# Schedule

A week-by-week breakdown of the material.

# Week 1 (09/07-9/11)

**Day 1** Basic Terminology<sup>1</sup>

**Day 2** Lab 1<sup>2</sup>

**Day 3** Visualizing Variables<sup>3</sup>

Day 4 Percentiles<sup>4</sup>

## Week 2 (09/14-09/18)

**Day 1** Measures of Center<sup>5</sup>

**Day 2** Lab 2<sup>6</sup>

**Day 3** Measures of Spread<sup>7</sup>

Linear Transformations<sup>8</sup>

**Day 4** Density Curves<sup>9</sup>

The Normal Distribution 10

## Week 3 (09/21-09/25)

 ${f Day~1}$  Relationships between two variables  $^{11}$ 

**Day 2** Lab 3<sup>12</sup>

**Day 3** Scatterplots and Correlation<sup>13</sup>

Day 4 General Theory on Modeling and Data Fitting<sup>14</sup>

<sup>&</sup>lt;sup>1</sup>notes/basic\_terminology.html

<sup>&</sup>lt;sup>2</sup>labs/1.html

<sup>&</sup>lt;sup>3</sup>notes/visualizing\_distributions.html

<sup>&</sup>lt;sup>4</sup>notes/percentiles.html

<sup>&</sup>lt;sup>5</sup>notes/measures center.html

<sup>&</sup>lt;sup>6</sup>labs/2.html

<sup>&</sup>lt;sup>7</sup>notes/measures\_spread.html

<sup>&</sup>lt;sup>8</sup>notes/linear\_transformations.html

<sup>&</sup>lt;sup>9</sup>notes/density\_curves.html

<sup>&</sup>lt;sup>10</sup>notes/normal\_distribution.html

<sup>&</sup>lt;sup>11</sup>notes/relationships.html

<sup>&</sup>lt;sup>12</sup>labs/3.html

<sup>&</sup>lt;sup>13</sup>notes/scatterplot\_correlation.html

<sup>&</sup>lt;sup>14</sup>notes/modeling\_general.html

#### Week 4 (09/28-10/02)

- **Day 1** Linear Models and Regression Lines<sup>15</sup>
- **Day 2** Lab 4<sup>16</sup>
- **Day 3** The question of causation<sup>17</sup>
- **Day 4** Introduction to Probability<sup>18</sup>

### Week 5 (10/05-10/09)

- Day 1 Review
- **Day 2 MIDTERM** (study guide<sup>19</sup>)
- **Day 3** Introduction to Probability (cont)<sup>20</sup>
- **Day 4** Independent Events<sup>21</sup>

### Week 6 (10/12-10/16)

- **Day 1** Probability rules<sup>22</sup>
- Day 2 Catchup
- **Day 3** Tree Diagrams<sup>23</sup>
- **Day 4** Tree Diagrams (cont)<sup>24</sup>

### Week 7 (10/19-10/23)

- Day 1 Fall Break
- Day 2 Probability Practice
- Day 3 Probability Practice
- Day 4 Probability Practice

# Week 8 (10/26-10/30)

- **Day 1** Random Variables<sup>25</sup>
- **Day 2** Lab Practice

<sup>&</sup>lt;sup>15</sup>notes/linear\_regression.html

<sup>&</sup>lt;sup>16</sup>labs/4.html

<sup>&</sup>lt;sup>17</sup>notes/correlation\_causation.html

<sup>&</sup>lt;sup>18</sup>notes/probability\_intro.html

<sup>&</sup>lt;sup>19</sup>notes/midterm1\_study\_guide.html

<sup>&</sup>lt;sup>20</sup>notes/probability\_intro.html

<sup>&</sup>lt;sup>21</sup>notes/independent\_events.html

<sup>&</sup>lt;sup>22</sup>notes/probability\_rules.html

<sup>&</sup>lt;sup>23</sup>notes/decision trees.html

<sup>&</sup>lt;sup>24</sup>notes/decision trees.html

<sup>&</sup>lt;sup>25</sup>notes/random\_variables.html

- **Day 3** The Binomial Setting and Distribution<sup>26</sup>
- **Day 4** Mean and Standard Deviation of Random Variables<sup>27</sup>

#### Week 9 (11/02-11/06)

- Day 1 Mean and Standard Deviation of Random Variables (cont)<sup>28</sup>
- **Day 2** Combining Random Variables<sup>29</sup>
- **Day 3** Combining Random Variables (cont)<sup>30</sup>
- Day 4 Review / Catchup

### Week 10 (11/09-11/13)

- Day 1 MIDTERM (study guide<sup>31</sup>)
- **Day 2** Lab: Work on Projects<sup>32</sup>
- Day 3 Mean and Standard Deviation of the Binomial<sup>33</sup>
- **Day 4** Binomial: Approximating by Normal<sup>34</sup>

### Week 11 (11/16-11/20)

- **Day 1** The Sample Mean / IID Setting<sup>35</sup>
- Day 2 Work on Projects
- **Day 3** The Sample Mean / IID Setting (cont)<sup>36</sup>
- **Day 4** Inference I: Confidence Intervals<sup>37</sup>

## Week 12 (11/23-11/27)

- **Day 1** Inference I: Confidence Intervals (cont)<sup>38</sup>
- Day 2 THANKSGIVING
- Day 3 THANKSGIVING
- Day 4 THANKSGIVING

<sup>&</sup>lt;sup>26</sup>notes/binomial.html

<sup>&</sup>lt;sup>27</sup>notes/rv\_mean.html

<sup>&</sup>lt;sup>28</sup>notes/rv\_mean.html

<sup>&</sup>lt;sup>29</sup>notes/rv\_combine.html

<sup>&</sup>lt;sup>30</sup>notes/rv\_combine.html

 $<sup>^{31}</sup>$ notes/midterm2\_study\_guide.html

<sup>&</sup>lt;sup>32</sup>labs/projectAnalysisSteps.html

<sup>&</sup>lt;sup>33</sup>notes/binomial\_mean.html

<sup>&</sup>lt;sup>34</sup>notes/binomial\_mean.html

<sup>&</sup>lt;sup>35</sup>notes/iid\_setting.html

<sup>&</sup>lt;sup>36</sup>notes/iid\_setting.html

<sup>&</sup>lt;sup>37</sup>notes/confidence\_intervals.html

<sup>&</sup>lt;sup>38</sup>notes/confidence\_intervals.html

# Week 13 (12/01-12/04)

**Day 1** Inference II: Hypothesis Tests<sup>39</sup>

**Day 2** Inference II: Hypothesis Tests (cont)<sup>40</sup>

Day 3 TBA

Day 4 TBA

# Week 14 (12/07-12/11)

Day 1 TBA

Day 2 TBA

Day 3 TBA

Day 4 TBA

<sup>&</sup>lt;sup>39</sup>notes/hypothesis\_tests.html

<sup>&</sup>lt;sup>40</sup>notes/hypothesis\_tests.html