

COURSE OUTLINE AND READINGS
STATISTICAL METHODS IN PUBLIC HEALTH I (140.621)

FIRST TERM

September 1 – October 22, 2015

<u>Class</u>	<u>Date</u>	<u>Topic</u>	<u>Suggested Reading*</u>
1	Sept 1	Statistical Reasoning in Public Health	Chapter 1
2	Sept 3	Exploring and Organizing Data to Address Public Health	Chapter 2.1 - 2.5
		Questions: Continuous and Discrete Data	Chapter 2.8-2.9
3	Sept 8	Exploring and Organizing Data (continued)	Chapter 3
		Probability Concepts and Distributions	
4	Sept 10	Binomial and Poisson Distributions	Chapter 4
PROBLEM SET 1 DUE			
	Sept 11	QUIZ 1	
5	Sept 15	Binomial and Poisson Distribution (cont'd)	Chapter 5
6	Sept 16	Summary and Review	
PROBLEM SET 2 DUE			
7	Sept 22	MIDTERM EXAMINATION	
8	Sept 24	Normal Distribution; Populations and Samples	Chapter 6.1-6.4
		Introduction to Statistical Inference: Sampling Distributions - Single Sample Mean	Chapter 6.5
9	Sept 29	- Difference between Two Sample Means - Single Sample Proportion - Difference between Two Sample Proportions	
9	Oct 1	Introduction to Statistical Inference: The Bootstrap	
11	Oct 6	Estimation	
		Hypothesis Testing	
PROBLEM SET 3 DUE			
12	Oct 8	Confidence Intervals and Hypothesis Tests: Single Sample Mean	Chapter 7.1-7.4,7.7
QUIZ 2			
13	Oct 13	Confidence Intervals and Hypothesis Tests: Difference between Two Sample Means Pre-Post Designs and Other Paired Comparisons	Chapter 8.4-8.7 Chapter 8.2
14	Oct 15	Confidence Intervals and Hypothesis Tests: Estimating a Proportion in a Single Population Comparing Proportions from Two Populations	Chapter 7.10 Chapter 10.2
15	Oct 20	Summary and Review	
PROBLEM SET 4 DUE			
16	Oct 22	FINAL EXAMINATION	

* Fundamentals of Biostatistics by Rosner (2011)