

MATHEMATICS 153

HISTORY OF MATHEMATICS

Text: *History of Mathematics, 5th edition*, by D.M. Burton.

This course is a survey from a historical viewpoint of various developments in mathematics with particular emphasis on the nineteenth and twentieth centuries. A listing of chapters in the text is given below.

- Ch. 1 Early Number Systems and Symbols
- Ch. 2 Mathematics in Early Civilizations
- Ch. 3 The Beginning of Greek Mathematics
- Ch. 4 The Alexandrian School: Euclid
- Ch. 5 The Twilight of Greek Mathematics: Diophantus
- Ch. 6 The First Awakening: Fibonacci
- Ch. 7 The Renaissance of Mathematics: Cardan and Tartaglia
- Ch. 8 The Mechanical World: Descartes and Newton
- Ch. 9 The Development of Probability Theory: Pascal, Bernoulli, Laplace
- Ch. 10 The Renaissance of Number Theory: Fermat, Euler, Gauss
- Ch. 11 Non-Euclidean Geometry: Bolyai and Lobachevsky
- Ch. 12 The Theory of Sets: Cantor and Kronecker
- Ch. 13 Extensions and Generalizations: Hardy, Hausdorff, Noether