Schedule

A week-by-week breakdown of the material.

Week 1 (09/04-9/08)

Day 1 A taste of statistics¹

Basic Terminology²

HW1 due Fri³

Day 2 Visualizing Variables⁴
Quiz 1 due Sun⁵

Day 3 Lab 1⁶

Week 2 (09/11-09/15)

Day 1 Percentiles⁷

Measures of Center⁸

Measures of Spread⁹

HW2 due Fri¹⁰

Quiz 2 due Thu¹¹

Day 2 Data Collection¹²

Linear Transformations¹³ HW3 due Mon¹⁴

Day 3 Lab 2¹⁵

¹notes/taste.html

²notes/basic_terminology.html

³assignments/hw1.html

⁴notes/visualizing_distributions.html

⁵https://moodle.hanover.edu/mod/quiz/view.php?id=5177

⁶https://hanoverstatslabs.github.io/resources/labs/Lab1Instructions.html

⁷notes/percentiles.html

⁸notes/measures_center.html

⁹notes/measures_spread.html

¹⁰assignments/hw2.html

¹¹https://moodle.hanover.edu/mod/quiz/view.php?id=5178

¹²notes/data_collection.html

 $^{^{13}}$ notes/linear_transformations.html

¹⁴assignments/hw3.html

¹⁵labs/2.html

Week 3 (09/18-09/22)

Day 1 Standardized scores¹⁶
 Density Curves¹⁷
 HW4 due Fri¹⁸
 The Normal Distribution¹⁹

Day 2 The Normal Distribution (cont)²⁰

Day 3 Lab 3²¹

Week 4 (09/25-09/29)

Day 1 Relationships between two variables²²
Scatterplots and Correlation²³

Day 2 General Theory on Modeling and Data Fitting²⁴

Day 3 Linear Models and Regression Lines²⁵ Lab 4²⁶

Week 5 (10/02-10/06)

Day 1 The question of causation²⁷

Day 2 MIDTERM (study guide²⁸)

Day 3 Introduction to Probability²⁹

¹⁶ notes/linear_transformations.html

¹⁷notes/density_curves.html

¹⁸assignments/hw4.html

¹⁹notes/normal_distribution.html

²⁰notes/normal_distribution.html

 $^{^{21}}$ labs/3.html

²²notes/relationships.html

²³notes/scatterplot_correlation.html

²⁴notes/modeling_general.html

²⁵notes/linear_regression.html

²⁶labs/4.html

²⁷notes/correlation causation.html

²⁸notes/midterm1_study_guide.html

²⁹notes/probability_intro.html

Week 6 (10/09-10/13)

- **Day 1** Conditional Probability³⁰
- **Day 2** Probability rules³¹
- **Day 3** Independent Events³²

Week 7 (10/16-10/20)

- Day 1 Tree Diagrams³³
- **Day 2** Random Variables³⁴
- **Day 3** The Binomial Setting and Distribution³⁵

Week 8 (10/23-10/27)

- Day 1 Fall Break
- **Day 2** The Binomial Setting and Distribution³⁶
- **Day 3** Lab: Work on Projects³⁷

Week 9 (10/30-11/03)

- Day 1 Mean and Standard Deviation of Random Variables³⁸
- **Day 2** Work on Projects³⁹

Day 3 Work on Projects⁴⁰

³⁰notes/probability_conditional.html

³¹notes/probability_rules.html

³²notes/independent_events.html

³³notes/decision_trees.html

³⁴notes/random_variables.html

³⁵notes/binomial.html

³⁶notes/binomial.html

³⁷labs/projectAnalysisSteps.html

³⁸notes/rv_mean.html

³⁹labs/projectAnalysisSteps.html

⁴⁰labs/projectAnalysisSteps.html

Week 10 (11/06-11/10)

- **Day 1** Combining Random Variables⁴¹
- **Day 2** Mean and Standard Deviation of the Binomial⁴²
- Day 3 MIDTERM (study guide⁴³)

Week 11 (11/13-11/17)

- **Day 1** Binomial: Approximating by Normal⁴⁴
- **Day 2** The Sample Mean / IID Setting⁴⁵
- **Day 3** The Sample Mean / IID Setting (cont)⁴⁶

Week 12 (11/20-11/24)

- **Day 1** Inference I: Confidence Intervals⁴⁷
- Day 2 THANKSGIVING
- Day 3 THANKSGIVING

Week 13 (11/27-12/01)

- **Day 1** Inference I: Confidence Intervals (cont)⁴⁸
- **Day 2** Inference II: Hypothesis Tests⁴⁹
- **Day 3** Inference II: Hypothesis Tests (cont)⁵⁰

Week 14 (12/04-12/08)

- Day 1 TBA
- Day 2 TBA
- Day 3 Presentations

⁴¹notes/rv combine.html

⁴²notes/binomial_mean.html

⁴³notes/midterm2_study_guide.html

⁴⁴notes/binomial mean.html

⁴⁵notes/iid_setting.html

⁴⁶notes/iid setting.html

⁴⁷notes/confidence intervals.html

⁴⁸notes/confidence intervals.html

⁴⁹notes/hypothesis_tests.html

⁵⁰notes/hypothesis_tests.html