

Professor Verzani's Syllabus for MTH214/MTHH501 Spring 2005

Descriptive Statistics			
1/27	1.1	Essentials	1.5,6,7
	1.2	Sources of data	1.19,26
	1.3	Critically appraising data	1.32,40
		R introduction	
1/28	2.1	Types of data	2.5,8
	2.2	Categorical data	2.22,23,24,34
	2.3	Numerical data	2.39,53,56
	2.4	Location	2.59,65,67,75
2/3	2.5	Variation	2.79,80,84,95
	2.6	Shape	2.96,100,108
		R for Graphics	
2/4	3.2	Scatterplots	3.14,19,20
	3.3	Correlation	3.28,32,33
2/10	3.4	Least squared regression	3.43,49,50,52,57
	3.5	Resistant regression	
		R for bivariate data	
2/11		College Closed	
Probability Concepts			
2/17	4.1	Basic concepts	4.4,5,9,10,19,22
	4.2	Probability Laws	4.30,37,39,45
		R for EDA	
2/18	4.3	Random variables	4.55,60,66,70
	4.4	Binomial distribution	4.85,91,95,100
2/24	4.5	Normal distribution	4.107,111,115,116,117,124
	5.1	Sampling distributions	5.1,6,11,13
		R for probability	
2/25	5.2	Sampling distribution of $\hat{y}$	5.14,18,25,29,30
		Review for exam	
3/3		Test 1, chapters 1-4	
3/4	5.3	Sampling distribution of p	5.41,44,47,50
	5.4	Other sampling distributions	5.59,61

Statistical Inference			
3/10	6.1	Data analysis	6.4,5,7,13
	6.2	Parameter, estimation R for sampling distributions	6.16,20,21,24
3/11	6.3	Estimating parameters	6.31,32,35,39
	7.1	CI for π	7.3,7,9,12,16
3/17	7.3	CI for μ R for CIs	7.22,36,37,38,39
3/18	8.1	Significance tests	8.3,6,8,9,11,12
	8.2	test for π	8.24,25,30,36
3/24	8.3	Friday Schedule	
	8.3	Test for μ	8.39,42,47,49,51
	8.4	test for median	8.60,62,69
3/31	9.1	Difference of parameters	9.1,7,9
	9.2	$H_0 : \pi_1 - \pi_2$ R for t -tests	9.16,20,22
4/1	9.3	$H_0 : \mu_1 = \mu_2$ Review	9.32,35,36,38,44
4/7	Test 2, chapters 5-8		
4/8	9.4	Equal variance assumption	9.50,51,55
	9.5	Matched samples	9.63,65,67
4/14	11.1	Regression	11.4,6,11
	11.2	Inference, β_1 R for regression	11.13,17,21
4/15	11.2	Inference, ANOVA	
	11.3	Estimation, prediction	11.26,32,38
4/21	11.4	Multiple regression	11.41,44,47
	11.5	Model Assumptions	11.60,63
4/22	12.2	One-way ANOVA	12.3,4,5,15
5/5	12.4	Kruskal-Wallis test R for ANOVA	12.37,38,1,42
5/6		Review for test 3	
5/12	Test 3, chapters 9,11-12		
5/13		Review for final exam	
5/??	Final Exam. Date to be announced		