

MATH 55 OUTLINE

STATWAY I-A 5-Unit Course

TEXT: Interated Statistics I, 1st Edition, Guth

Approved: JUNE 2011

Effective: FALL 2011

MATERIAL TO BE COVERED	SECTIONS FROM TEXT	TIME LINE
Rates and Proportions: Rates and proportions, unit conversion, numeracy, algebraic simplification, solving literal equations, absolute value and inequalities, functions and graphs.	1.1 - 1.7	7 Hours
Statistical Studies and an Overview of Data Analysis: The process of statistical analysis, collection data - sampling and sampling error, collecting data by conducting an experiment, the scope of inference.	2.1 - 2.4	12 Hours
Summarizing Data Graphically and Numerically: Dotplots, histograms, distributions for quantitative data, quantifying the center of a distribution: mean and median, quantifying variability relative to the median, quantifying variability relative to the mean.	3.1 - 3.4	12 Hours
Reasoning About Bivariate Numerical Data - Linear Relationships: The algebra of linear expressions, graphing and modeling with linear functions, lab activity - linear functions and motion, scatterplots, linear relationships, linear correlation, fitting a line to bivariate data, assessing the fit of a line.	4.1 - 4.6	13 Hours
Linear Systems of Equations: Solving linear systems by graphing, substitution, and elimination. Characterizing linear systems.	5.1	3 Hours
Modeling Quadratic and Polynomial Functions: Operations on polynomials, factoring binomials, factoring trinomials by trial and error and grouping, solving quadratic equations by factoring, completing the square, and quadratic formula. Graphing quadratic functions, lab activity - the ball bounces.	6.1 - 6.5	13 Hours
Modeling with Rational Functions: Algebraic analysis of rational expressions, graphing rational functions, lab activity - discovering Boyle's Law.	7.1 - 7.3	5 Hours

*** One hour = 1 hour of face time. ****This outline allows for 5 hours of exams.

16 Week Term: 1 week = 4.6667 hours (face time) 6 Week Term: 1 week = 12.5 hours (face time)

NOTE: Textbook section number may change. Outline will be updated to match if this occurs.

**** See reverse side for important Department Policy****

Submitted by: Guth, Nitta, Young.