Schedule

A week-by-week breakdown of the material.

Week 1 (09/04-9/08)

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Day 1 A taste of statistics<sup>1</sup>

Basic Terminology<sup>2</sup>

HW1 due<sup>3</sup>

Day 2 Visualizing Variables<sup>4</sup>

Quiz 1 due Sun<sup>5</sup>

Day 3 Lab 1<sup>6</sup>
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Week 2 (09/11-09/15)

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Measures of Center<sup>8</sup>
Measures of Spread<sup>9</sup>
HW2 due<sup>10</sup>
Quiz 2 due Thu<sup>11</sup>

Day 2 Data Collection<sup>12</sup>
Linear Transformations<sup>13</sup>
HW3 due<sup>14</sup>
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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

¹³notes/linear_transformations.html

¹⁴assignments/hw3.html

¹⁵https://hanoverstatslabs.github.io/resources/labs/Lab2Instructions.html

Week 3 (09/18-09/22)

Day 1 Standardized scores¹⁶

Day 2 Density Curves¹⁷ HW4 due¹⁸

Day 3 Lab 3¹⁹

Week 4 (09/25-09/29)

Day 1 The Normal Distribution²⁰

Day 2 The Normal Distribution (cont)²¹

Day 3 Lab 4²²

HW5 due²³

Week 5 (10/02-10/06)

Day 1 Relationships between two variables²⁴ HW6 due²⁵

Day 2 MIDTERM (study guide²⁶)

Day 3 Lab 5^{27}

Week 6 (10/09-10/13)

Day 1 Scatterplots and Correlation²⁸

Day 2 General Theory on Modeling and Data Fitting²⁹ Linear Models and Regression Lines³⁰

¹⁶notes/linear transformations.html

¹⁷notes/density curves.html

¹⁸assignments/hw4.html

¹⁹https://hanoverstatslabs.github.io/resources/labs/Lab3Instructions.html

²⁰notes/normal_distribution.html

²¹notes/normal_distribution.html

²²https://hanoverstatslabs.github.io/resources/labs/Lab4Instructions.html

²³assignments/hw5.html

²⁴notes/relationships.html

²⁵assignments/hw6.html

²⁶notes/midterm1 study guide.html

²⁷https://hanoverstatslabs.github.io/resources/labs/Lab5Instructions.html

²⁸notes/scatterplot_correlation.html

²⁹notes/modeling_general.html

³⁰notes/linear_regression.html

HW7 due³¹

Day 3 Lab 6³²

Week 7 (10/16-10/20)

- **Day 1** Linear Models and Regression Lines (cont)³³
- **Day 2** The question of causation³⁴
- **Day 3** Lab 7^{35}

Week 8 (10/23-10/27)

- Day 1 Fall Break
- **Day 2** Introduction to Probability³⁶
- **Day 3** Conditional Probability³⁷ HW8 due³⁸

Week 9 (10/30-11/03)

- **Day 1** Probability rules³⁹ Independent Events⁴⁰
- **Day 2** Tree Diagrams⁴¹
 HW9 due⁴²

Day 3 Lab 8⁴³

- ³¹assignments/hw7.html
- ³²https://hanoverstatslabs.github.io/resources/labs/Lab6Instructions.html
- ³³notes/linear_regression.html
- ³⁴notes/correlation causation.html
- ³⁵https://hanoverstatslabs.github.io/resources/labs/Lab7Instructions.html
- ³⁶notes/probability_intro.html
- ³⁷notes/probability conditional.html
- ³⁸assignments/hw8.html
- ³⁹notes/probability_rules.html
- 40 notes/independent_events.html
- ⁴¹notes/decision_trees.html
- ⁴²assignments/hw9.html
- ⁴³https://hanoverstatslabs.github.io/resources/labs/Lab8Instructions.html

Week 10 (11/06-11/10)

Day 1 Random Variables⁴⁴ HW10 due⁴⁵

Day 2 Review

HW11 due⁴⁶

Day 3 MIDTERM (study guide⁴⁷)

Week 11 (11/13-11/17)

Day 1 Random Variables (cont)⁴⁸

Day 2 The Binomial Setting and Distribution⁴⁹

Day 3 Project work

HW12 due⁵⁰

Week 12 (11/20-11/24)

Day 1 Mean and Standard Deviation of Random Variables⁵¹ HW13 due⁵²

Day 2 THANKSGIVING

Day 3 THANKSGIVING

Week 13 (11/27-12/01)

Day 1 Combining Random Variables⁵³

Mean and Standard Deviation of the Binomial⁵⁴

Binomial: Approximating by Normal⁵⁵

⁴⁴notes/random_variables.html

⁴⁵assignments/hw10.html

⁴⁶assignments/hw11.html

⁴⁷notes/midterm2 study guide.html

⁴⁸notes/random_variables.html

⁴⁹notes/binomial.html

⁵⁰assignments/hw12.html

⁵¹notes/rv_mean.html

⁵²assignments/hw13.html

⁵³notes/rv combine.html

⁵⁴notes/binomial mean.html

⁵⁵notes/binomial_mean.html

Day 2 The Sample Mean / IID Setting⁵⁶ HW14 due⁵⁷

Day 3 Inference I: Confidence Intervals⁵⁸ HW15 due⁵⁹

Week 14 (12/04-12/08)

Day 1 Inference II: Hypothesis Tests⁶⁰ HW16 due⁶¹

Day 2 TBA HW17 due⁶²

Day 3 Presentations

⁵⁶notes/iid_setting.html

⁵⁷assignments/hw14.html

⁵⁸notes/confidence_intervals.html

⁵⁹assignments/hw15.html

⁶⁰notes/hypothesis_tests.html

⁶¹assignments/hw16.html

⁶²assignments/hw17.html