**Math 70S Topical Outline**

*Approved April 2015*

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| **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 |

### 5-unit class: hours total 72.5 (15 x 4 hours 50 minutes) – hours for exams + 2.5 hour final

### This outline allows for 5 hours of exams.

Submitted by the Math 70S Committee

Math Department Policy can be found at: https://mtsac.instructure.com/courses/33990/files?preview=1988385