

History of Mathematics
(MATH 4123)
Fall 2004

Professor: Paul Bailey

Office: WIL 228

Office Hours: MWF 10 am to 11 am, 2 pm to 3 pm; TR 1 pm to 2 pm

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

Grading

A:	85% to 100%	Homework:	20%
B:	70% to 84%	Quizzes:	20%
C:	50% to 69%	Midterm:	20%
D:	30% to 49%	Final:	40%
F:	0% to 29%		

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. Homework 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 are welcome to work with each other on problem sets if you follow these rules: 1) anyone you discuss a problem with should be mentioned in your solution, and the originator of any idea should be so credited, and 2) you must write your solution in your *own words* (NO COPYING). Any violation of rules 1) and 2) is academic dishonesty.

Quizzes will be given weekly, on Friday. The midterm examination will be given in mid-October. The final examination is scheduled for Wednesday, December 15, at 8:00 am.

Approximate Syllabus

Week	Beginning	Historic Topic	Mathematical Topic	Reading
Week 1	Aug 30	Prehistoric	Bases	Eves 1
Week 2	Sep 6	Egypt and Babylonia	Regular Triples	Eves 2
Week 3	Sep 13	Greek 500 BC	Mystical Numbers	Eves 3
Week 4	Sep 20	Greek 400 BC	Constructible Points	Eves 4; Dunham 1
Week 5	Sep 27	Greek 300 BC	GCD and Regular Solids	Eves 5; Dunham 2, 3
Week 6	Oct 4	Greek 200 BC	Pi	Eves 6; Dunham 4
Week 7	Oct 11	Greek 200 AD	Rational Points	Eves 6
Week 8	Oct 18	China and Arabia	Modular Arithmetic	Eves 7
Week 9	Oct 25	Europe 1500 AD	Cubic Polynomials	Eves 8; Dunham 6
Week 10	Nov 1	Europe 1600 AD	Models of the Universe	Eves 9
Week 11	Nov 8	Europe 1650 AD	Origins of Calculus	Eves 11
Week 12	Nov 15	Europe 1700 AD	Infinite Series	Eves 12; Dunham 8, 9
Week 13	Nov 22	Europe 1750 AD	Number Theory	Eves 12; Dunham 10
Week 14	Nov 29	Europe 1800 AD	Field Theory	Eves 13
Week 15	Dec 6	Europe 1900 AD	Set Theory	Eves 15; Dunham 11, 12