## **Math 70S Topical Outline**

Approved April 2015

Topics from Statway version 2.8 or SACWay 2.0 as noted.	Statway/SACWay Lessons	Hours
Solving linear equations, proportions, and inequalities, with application problems.	1.1 SACWay Lessons	4
Graphing lines, lines and slope, graphing lines in slope Intercept Form, Parallel and Perpendicular Lines	2.1 – 2.4 SACWay Lessons	8
Solving linear systems of equations: graphing, substitution, and elimination.	3.1 – 3.2 SACWay Lessons	4
Radical expressions: simplifying and solving equations	4.1 SACWay Lesson	4
Operations on polynomials – adding, subtracting, multiplying and factoring. Factoring trinomials and special factorizations. Solving quadratic equations by factoring, completing the square, and the quadratic formula. Graphing quadratic functions.	5.1 – 5.5 SACWay Lessons	11
Rational expressions: reducing, adding, subtracting, multiplying, dividing, and solving equations.	6.1 – 6.2 SACWay Lessons	4
Exponential and logarithmic functions. Graphing, solving equations, with applications.	7.1 – 7.4 SACWay Lessons	8
The Statistical Analysis Process, Statway Mindset Activity, Populations and Samples, Research Questions and Types of Statistical Studies Random Sampling, Sources of Bias—Response and Nonresponse Bias, Collecting Data by Conducting an Experiment, Random Assignment in Experiments	1.1.1 – 1.3.2 Statway Lessons	8
Distributions of Quantitative Data: Dotplots and Histograms, Quantifying the Center of a Distribution – Sample Mean and Sample Median, Quantifying Variability Relative to the Median, Quantifying Variability Relative to the Mean	2.1.1 – 2.4.1 Statway Lessons	14

Submitted by the Math 70S Committee

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).