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 3^{11}

Day 2 No class

Day 3 Lab 2¹²

Week 3 (01/21-01/25)

Day 1 Data Collection¹³

Linear Transformations¹⁴

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

¹⁴notes/linear transformations.html

HW3 due¹⁵ Day 2 Standardized scores¹⁶ Density Curves¹⁷ The Normal Distribution¹⁸ Quiz 319 **Day 3** Lab 3²⁰ Week 4 (01/28-02/01) **Day 1** The Normal Distribution (cont)²¹ HW4 due²² **Day 2** Relationships between two variables²³ **Day 3** Lab 4²⁴ HW5 due²⁵ Week 5 (02/04-02/08) Day 1 HW6 due²⁶ **Day 2** Scatterplots and Correlation²⁷ Quiz 4²⁸ **Day 3 MIDTERM** (study guide²⁹) ¹⁵assignments/hw3.html ¹⁶notes/linear_transformations.html ¹⁷notes/density_curves.html ¹⁸notes/normal distribution.html ¹⁹https://moodle.hanover.edu/mod/quiz/view.php?id=14005 ²⁰https://hanoverstatslabs.github.io/resources/labs/Lab3Instructions.html ²¹notes/normal_distribution.html ²²assignments/hw4.html ²³notes/relationships.html ²⁴https://hanoverstatslabs.github.io/resources/labs/Lab4Instructions.html

²⁵assignments/hw5.html ²⁶assignments/hw6.html

²⁷notes/scatterplot_correlation.html

²⁹notes/midterm1_study_guide.html

²⁸https://moodle.hanover.edu/mod/quiz/view.php?id=14010

Week 6 (02/11-02/15)

Day 1 General Theory on Modeling and Data Fitting³⁰ Linear Models and Regression Lines³¹ HW7 due³²

Day 2 Linear Models and Regression Lines (cont)³³

Day 3 Lab 5³⁴

Week 7 (02/18-02/22)

Day 1 The question of causation³⁵
Quiz 5³⁶

Day 2 Introduction to Probability³⁷

Day 3 Lab 6³⁸

Week 8 (02/25-03/01)

WINTER BREAK

Week 9 (03/04-03/08)

Day 1 Conditional Probability³⁹
HW8 due⁴⁰

Day 2 Probability rules⁴¹ Independent Events⁴² Quiz 6⁴³

Day 3 Lab 7⁴⁴

³⁰notes/modeling_general.html

³¹notes/linear regression.html

³²assignments/hw7.html

³³notes/linear_regression.html

³⁴https://hanoverstatslabs.github.io/resources/labs/Lab5Instructions.html

³⁵notes/correlation_causation.html

³⁶https://moodle.hanover.edu/mod/quiz/view.php?id=14011

³⁷notes/probability_intro.html

³⁸https://hanoverstatslabs.github.io/resources/labs/Lab6Instructions.html

³⁹notes/probability_conditional.html

⁴⁰assignments/hw8.html

⁴¹notes/probability rules.html

⁴²notes/independent events.html

⁴³https://moodle.hanover.edu/mod/quiz/view.php?id=14014

⁴⁴https://hanoverstatslabs.github.io/resources/labs/Lab7Instructions.html

Week 10 (03/11-03/15)

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Day 1 Tree Diagrams<sup>45</sup>
HW9 due<sup>46</sup>
Quiz 7<sup>47</sup>
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Day 2 Review

HW11 due⁴⁸

Day 3 MIDTERM (study guide⁴⁹)

Week 11 (03/18-03/22)

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Day 1 Random Variables<sup>50</sup>
HW10 due<sup>51</sup>
```

Day 2 Random Variables (cont)⁵²

Day 3 Lab 8⁵³ HW12 due⁵⁴

Week 12 (03/25-03/29)

Day 1 The Binomial Setting and Distribution⁵⁵
Quiz 8⁵⁶

Day 2 Mean and Standard Deviation of Random Variables⁵⁷ HW13 due⁵⁸

Day 3 Project work

⁴⁵notes/decision_trees.html
46assignments/hw9.html
47https://moodle.hanover.edu/mod/quiz/view.php?id=14018
48assignments/hw11.html
49notes/midterm2_study_guide.html
50notes/random_variables.html
51assignments/hw10.html
52notes/random_variables.html
53https://hanoverstatslabs.github.io/resources/labs/Lab8Instructions.html
54assignments/hw12.html
55notes/binomial.html
56https://moodle.hanover.edu/mod/quiz/view.php?id=14020
57notes/rv_mean.html
58assignments/hw13.html

Week 13 (04/01-04/05)

```
    Day 1 Combining Random Variables<sup>59</sup>
        Mean and Standard Deviation of the Binomial<sup>60</sup>
        Binomial: Approximating by Normal<sup>61</sup>
        Quiz 9<sup>62</sup>

    Day 2 The Sample Mean / IID Setting<sup>63</sup>
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Day 2 The Sample Mean / IID Setting<sup>63</sup>
HW14 due<sup>64</sup>
Quiz 10<sup>65</sup>
```

Day 3 Inference I: Confidence Intervals⁶⁶
HW15 due⁶⁷

Week 14 (04/08-04/12)

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Day 1 Inference II: Hypothesis Tests<sup>68</sup>
HW16 due<sup>69</sup>
Quiz 11<sup>70</sup>
```

Day 2 TBA HW17 due⁷¹

Day 3 Presentations

⁵⁹ notes/rv_combine.html
60 notes/binomial_mean.html
61 notes/binomial_mean.html
62 https://moodle.hanover.edu/mod/quiz/view.php?id=14023
63 notes/iid_setting.html
64 assignments/hw14.html
65 https://moodle.hanover.edu/mod/quiz/view.php?id=14026
66 notes/confidence_intervals.html
67 assignments/hw15.html
68 notes/hypothesis_tests.html
69 assignments/hw16.html
70 https://moodle.hanover.edu/mod/quiz/view.php?id=14028
71 assignments/hw17.html