Schedule

A week-by-week breakdown of the material.

Week 1 (01/07-1/11)

Day 1 A taste of statistics¹
Basic Terminology²

Day 2 HW1 due Fri³
Visualizing Variables⁴
Quiz 1 due Sun⁵

Day 3 Lab 1⁶

Week 2 (01/14-09/18)

Day 1 Percentiles⁷

Measures of Center⁸

Measures of Spread⁹

HW2 due¹⁰

Quiz 2 due Mon of week 3¹¹

Day 2 No class

Day 3 Lab 2¹²

Week 3 (01/21-01/25)

Day 1 Data Collection¹³

HW3 due¹⁴

¹notes/taste.html

²notes/basic terminology.html

³assignments/hw1.html

⁴notes/visualizing_distributions.html

⁵https://moodle.hanover.edu/mod/quiz/view.php?id=14001

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=14002

¹²https://hanoverstatslabs.github.io/resources/labs/Lab2Instructions.html

¹³notes/data collection.html

¹⁴assignments/hw3.html

```
Day 2 Linear Transformations<sup>15</sup>
Standardized scores<sup>16</sup>
Day 3 Lab 3<sup>17</sup>
```

Week 4 (01/28-02/01)

```
Day 1 Density Curves<sup>18</sup>

The Normal Distribution<sup>19</sup>

Quiz 3<sup>20</sup>
```

Day 2 Class cancelled

```
Day 3 Lab 4<sup>21</sup>
HW4 due<sup>22</sup>
```

Week 5 (02/04-02/08)

```
Day 1 Relationships between two variables<sup>23</sup> HW5 due<sup>24</sup>
```

Day 2 Scatterplots and Correlation²⁵

Quiz 4²⁶

HW6 due²⁷

Day 3 MIDTERM (study guide²⁸)

```
15notes/linear_transformations.html
16notes/linear_transformations.html
17https://hanoverstatslabs.github.io/resources/labs/Lab3Instructions.html
18notes/density_curves.html
19notes/normal_distribution.html
20https://moodle.hanover.edu/mod/quiz/view.php?id=14005
21https://hanoverstatslabs.github.io/resources/labs/Lab4Instructions.html
22assignments/hw4.html
23notes/relationships.html
24assignments/hw5.html
25notes/scatterplot_correlation.html
26https://moodle.hanover.edu/mod/quiz/view.php?id=14010
27assignments/hw6.html
28notes/midterm1_study_guide.html
```

Week 6 (02/11-02/15)

Day 1 General Theory on Modeling and Data Fitting²⁹ Linear Models and Regression Lines³⁰ HW7 due³¹

Day 2 Linear Models and Regression Lines (cont)³²

Day 3 Lab 5³³

Week 7 (02/18-02/22)

Day 1 The question of causation³⁴

Quiz 5³⁵

Day 2 Introduction to Probability³⁶

Day 3 Lab 6^{37}

Week 8 (02/25-03/01)

WINTER BREAK

Week 9 (03/04-03/08)

Day 1 Conditional Probability³⁸
HW8 due³⁹

Day 2 Probability rules⁴⁰
Independent Events⁴¹
Quiz 6⁴²

Day 3 Lab 7⁴³

²⁹notes/modeling_general.html

³⁰notes/linear regression.html

³¹assignments/hw7.html

³²notes/linear regression.html

³³https://hanoverstatslabs.github.io/resources/labs/Lab5Instructions.html

³⁴notes/correlation_causation.html

³⁵https://moodle.hanover.edu/mod/quiz/view.php?id=14011

³⁶notes/probability_intro.html

³⁷https://hanoverstatslabs.github.io/resources/labs/Lab6Instructions.html

³⁸notes/probability_conditional.html

³⁹assignments/hw8.html

⁴⁰notes/probability rules.html

⁴¹notes/independent events.html

⁴²https://moodle.hanover.edu/mod/quiz/view.php?id=14014

⁴³https://hanoverstatslabs.github.io/resources/labs/Lab7Instructions.html

Week 10 (03/11-03/15)

```
Day 1 Tree Diagrams<sup>44</sup>
HW9 due<sup>45</sup>
Quiz 7<sup>46</sup>
```

Day 2 Review

HW11 due⁴⁷

Day 3 MIDTERM (study guide⁴⁸)

Week 11 (03/18-03/22)

```
Day 1 Random Variables<sup>49</sup> HW10 due<sup>50</sup>
```

Day 2 Random Variables (cont)⁵¹

Day 3 Lab 8⁵² HW12 due⁵³

Week 12 (03/25-03/29)

Day 1 The Binomial Setting and Distribution⁵⁴
Quiz 8⁵⁵

Day 2 Mean and Standard Deviation of Random Variables⁵⁶ HW13 due⁵⁷

Day 3 Project work

⁴⁴ notes/decision_trees.html
45 assignments/hw9.html
46 https://moodle.hanover.edu/mod/quiz/view.php?id=14018
47 assignments/hw11.html
48 notes/midterm2_study_guide.html
49 notes/random_variables.html
50 assignments/hw10.html
51 notes/random_variables.html
52 https://hanoverstatslabs.github.io/resources/labs/Lab8Instructions.html
53 assignments/hw12.html
54 notes/binomial.html
55 https://moodle.hanover.edu/mod/quiz/view.php?id=14020
56 notes/rv_mean.html
57 assignments/hw13.html

Week 13 (04/01-04/05)

```
    Day 1 Combining Random Variables<sup>58</sup>
        Mean and Standard Deviation of the Binomial<sup>59</sup>
        Binomial: Approximating by Normal<sup>60</sup>
        Quiz 9<sup>61</sup>

    Day 2 The Sample Mean / IID Setting<sup>62</sup>
```

Day 2 The Sample Mean / IID Setting⁶²
HW14 due⁶³
Quiz 10⁶⁴

Day 3 Inference I: Confidence Intervals⁶⁵
HW15 due⁶⁶

Week 14 (04/08-04/12)

```
Day 1 Inference II: Hypothesis Tests^{67} HW16 due^{68} Quiz 11^{69}
```

Day 2 TBA HW17 due⁷⁰

Day 3 Presentations

⁵⁸notes/rv_combine.html

⁷⁰assignments/hw17.html

⁵⁹ notes/binomial_mean.html
60 notes/binomial_mean.html
61 https://moodle.hanover.edu/mod/quiz/view.php?id=14023
62 notes/iid_setting.html
63 assignments/hw14.html
64 https://moodle.hanover.edu/mod/quiz/view.php?id=14026
65 notes/confidence_intervals.html
66 assignments/hw15.html
67 notes/hypothesis_tests.html
68 assignments/hw16.html
69 https://moodle.hanover.edu/mod/quiz/view.php?id=14028