## 2015–2016 AP Statistics Assigments

(see web site for reading guides, glossaries of important terms, notes, HW answers, and other goodies)

Chapter	Day	Topics	Objectives: Students will be able to	Homework	Reading	1/2B	
		It is important you understand the vocabu	nis Chapter is vocabulary intentensive. Ilary, take notes, and come to class prepared to ask A Notes, refer to the Glossary of important terms, and		-		
4	0 (post test)	4.1 Introduction, Sampling and Surveys, How to Sample Badly, How to Sample Well: Random Samples	<ul> <li>Identify the population and sample in a sample survey.</li> <li>Identify voluntary response samples and convenience samples.</li> <li>Explain how these bad sampling methods can lead to bias.</li> <li>Describe how to use Table D to select a simple random sample (SRS).</li> </ul>	1, 3, 5, 7, 9, 11, 13	Section 4.1	7-Oct	
		Co	lumbus Weekend - OFF OCT9 and OCT12			-	
4	1	4.1 Other Sampling Methods; Inference for Sampling, Sample Surveys: What Can Go Wrong? <u>Activity 1</u> : 4.1 Review Sampling Methods and Types	• Distinguish a simple random sample from a stratified random sample or cluster sample. Give advantages and disadvantages of each sampling method.	17, 19, 21, 23, 27, 31, 33, 35	Study for 4.1 Quiz	13-Oct	
		of Bias <u>Activity 2</u> : Frappy's 2001q3, 2008q2	• Explain how undercoverage, nonresponse, and question wording can lead to bias in a sample survey.	Optional: 37-42			
4	2	<ul> <li>4.2 Observational Studies vs. Experiments, The Language of Experiments, How to Experiment Badly</li> <li>Activity : The Jelly Blubber Sampling Design Activity</li> </ul>	<ul> <li>Distinguish between an observational study and an experiment.</li> <li>Explain how a lurking/extraneous variable in an observational study can lead to confounding.</li> <li>Identify the experimental units or subjects, explanatory variables (factors), treatments, and response variables in an experiment.</li> </ul>	45, 47, 51 % Test next class 'Analyzing Experiments' due day of Ch4 Quiz	Section 4.2 pgs. 231-236	15-Oct	
4	3		Quiz 4.1 (1/2 test grade)			19-Oct	
4	3	4.2 Experiments: How to Experiment Well, 3 Principles of Experimental Design What Can Go Wrong? Inference for Experiments Activity: 4.2a Introduction to Experiments with Frappy's 1998q3 and 1999q3	<ul> <li>Describe a completely randomized design for an experiment.</li> <li>Explain why random assignment is an important experimental design principle.</li> <li>Describe how to avoid the placebo effect in an experiment.</li> <li>Explain the meaning and the purpose of blinding in an experiment.</li> <li>Explain in context what "statistically significant" means.</li> </ul>	53, 57, 59, 61, 63, 65 Finish Frappy's for HW	Finish Section 4.2	19-Oct	

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4.2 Experiments: Blocking, Matched Pairs Design • Distinguish between a completely randomized design and a 62, 67, 79, 4 Activity: 4.2b Designing Studies 85, 91-98, randomized block design. Section 4.3 21-Oct • Know when a matched pairs experimental design is 103, 105, 106 appropriate and how to implement such a design. 4.3 Scope of Inference, the Challenges of 5 •Determine the scope of inference for a statistical study. Chapter 4 AP

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Establishing Causation

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		2003a4, 2006Ba5	•Evaluate whether a statistical study has been carried out in an ethical manner.	Practice Test <sup>1</sup> /2 Test next class		23-Oct					
4	6	Chapter 4 Quiz (1/2 test grade)									
4	6	Activity: Cumulative MC Problem Sets (chapters 1-4)		Cumulative Mo (chapte	C Problem Sets rs 1-4)	26-Oct					
4	7	Multiple Choice Cumulative Test #1 (Chapters 1-4)				<b>28-Oct</b>					
Quarter 1 ends October 30th											