

SU DEPARTMENT OF MATHEMATICS AND COMPUTER SCIENCE
 SYLLABUS (*Tentative*)
 MATH 503 *Data Analysis*

Intended for: Teachers of middle or high school or those desiring to teach school

Objectives: To strengthen the background of teachers in data analysis and basic inferential statistics. This course is aligned with the NCTM standards for quantitative literacy.

Textbook: No text required.

Technology: Statistical software such as MINITAB will be used throughout the course.

<i>Topics</i>	<i>Weeks</i>
Statistical Thinking	.5
Describing Data; Exploratory Data Analysis	2.5
Exploring Probability	1.5
Random Variables and Probability Distributions (Activities and Simulations)	2.5
Sampling, Sampling Distributions, and the Central Limit Theorem (Activities and Simulations)	1.0
Statistical Inference:	
Estimation & Tests of Hypotheses for a single population	3.0
Estimation & Tests of Hypotheses comparing two populations	2.0
Project Reports and Presentations	<u>1.0</u>
	14.0

EVALUATION

Class participation, Group work, Attendance	1/5
Quizzes, homework	1/5
Midterm	1/5
Group Project	1/5
Final Exam	1/5

This course complies with the University Policy on Writing Across the Curriculum. It is very important to be able to communicate mathematics effectively both orally and in writing. Students must write a revised lesson plan and keep a journal or portfolio. In addition, all assignments in this course require clearly written interpretations of results of the data analyses performed.