

DEPARTMENT OF MATHEMATICS SYLLABUS

Course # & Name: MAT 111: The History of Mathematics

Recommended Text(s) & Price: “A History of Mathematics, 2 Edition” by
Victor Katz

Prepared by: Dr. Ali Dad-Del UPC Approval Date: Fall 2004

Lecture(s)	Sections	Comments/Topics
1	1.1 – 1.3	Comments/Topics
2	1.4	Ancient civilizations, counting, Arithmetic calculations
3	1.5 – 1.6	Elementary Geometry, Astronomical Calculations
4	1.7	Square Roots
5	1.8 – 1.9	The Pythagorean Theorem, Quadratic Equations
6	2.1 – 2.2	The earliest Greek Mathematicians
7	2.3	Aristotle
8	2.4.1-2	Euclid and the Elements
9	2.4.3-5	Euclid and the Elements
10	2.4.6-7	Euclid and the Elements
11	3.1	Archimedes and Physics
12	3.2	Archimedes and Numerical Calculations
13	3.3	Archimedes and Geometry
14	4.1.3	Beginning of Trigonometry
15	4.3	Practical Mathematics in Hellenistic Time
16	5.1-5.2	Diophantus and Greek Algebra
17	6.1	Medieval Chinese Mathematics
18	6.5	Mathematics of Medieval India
19	6.9	The Hindu-Arabic Decimal Place-Value System
20	7.1	Mathematics of Islam
21	7.2	Islamic Algebra
22	8.3	Algebra in Medieval Europe
23	9.3	The Solutions of the Cubic Equations
24	10.4	Logarithms
25	12.5	Isaac Newton
26	12.6	Gottfried Wilhelm Leibniz
27	1.2	Mathematics in America, Africa, and the Pacific

Additional Notes:

Two midterm exams, student in-class presentation, and term paper are required.