

Syllabus for STA 5001
(subject to change)

<u>Date</u>	<u>Topic(s)</u>	<u>Text reference</u>
Jan. 4	Sampling and Descriptive Statistics	Ch. 1
9	Sampling and Descriptive Statistics	Ch. 1
11	Probability	Ch. 2
16	Probability	Ch. 2
18	Probability	Ch. 2
23	Test #1 (Chapter 1-2)	
25	Commonly Used Distributions	Ch. 4
30	Commonly Used Distributions	Ch. 4
Feb. 1	Comm. Used Dists. & Confidence Intervals	Ch. 4 & Ch. 5
6	Confidence Intervals	Ch. 5
8	Confidence Intervals	Ch. 5
13	Test #2 (Chapters 4-5)	
15	Hypothesis Testing	Ch. 6
27	Hypothesis Testing	Ch. 6
Mar. 1	Hypothesis Testing	Ch. 6
6	Hypothesis Testing	Ch. 6
8	Correlation & Simple Linear Regression	Ch. 7
13	Correlation & Simple Linear Regression	Ch. 7
15	Multiple Regression	Ch. 8
20	Multiple Regression	Ch. 8
22	Multiple Regression	Ch. 8
27	Test #3 (Chapters 6-8)	
29	Analysis of Variance	Ch. 9
Apr. 3	Multiple Comparisons	Ch. 9
5	Two-way Analysis of Variance	Ch. 9
10	Randomized Complete Block Designs	Ch. 9
12	Factorial Experiments	Ch. 9
17	Review	
19	Final Exam, 7:00-10:00 PM	

Some Important Dates:

Jan. 17	Last day 100% tuition refund-full semester courses Last day late registration-full semester courses Last day to add a class Last day for “no grade” drop
Jan. 18	First day 0% tuition refund-full semester courses First day grade of “W” assigned for drops-full semester courses
Mar. 14	Last day official withdrawal—full semester classes
Apr. 17	Winter classes end 10:00 PM
Apr. 19	Final Exam, 7:00-10:00 PM

STATISTICAL METHODS IN RESEARCH AND PRODUCTION
STA 5001-001 CRN 14169 Winter 2018

Time: Tues., Thur., 5:30-7:17 PM
Room: 104 MSC
Email: mcdonald@oakland.edu
Office Phone: 248-370-3449
Dept. Phone: 248-370-3430
Office Room: 369 MSC
Office Hours: Tues., Thur., 3:00-5:00 PM

Textbook: Statistics for Engineers and Scientists, 4th Edition
By William Navidi
2015, McGraw-Hill (ISBN: 978-0-07-340133-1)

Recommended: Statistics Handbook for the TI-83
Larry Morgan
1997 Texas Instruments, Inc. (ISBN: 1-886309-07-8)
(or similar handbook for use with the TI-83 Plus calculator)

Prerequisite: Good command of high school algebra & basic understanding of calculus

Workload: You should be able to do well in this course if you attend class regularly and spend approximately 10 hours per week outside of class studying the material and **working problems**. Homework assignments are an important part of the learning process. You are encouraged to ask questions about exercises or lecture material you find difficult.

Calculators: You will need a calculator for homework and exams (e.g., **TI-83 Plus**, TI-83 Plus SE, TI-84 Plus, TI-84 Plus SE, TI-89, TI-89 Titanium).

Computers: We'll make extensive use of **Minitab**. Other computer software such as **Excel, R, SAS** could be used—we'll discuss.

Exams: There will be three in-class tests and a final exam. If the University is officially closed on a test day, the exam will be given the next class meeting. The tests and the final exam will be open book and **limited** open notes—to be discussed. **There will be no makeup tests.**

Grading: Tests are 100 points each; the final exam 150 points. Homework turn-ins expected from time-to-time (for a total of 120 points). So 570 points total for the course.

Scale: 95%--4.0; 80%--3.0; 65%--2.0; 50%--1.0 ($y = (x-35)/15$)