 BC	GCD and Regular Solids	Eves 5; Dunham 2, 3
Week 6	Oct 2	Greece 200 BC	Pi	Eves 6; Dunham 4
Week 7	Oct 9	Greece 200 AD	Rational Points	Eves 6
Week 8	Oct 16	China and Arabia	Modular Arithmetic	Eves 7
Week 9	Oct 23	Europe 1500 AD	Cubic Polynomials	Eves 8; Dunham 6
Week 10	Oct 30	Europe 1600 AD	Models of the Universe	Eves 9
Week 11	Nov 6	Europe 1650 AD	Origins of Calculus	Eves 11
Week 12	Nov 13	Europe 1700 AD	Infinite Series	Eves 12; Dunham 8, 9
Week 13	Nov 20	Europe 1750 AD	Number Theory	Eves 12; Dunham 10
Week 14	Nov 27	Europe 1800 AD	Field Theory	Eves 13
Week 15	Dec 4	Europe 1900 AD	Set Theory	Eves 15; Dunham 11, 12