

# AP STATISTICS 2013-2014

## Unit 3 Syllabus: Experimental Design

BLOCK	DATE	TOPIC	HOMEWORK
1	TH 10/31	Ch 12: Sample Surveys Lab: Rolling River	Ch 12: #5, 9, 11, 15, 19
2	W 11/6	Finish Ch 12 Lab: Random Rectangles Start Ch 13: Experiments and Observational Studies	Read Ch 13 Ch 13 Reading Guide Ch 13 #1, 3, 5, 7, 9
3	F 11/8	Finish Ch 13	Ch 12 #3, 13 Ch 13 # 25, 35, 37
4	T 11/12	Review Ch 12 & 13	Pg 319 #1, 3, 5, 25, 37
5	TH 11/14	<b>Quiz: Ch 12 and 13</b>	Read Ch 11 Ch 11 Reading Guide Review your Ch 1-5 Notes
6	M 11/18	<b>Skills Review #1: Descriptive Stats</b> Ch 11: Simulation	Ch 11 #5, 7, 9, 11, 13
7	W 11/20	Finish Ch 11 Graded Practice Problems Review Unit 3 (Ch 11-13)	Pg 320 #7, 9, 27, 39, 41
8	F 11/22	<b>Test Unit 3: Experimental Design (Ch 11-13)</b>	Read Ch 14 Ch 14 Reading Guide Review your Ch 6 Notes
9	T 11/26	<b>Skills Review #2: Normal Distribution</b> Ch 14/15: Sample Space	

**\*\*Syllabus subject to change due to illness, weather, pep rallies, etc**

### Need Help?

Mrs. Blubaugh is available before school in L400.

Mu Alpha Theta is Monday, Thursday, and Friday mornings in L409.

### Need to make up a test/quiz?

Math Make Up Room is open Tuesday, Thursday, and Friday mornings and Tuesday, Wednesday, and Thursday afternoons.



What College Board has to say about this topic.....

Planning and conducting a study (10%-15%)

*Data must be collected according to a well-developed plan if valid information on a conjecture is to be obtained. This includes clarifying the question and deciding upon a method of data collection and analysis.*

A. Overview of methods of data collection

1. Census
2. Sample survey
3. Experiment
4. Observational study

B. Planning and conducting surveys

1. Characteristics of a well-designed and well-conducted survey
2. Populations, samples, and random selection
3. Sources of bias in sampling and surveys
4. Sampling methods, including simple random sampling, stratified random sampling, and cluster sampling

C. Planning and conducting experiments

1. Characteristics of a well-designed and well-conducted experiment
2. Treatments, control groups, experimental units, random assignments, and replication
3. Sources of bias and confounding, including placebo effect and blinding
4. Randomized block design, including matched pairs design

D. Generalizability of results and types of conclusions that can be drawn from observational studies, experiments, and surveys