Schedule

A week-by-week breakdown of the material.

Week 1 (09/04-9/08)

Day 1 A taste of statistics¹

Basic Terminology²

Data Collection³

HW1 due Fri⁴

Day 2 Visualizing Variables⁵
Percentiles⁶
Quiz 1 due Sun⁷

Day 3 Lab 1⁸

Week 2 (09/11-09/15)

Day 1 Measures of Center⁹

Day 2 Measures of Spread¹⁰

Day 3 Linear Transformations 11 Lab 2^{12}

Week 3 (09/18-09/22)

Day 1 Density Curves¹³

The Normal Distribution¹⁴

¹notes/taste.html

²notes/basic_terminology.html

³notes/data_collection.html

⁴assignments/hw1.html

⁵notes/visualizing_distributions.html

⁶notes/percentiles.html

⁷https://moodle.hanover.edu/mod/quiz/view.php?id=5177

⁸https://hanoverstatslabs.github.io/resources/labs/Lab1Instructions.html

⁹notes/measures_center.html

¹⁰notes/measures_spread.html

¹¹notes/linear_transformations.html

¹²labs/2.html

¹³notes/density_curves.html

¹⁴notes/normal_distribution.html

Day 2 The Normal Distribution (cont)¹⁵

Day 3 Lab 3¹⁶

Week 4 (09/25-09/29)

Day 1 Relationships between two variables¹⁷ Scatterplots and Correlation¹⁸

Day 2 General Theory on Modeling and Data Fitting¹⁹

Day 3 Linear Models and Regression Lines²⁰ Lab 4²¹

Week 5 (10/02-10/06)

Day 1 The question of causation²²

Day 2 MIDTERM (study guide²³)

Day 3 Introduction to Probability²⁴

Week 6 (10/09-10/13)

Day 1 Conditional Probability²⁵

Day 2 Probability rules²⁶

Day 3 Independent Events²⁷

¹⁵notes/normal distribution.html

¹⁶labs/3.html

¹⁷notes/relationships.html

¹⁸notes/scatterplot correlation.html

¹⁹notes/modeling_general.html

²⁰notes/linear_regression.html

²¹labs/4.html

²²notes/correlation_causation.html

²³notes/midterm1_study_guide.html

²⁴notes/probability_intro.html

²⁵notes/probability_conditional.html

²⁶notes/probability_rules.html

²⁷notes/independent_events.html

Week 7 (10/16-10/20)

- **Day 1** Tree Diagrams²⁸
- **Day 2** Random Variables²⁹
- **Day 3** The Binomial Setting and Distribution³⁰

Week 8 (10/23-10/27)

- Day 1 Fall Break
- **Day 2** The Binomial Setting and Distribution³¹
- **Day 3** Lab: Work on Projects³²

Week 9 (10/30-11/03)

- **Day 1** Mean and Standard Deviation of Random Variables³³
- **Day 2** Work on Projects³⁴
- **Day 3** Work on Projects³⁵

Week 10 (11/06-11/10)

- **Day 1** Combining Random Variables³⁶
- Day 2 Mean and Standard Deviation of the Binomial³⁷

Day 3 MIDTERM (study guide³⁸)

²⁸notes/decision trees.html

²⁹notes/random_variables.html

³⁰notes/binomial.html

³¹notes/binomial.html

³²labs/projectAnalysisSteps.html

³³notes/rv_mean.html

³⁴labs/projectAnalysisSteps.html

³⁵labs/projectAnalysisSteps.html

³⁶notes/rv_combine.html

³⁷notes/binomial_mean.html

³⁸notes/midterm2_study_guide.html

Week 11 (11/13-11/17)

Day 1 Binomial: Approximating by Normal³⁹

Day 2 The Sample Mean / IID Setting⁴⁰

Day 3 The Sample Mean / IID Setting (cont)⁴¹

Week 12 (11/20-11/24)

Day 1 Inference I: Confidence Intervals⁴²

Day 2 THANKSGIVING

Day 3 THANKSGIVING

Week 13 (11/27-12/01)

Day 1 Inference I: Confidence Intervals (cont)⁴³

Day 2 Inference II: Hypothesis Tests⁴⁴

Day 3 Inference II: Hypothesis Tests (cont)⁴⁵

Week 14 (12/04-12/08)

Day 1 TBA

Day 2 TBA

Day 3 Presentations

³⁹notes/binomial_mean.html

⁴⁰notes/iid_setting.html

⁴¹notes/iid setting.html

⁴²notes/confidence intervals.html

⁴³notes/confidence intervals.html

⁴⁴notes/hypothesis_tests.html

⁴⁵notes/hypothesis_tests.html