Schedule

A week-by-week breakdown of the material.

Week 1 (05/01-05/05)

Day 1 Basic Terminology¹

Visualizing Variables²

Lab: Introduction to SPSS³

Day 2 Project Selection⁴

Percentiles⁵

Measures of Center⁶

Measures of Spread⁷

Lab: Describing Variables⁸

Day 3 Linear Transformations⁹

Density Curves¹⁰

Lab: Project Prep¹¹

Day 4 The Normal Distribution 12

Relationships between two variables 13

Lab: Investigating relationships between variables¹⁴

Day 5 Scatterplots and Correlation¹⁵

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<sup>1</sup>notes/basic_terminology.html
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²notes/visualizing_distributions.html

³labs/1.html

⁴notes/projects.html

⁵notes/percentiles.html

⁶notes/measures_center.html

⁷notes/measures_spread.html

⁸labs/2.html

⁹notes/linear_transformations.html

¹⁰notes/density_curves.html

¹¹labs/project_prep.html

¹²notes/normal_distribution.html

¹³notes/relationships.html

¹⁴labs/3.html

¹⁵notes/scatterplot correlation.html

Week 2 (05/08-05/12)

Day 1 General Theory on Modeling and Data Fitting¹⁶

Linear Models and Regression Lines¹⁷

Lab: Regression lines, scatterplot smoothers¹⁸

Day 2 MIDTERM (study guide¹⁹)

Day 3 Data Collection²⁰

The question of causation²¹

Lab: Practice 1²²

Day 4 Introduction to Probability²³

Lab: Continue Practice Lab 1

Day 5 Conditional Probability²⁴

Probability rules²⁵

Independent Events²⁶

Week 3 (05/15-05/19)

Day 1 Tree Diagrams (cont)²⁷

Random Variables²⁸

The Binomial Setting and Distribution²⁹

Day 2 Mean and Standard Deviation of Random Variables³⁰

Day 3 Combining Random Variables³¹

Mean and Standard Deviation of the Binomial³²

¹⁶notes/modeling_general.html

¹⁷notes/linear_regression.html

¹⁸labs/4.html

¹⁹notes/midterm1_study_guide.html

²⁰notes/data_collection.html

²¹notes/correlation causation.html

²²labs/practice1.html

²³notes/probability_intro.html

²⁴notes/probability conditional.html

²⁵notes/probability_rules.html

²⁶notes/independent_events.html

²⁷notes/decision_trees.html

²⁸notes/random_variables.html

²⁹notes/binomial.html

³⁰notes/rv_mean.html

³¹notes/rv_combine.html

³²notes/binomial_mean.html

Day 4 MIDTERM 2 (study guide³³)

Day 5 At conference

Work on projects

Week 4 (05/22-05/26)

Day 1 Binomial: Approximating by Normal³⁴
The Sample Mean / IID Setting³⁵

Day 2 Inference I: Confidence Intervals³⁶ Inference II: Hypothesis Tests³⁷

Day 3 TBD

Day 4 Presentations

Day 5 MIDTERM 3 (study guide³⁸)

³³notes/midterm2_study_guide.html

³⁴notes/binomial_mean.html

³⁵notes/iid_setting.html

³⁶notes/confidence_intervals.html

³⁷notes/hypothesis_tests.html

 $^{^{38}}$ notes/midterm3_study_guide.html