

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 Distribution¹²

Relationships between two variables¹³

Lab: Investigating relationships between variables¹⁴

Day 5 Scatterplots and Correlation¹⁵

¹notes/basic_terminology.html

²notes/visualizing_distributions.html

³<labs/1.html>

⁴<notes/projects.html>

⁵<notes/percentiles.html>

⁶notes/measures_center.html

⁷notes/measures_spread.html

⁸<labs/2.html>

⁹notes/linear_transformations.html

¹⁰notes/density_curves.html

¹¹labs/project_prep.html

¹²notes/normal_distribution.html

¹³<notes/relationships.html>

¹⁴<labs/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

Introduction to Probability²²

Lab: Practice 1²³

Day 4 Conditional Probability²⁴

Probability rules²⁵

Independent Events²⁶

Lab: Project work

Day 5 Tree Diagrams²⁷

Random Variables²⁸

The Binomial Setting and Distribution²⁹

Week 3 (05/15-05/19)

Day 1 Mean and Standard Deviation of Random Variables³⁰

Combining Random Variables³¹

Day 2 Mean and Standard Deviation of the Binomial³²

Binomial: Approximating by Normal³³

¹⁶[notes/modeling_general.html](#)

¹⁷[notes/linear_regression.html](#)

¹⁸[labs/4.html](#)

¹⁹[notes/midterm1_study_guide.html](#)

²⁰[notes/data_collection.html](#)

²¹[notes/correlation_causation.html](#)

²²[notes/probability_intro.html](#)

²³[labs/practice1.html](#)

²⁴[notes/probability_conditional.html](#)

²⁵[notes/probability_rules.html](#)

²⁶[notes/independent_events.html](#)

²⁷[notes/decision_trees.html](#)

²⁸[notes/random_variables.html](#)

²⁹[notes/binomial.html](#)

³⁰[notes/rv_mean.html](#)

³¹[notes/rv_combine.html](#)

³²[notes/binomial_mean.html](#)

³³[notes/binomial_mean.html](#)

Day 3 The Sample Mean / IID Setting³⁴

Day 4 MIDTERM 2 (study guide³⁵)

Day 5 At conference

Work on projects

Week 4 (05/22-05/26)

Day 1 Inference I: Confidence Intervals³⁶

Inference II: Hypothesis Tests³⁷

Day 2 TBD

Day 3 TBD

Day 4 MIDTERM 3 (study guide³⁸)

Day 5 Presentations

³⁴[notes/iid_setting.html](#)

³⁵[notes/midterm2_study_guide.html](#)

³⁶[notes/confidence_intervals.html](#)

³⁷[notes/hypothesis_tests.html](#)

³⁸[notes/midterm3_study_guide.html](#)