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 Transformations¹⁵ Standardized scores¹⁶

Day 3 Lab 3¹⁷

Week 4 (01/28-02/01)

Day 1 Density Curves¹⁸

The Normal Distribution¹⁹

Quiz 3²⁰

Day 2 Class cancelled

Day 3 Lab 4²¹ HW4 due²²

Week 5 (02/04-02/08)

Day 1 Relationships between two variables²³ HW5 due²⁴

Day 2 Scatterplots and Correlation²⁵ HW6 due²⁶

Day 3 MIDTERM (study guide²⁷)

Week 6 (02/11-02/15)

Day 1 Scatterplots and Correlation (cont) 28 General Theory on Modeling and Data Fitting 29 Quiz 4^{30}

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

²⁶assignments/hw6.html

²⁷notes/midterm1 study guide.html

²⁸notes/scatterplot correlation.html

²⁹notes/modeling_general.html

³⁰ https://moodle.hanover.edu/mod/quiz/view.php?id=14010

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Day 2 Linear Models and Regression Lines<sup>31</sup>
Day 3 HW7 due<sup>32</sup>
      Lab 5<sup>33</sup>
Week 7 (02/18-02/22)
Day 1 The question of causation<sup>34</sup>
      Quiz 5<sup>35</sup>
Day 2 Introduction to Probability<sup>36</sup>
Day 3 Lab 6<sup>37</sup>
      HW8 due<sup>38</sup>
Week 8 (02/25-03/01)
WINTER BREAK
Week 9 (03/04-03/08)
Day 1 Conditional Probability<sup>39</sup>
Day 2 Probability rules<sup>40</sup>
      Independent Events<sup>41</sup>
      Quiz 642
Day 3 Lab 7<sup>43</sup>
  <sup>31</sup>notes/linear_regression.html
  <sup>32</sup>assignments/hw7.html
  <sup>33</sup>https://hanoverstatslabs.github.io/resources/labs/Lab5Instructions.html
  <sup>34</sup>notes/correlation causation.html
  35https://moodle.hanover.edu/mod/quiz/view.php?id=14011
  <sup>36</sup>notes/probability_intro.html
  <sup>37</sup>https://hanoverstatslabs.github.io/resources/labs/Lab6Instructions.html
  <sup>38</sup>assignments/hw8.html
  <sup>39</sup>notes/probability_conditional.html
  <sup>40</sup>notes/probability_rules.html
  <sup>41</sup>notes/independent events.html
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42https://moodle.hanover.edu/mod/quiz/view.php?id=14014

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

Week 10 (03/11-03/15)

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

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    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>
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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)

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