

Modern Data Analysis Methods
STAT 235 – Fall 2007

Tentative Course Schedule (subject to change):

Date	Topic	Reading (V & R)	Homework
Thur, 27 Sep	Introduction	Ch. 1-4	
Tues, 02 Oct	Simulation for evaluating procedures	Ch. 1-4	HW1 – Out
Thur, 04 Oct	Introduction to the bootstrap	§ 5.7, 6.6	
Tues, 09 Oct	Technical details of bootstrapping I	Notes	
Thur, 11 Oct	Technical details of bootstrapping II	Notes	HW1 – In HW2 – Out
Tues, 16 Oct	Jackknife estimators	Notes	
Thur, 18 Oct	Smoothing I (basis expansion)	§ 8.7/Notes	
Tues, 23 Oct	Smoothing II (basis expansion)	§ 8.7/Notes	HW2 – In HW3 – Out
Thur, 25 Oct	Smoothing III (local methods)	§ 8.7/Notes	
Tues, 30 Oct	Introduction to prediction problems	Notes	
Thur, 01 Nov	Midterm (In-Class)		HW3 – In HW4 – Out
Tues, 06 Nov	Linear methods for regression	Ch. 12	
Thur, 08 Nov	Linear methods for classification	Ch. 12	
Tues, 13 Nov	Model selection I (bias vs. variance)	Ch. 12/Notes	
Thur, 15 Nov	Model selection II (assessing accuracy)	Ch. 12/Notes	HW4 – In HW5 – Out
Tues, 20 Nov	Model averaging	§ 6.5	
Thur, 22 Nov	HOLIDAY		
Tues, 27 Nov	Classification & Regression Trees	Ch. 9	
Thur, 29 Nov	Generalized additive models	§ 8.8	HW5 – In Final - Out
Tues, 04 Dec	Case study 1: Bayesian smoothing in survival data	Notes	
Thur, 06 Dec	Case study 2: CART for survival data	Notes	
Thur, 13 Dec	Final exam due (5pm)		