

STAT 252.001 Winter 2006
Syllabus

Week 1

Friday, January 6

Introduction; Review of Stat 251

Week 2

Monday, January 9

What is a Statistic? (§1.1)

Wednesday, January 11

How Inferences are Made (§1.4); Theory and Reality (§1.5)

Friday, January 13

Assignment #1 Due

Sampling Distributions (§7.1, §7.2)

Week 3

Monday, January 16

Central Limit Theorem (§7.3)

Wednesday, January 18

Proof of Central Limit Theorem (§7.4)

Friday, January 20

Assignment #2 Due

Normal Approximation to Binomial (§7.5)

Week 4

Monday, January 23

Laws of Large Numbers (Extra)

Wednesday, January 25

Estimators, Statistics, Parameters (§8.1, §8.2, §8.3)

Friday, January 27

Assignment #3 Due

Midterm Review

Week 5

Monday, January 30

MIDTERM #1

Wednesday, February 1

Evaluating Estimators (§8.4)

Friday, February 3

Confidence Intervals (§8.5)

Week 6

Monday, February 6

Assignment #4 Due

Large- and Small-Sample Confidence Intervals (§8.6, §8.8)

Wednesday, February 8

Selecting the Sample Size (§8.7)

Friday, February 10

Confidence Intervals for σ^2 (§8.9)

Week 7

Monday, February 13

Assignment #5 Due

Point Estimators (§9.1); Relative Efficiency (§9.2)

Wednesday, February 15

Consistency (§9.3), Sufficiency (§9.4)

Friday, February 17

Rao-Blackwell Theorem and MVUE (§9.5)

Week 8

Monday, February 20 NO CLASS
Wednesday, February 22 NO CLASS
Friday, February 24 NO CLASS

Week 9

Monday, February 27 Assignment #6 Due The Method of Moments (§9.6)
Wednesday, March 1 Midterm Review
Friday, March 3 MIDTERM #2

Week 10

Monday, March 6 The Method of Maximum Likelihood (§9.7)
Wednesday, March 8 Fisher Information (Extra)
Friday, March 10 Large-Sample Properties of MLEs (§9.8)

Week 11

Monday, March 13 Assignment #7 Due Hypothesis Testing (§10.1); Elements of a Statistical Test (§10.2)
Wednesday, March 15 Common Large-Sample Tests (§10.3)
Friday, March 17 Type II Error and Finding the Z -Test Sample Size (§10.4)

Week 12

Monday, March 20 Assignment #8 Due Hypothesis Test–Confidence Interval Duality (§10.5, §10.6, §10.7)
Wednesday, March 22 Small-Sample Hypothesis Testing (§10.8)
Friday, March 24 ???

Week 13

Monday, March 27 Assignment #9 Due Testing Hypotheses Concerning Variances (§10.9)
Wednesday, March 29 Power of Tests and Neyman-Pearson (§10.10)
Friday, March 31 Midterm Review

Week 14

Monday, April 3 MIDTERM #3
Wednesday, April 5 Likelihood Ratio Tests (§10.11)
Friday, April 7 Likelihood Ratio Tests (§10.11)

Week 15

Monday, April 10 Assignment #10 Due Generalized Likelihood Ratio Tests (Extra)
Wednesday, April 12 Final Exam Review
