

# 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 Fri<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 Fri<sup>10</sup>

Quiz 2 due Thu<sup>11</sup>

**Day 2** Data Collection<sup>12</sup>

Linear Transformations<sup>13</sup>

HW3 due Mon<sup>14</sup>

**Day 3** Lab 2<sup>15</sup>

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<sup>1</sup>[notes/taste.html](https://moodle.hanover.edu/mod/quiz/view.php?id=5177)

<sup>2</sup>[notes/basic\\_terminology.html](https://moodle.hanover.edu/mod/quiz/view.php?id=5177)

<sup>3</sup>[assignments/hw1.html](https://moodle.hanover.edu/mod/quiz/view.php?id=5177)

<sup>4</sup>[notes/visualizing\\_distributions.html](https://moodle.hanover.edu/mod/quiz/view.php?id=5177)

<sup>5</sup><https://moodle.hanover.edu/mod/quiz/view.php?id=5177>

<sup>6</sup><https://hanoverstatslabs.github.io/resources/labs/Lab1Instructions.html>

<sup>7</sup>[notes/percentiles.html](https://moodle.hanover.edu/mod/quiz/view.php?id=5178)

<sup>8</sup>[notes/measures\\_center.html](https://moodle.hanover.edu/mod/quiz/view.php?id=5178)

<sup>9</sup>[notes/measures\\_spread.html](https://moodle.hanover.edu/mod/quiz/view.php?id=5178)

<sup>10</sup>[assignments/hw2.html](https://moodle.hanover.edu/mod/quiz/view.php?id=5178)

<sup>11</sup><https://moodle.hanover.edu/mod/quiz/view.php?id=5178>

<sup>12</sup>[notes/data\\_collection.html](https://moodle.hanover.edu/mod/quiz/view.php?id=5178)

<sup>13</sup>[notes/linear\\_transformations.html](https://moodle.hanover.edu/mod/quiz/view.php?id=5178)

<sup>14</sup>[assignments/hw3.html](https://moodle.hanover.edu/mod/quiz/view.php?id=5178)

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

## Week 3 (09/18-09/22)

**Day 1** Standardized scores<sup>16</sup>

**Day 2** Density Curves<sup>17</sup>

HW4 due Wed<sup>18</sup>

**Day 3** Lab 3<sup>19</sup>

## Week 4 (09/25-09/29)

**Day 1** The Normal Distribution<sup>20</sup>

**Day 2** Relationships between two variables<sup>21</sup>

Scatterplots and Correlation<sup>22</sup>

**Day 3** Lab 4<sup>23</sup>

HW5 due Fri<sup>24</sup>

## Week 5 (10/02-10/06)

**Day 1** General Theory on Modeling and Data Fitting<sup>25</sup>

HW6 due Mon<sup>26</sup>

**Day 2** **MIDTERM** (study guide<sup>27</sup>)

**Day 3** Linear Models and Regression Lines<sup>28</sup>

The question of causation<sup>29</sup>

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<sup>16</sup>[notes/linear\\_transformations.html](#)

<sup>17</sup>[notes/density\\_curves.html](#)

<sup>18</sup>[assignments/hw4.html](#)

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

<sup>20</sup>[notes/normal\\_distribution.html](#)

<sup>21</sup>[notes/relationships.html](#)

<sup>22</sup>[notes/scatterplot\\_correlation.html](#)

<sup>23</sup><https://hanoverstatslabs.github.io/resources/labs/Lab4Instructions.html>

<sup>24</sup>[assignments/hw5.html](#)

<sup>25</sup>[notes/modeling\\_general.html](#)

<sup>26</sup>[assignments/hw6.html](#)

<sup>27</sup>[notes/midterm1\\_study\\_guide.html](#)

<sup>28</sup>[notes/linear\\_regression.html](#)

<sup>29</sup>[notes/correlation\\_causation.html](#)

## Week 6 (10/09-10/13)

**Day 1** Introduction to Probability<sup>30</sup>

**Day 2** Conditional Probability<sup>31</sup>

Probability rules<sup>32</sup>

**Day 3** Independent Events<sup>33</sup>

## Week 7 (10/16-10/20)

**Day 1** Tree Diagrams<sup>34</sup>

**Day 2** Random Variables<sup>35</sup>

**Day 3** The Binomial Setting and Distribution<sup>36</sup>

## Week 8 (10/23-10/27)

**Day 1** Fall Break

**Day 2** The Binomial Setting and Distribution<sup>37</sup>

**Day 3** Lab: Work on Projects<sup>38</sup>

## Week 9 (10/30-11/03)

**Day 1** Mean and Standard Deviation of Random Variables<sup>39</sup>

**Day 2** Work on Projects<sup>40</sup>

**Day 3** Work on Projects<sup>41</sup>

## Week 10 (11/06-11/10)

**Day 1** Combining Random Variables<sup>42</sup>

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<sup>30</sup>[notes/probability\\_intro.html](#)

<sup>31</sup>[notes/probability\\_conditional.html](#)

<sup>32</sup>[notes/probability\\_rules.html](#)

<sup>33</sup>[notes/independent\\_events.html](#)

<sup>34</sup>[notes/decision\\_trees.html](#)

<sup>35</sup>[notes/random\\_variables.html](#)

<sup>36</sup>[notes/binomial.html](#)

<sup>37</sup>[notes/binomial.html](#)

<sup>38</sup>[labs/projectAnalysisSteps.html](#)

<sup>39</sup>[notes/rv\\_mean.html](#)

<sup>40</sup>[labs/projectAnalysisSteps.html](#)

<sup>41</sup>[labs/projectAnalysisSteps.html](#)

<sup>42</sup>[notes/rv\\_combine.html](#)

**Day 2** Mean and Standard Deviation of the Binomial<sup>43</sup>

**Day 3** **MIDTERM** (study guide<sup>44</sup>)

## **Week 11 (11/13-11/17)**

**Day 1** Binomial: Approximating by Normal<sup>45</sup>

**Day 2** The Sample Mean / IID Setting<sup>46</sup>

**Day 3** The Sample Mean / IID Setting (cont)<sup>47</sup>

## **Week 12 (11/20-11/24)**

**Day 1** Inference I: Confidence Intervals<sup>48</sup>

**Day 2** THANKSGIVING

**Day 3** THANKSGIVING

## **Week 13 (11/27-12/01)**

**Day 1** Inference I: Confidence Intervals (cont)<sup>49</sup>

**Day 2** Inference II: Hypothesis Tests<sup>50</sup>

**Day 3** Inference II: Hypothesis Tests (cont)<sup>51</sup>

## **Week 14 (12/04-12/08)**

**Day 1** TBA

**Day 2** TBA

**Day 3** Presentations

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<sup>43</sup>[notes/binomial\\_mean.html](#)

<sup>44</sup>[notes/midterm2\\_study\\_guide.html](#)

<sup>45</sup>[notes/binomial\\_mean.html](#)

<sup>46</sup>[notes/iid\\_setting.html](#)

<sup>47</sup>[notes/iid\\_setting.html](#)

<sup>48</sup>[notes/confidence\\_intervals.html](#)

<sup>49</sup>[notes/confidence\\_intervals.html](#)

<sup>50</sup>[notes/hypothesis\\_tests.html](#)

<sup>51</sup>[notes/hypothesis\\_tests.html](#)