AP Stats Chapter 1: Exploring Data
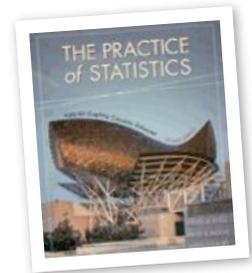
"Statistical thinking will one day be as necessary for efficient citizenship as the ability to read and write."
~ H. G. Wells

Tentative Lesson Guide					
Date		**Stats**	**Lesson**	**Assignment**	**Done**
Mon	9/4		Labor Day		
Tues	9/5		Welcome!	Rd Ch1 "Damn Lies"	
Wed	9/6		Intro Activity	Rd Ch1 "Damn Lies"	
Thu	9/7	1.1	What is Statistics?	Rd 4-7	
Fri	9/8	1.1	Exploratory Data Analysis	Rd 8-10 Do 1-6	
Mon	9/11	1.1	Plots, Plots, and Plots	Rd 11-16 Do 8,9,10	
Tues	9/12	1.1	More Plots	Rd 18-27 Do 15,16,20	
Wed	9/13	**Quiz**	**Review and Quiz 1.1**	Rd 27-34 Do 23,24,28	
Thu	9/14	1.2	Measures of Center	Rd 37-46 Do 31,34,36,39	
Fri	9/15	1.2	Standard Deviation	Rd 49-52 Do 40,41,43	
Mon	9/18	1.2	Center and Spread	Rd 53-55 Do 44,45,46	
Tues	9/19	1.2	Comparing Distributions	Rd 56-61 Do 48,49	
Wed	9/20	Rev	Decisions Through Data	Rd 64-66 Do 60,63,66,67	
Thu	9/21	Rev	Review Chapter 1	**Online Quiz 1 Due**	
Fri	9/22	**Exam**	**Exam Chapter 1**	**Homework Due**	

Note:
The purpose of this guide is to help you organize your studies for this chapter. The schedule and assignments may change slightly.

Keep your homework organized and refer to this when you turn in your assignments at the end of the chapter.

Class Website:
Be sure to log on to the class website for notes, worksheets, links to our text companion site, etc.

http://web.mac.com/statsmonkey

Please register at our text companion site so you can take the online review quizzes. Be sure to enter my email address correctly!

http://bcs.whfreeman.com/yates2e

My email address is:

jmmolesky@isd194.k12.mn.us

Chapter 1 Objectives and Skills:

These are the expectations for this chapter. You should be able to answer these questions and perform these tasks accurately and thoroughly. Although this is not an exhaustive review sheet, it gives a good idea of the "big picture" skills that you should have after completing this chapter. The more thoroughly and accurately you can complete these tasks, the better your preparation.

DESCRIBING DATA:

☐ Given a scenario, tell me: the variables of interest, the sample used, the population we want to describe.

☐ Understand completely the idea of the "distribution" of a variable. What do we mean by a variable's "distribution?"

☐ Be able to verbally describe the distribution of a specific variable. The description must be in context of the real world situation it describes. You should be able to support your conclusions with numerical evidence. You should be able to make relevant comparisons between two different variables.

VISUAL DISPLAYS:

☐ Be able to construct and interpret by hand AND on the TI: box plots, dot plots, histograms, time plots, stem-leaf plots.

INTERPRETING DATA, MAKING COMPARISONS AND CONCLUSIONS:

☐ Given a real-world situation, and a question to answer, be able to choose an appropriate variable to analyze. You should be able to construct an accurate and appropriate visual display for analysis. After the analysis, be able to construct a coherent, relevant real-world conclusion.

☐ Compare the distribution of two different samples of data. You should be able to describe the relevant differences in their distributions, substantiate those differences with numerical / visual evidence, and make appropriate real-world conclusions based on your observations.

NUMERIC SUMMARIES OF DATA:

☐ Understand the difference between a measure of center, a measure of location, and a measure of spread. Which numerical tools are measures of center? spread? relative location?

☐ Be able to make conclusions and solve problems involving numerical measures of data: mean, median, pth percentile, quartiles, range, std. deviation, variance, inter-quartile range. This means that you must not only understand their mathematical properties, you must reach conclusions to problems based on these formulas.

☐ Understand how to change units to a set of data. Understand how changing units (or performing other linear transformations) affects measures of center and spread.

☐ You should be able to use the TI 83 to enter data, create some visual displays, change units for data, and calculate numeric summaries for any set of data.