ISyE 2028 – Basic Statistical Meth - Fall 2013

Tentative Course Schedule

Lecture #	Date	Topic	Chapters in textbook
Week 1			
1	8/19, Mon	Discuss syllabus, course introduction	
2	8/21, Wed	Basic concepts of statistics, introduction to R	1
Week 2			
3	8/26, Mon	Review of probability, introduction to R	2, 3, 4, 5
4	8/28, Wed	Descriptive statistics	6
Homework 1 (Review: Probability and random variables)			
Week 3			
	9/2, Mon	Labor day, no class	
5	9/4, Wed	Sampling distribution	7.1-7.2
Homework 2 (Descriptive Statistics)			
Week 4			
6	9/9, Mon	Statistical estimation concepts	7.3
7	9/11, Wed	Statistical estimation performance metrics	7.4
Homework 3 (Statistical Estimation)			
Week 5			
8	9/16, Mon	Statistical estimation: MSE	7.4
9	9/18, Wed	Statistical estimation methods	7.4
Practice Midterm 1 (Descriptive statistics and statistical estimation)			
Week 6			
Midterm 1	**9/23, Mon**	**Descriptive statistics and statistical estimation**	
10	9/25, Wed	Statistical confidence intervals for normal	8.1-8.3
Week 7			
11	9/30, Mon	Statistical confidence interval for Binomial	Notes and 9.5
12	10/2, Wed	Hypotheses test, concept	9.1
Homework 4 (Statistical confidence intervals)			
Week 8			
13	10/7, Mon	Hypotheses test for Normal mean	9.2
14	10/9, Wed	Hypotheses test of Binomial	Notes

Homework 5 (Hypotheses test of single Population)			
Week 9			
	10/14, Mon	Fall student recess, no class	
15	10/16, Wed	Hypotheses test and p-values	Notes
Week 10			
Computer Exam 1	**10/21, Mon**	**Point estimator and confidence interval**	
16	10/23, Wed	p-values	Notes
Homework 6 (Comparing Two Populations)			
Week 11			
17	10/28, Mon	Comparing Two Populations, Normal	10.1-10.2
18	10/30, Wed	Comparing Two Populations, Binomial	10.6
Practice Midterm 2 (Confidence Interval and Hypothesis Testing for single and two populations)			
Week 12			
Midterm 2	**11/4, Mon**	**Confidence interval and hypothesis testing for single and two populations**	
19	11/6, Wed	Comparing Two Populations, normal variance and introduction to ANOVA	10.7
Week 13			
20	11/11, Mon	ANOVA	13.1-13.4
Computer Exam 2	**11/13, Wed**	**Comparing two Populations & ANOVA**	
Homework 7 (ANOVA)			
Week 14			
21	11/18, Mon	Simple Linear Regression	11.1-11.2
22	11/20, Wed	Linear Regression hypothesis test and confidence interval	11.3-11.5
Homework 8 (Linear regression)			
Week 15			
23	11/25, Mon	Linear Regression diagnosis	11.3-11.5
24	11/27, Wed	Multi-linear, stepwise and logistic regression	11.7, 11.10
Practice Finals			
Week 16 (dead weak)			
25	12/2, Mon	Review for Final	
26	12/4, Wed	Discuss Sample Finals	
Final	**12/11, Wed**	**8:00am – 10:50am**	