Schedule

A week-by-week breakdown of the material.

Week 1 (09/04-9/08)

```
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>
```

Week 2 (09/11-09/15)

```
Day 1 Percentiles<sup>7</sup>
        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>
Day 3 Lab 2<sup>15</sup>
```

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

```
<sup>16</sup>notes/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

Day 2 General Theory on Modeling and Data Fitting²⁹ Linear Models and Regression Lines³⁰ HW7 due³¹

Day 3 Lab 6³²

Week 7 (10/16-10/20)

Day 1 Linear Models and Regression Lines (cont)³³ The question of causation³⁴

Day 2 Introduction to Probability³⁵
Conditional Probability³⁶

Day 3 Probability rules³⁷
Independent Events³⁸
Tree Diagrams³⁹
HW8 due⁴⁰

Week 8 (10/23-10/27)

Day 1 Fall Break

Day 2 Random Variables⁴¹

Day 3 Lab: Work on Projects⁴²

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29notes/modeling_general.html
30notes/linear_regression.html
31assignments/hw7.html
32https://hanoverstatslabs.github.io/resources/labs/Lab6Instructions.html
33notes/linear_regression.html
34notes/correlation_causation.html
35notes/probability_intro.html
36notes/probability_conditional.html
37notes/probability_rules.html
38notes/independent_events.html
39notes/decision_trees.html
40assignments/hw8.html
41notes/random_variables.html
42labs/projectAnalysisSteps.html
```

Week 9 (10/30-11/03)

- **Day 1** The Binomial Setting and Distribution⁴³ HW9 due⁴⁴
- **Day 2** Mean and Standard Deviation of Random Variables⁴⁵
- **Day 3** Work on Projects⁴⁶

Week 10 (11/06-11/10)

- **Day 1** Combining Random Variables⁴⁷
- **Day 2** Mean and Standard Deviation of the Binomial⁴⁸
- Day 3 MIDTERM (study guide⁴⁹)

Week 11 (11/13-11/17)

- **Day 1** Binomial: Approximating by Normal⁵⁰
- **Day 2** The Sample Mean / IID Setting⁵¹
- **Day 3** The Sample Mean / IID Setting (cont)⁵²

Week 12 (11/20-11/24)

- **Day 1** Inference I: Confidence Intervals⁵³
- Day 2 THANKSGIVING

Day 3 THANKSGIVING

⁴³notes/binomial.html

⁴⁴assignments/hw9.html

⁴⁵notes/rv_mean.html

⁴⁶labs/projectAnalysisSteps.html

⁴⁷notes/rv_combine.html

⁴⁸notes/binomial_mean.html

⁴⁹notes/midterm2_study_guide.html

⁵⁰notes/binomial mean.html

⁵¹notes/iid_setting.html

⁵²notes/iid_setting.html

⁵³notes/confidence_intervals.html

Week 13 (11/27-12/01)

Day 1 Inference I: Confidence Intervals (cont)⁵⁴

Day 2 Inference II: Hypothesis Tests⁵⁵

Day 3 Inference II: Hypothesis Tests (cont)⁵⁶

Week 14 (12/04-12/08)

Day 1 TBA

Day 2 TBA

Day 3 Presentations

⁵⁴notes/confidence_intervals.html

⁵⁵notes/hypothesis_tests.html

⁵⁶notes/hypothesis_tests.html