

## MATHEMATICS 153

### HISTORY OF MATHEMATICS

**Text:** *History of Mathematics, 5<sup>th</sup> 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