**Stat 216 Calendar of Topics and Due Dates – Fall 2022**

*\*GS indicates the assignment/lab should be turned into Gradescope*

*\*D2L indicates the video quiz is completed within D2L*

**Additional due dates:**

* The previous day’s in-class activity (as instructed by your instructor) is due at the beginning of class each day.

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| **Week** | **Date** | **Activity/Lab completed in class** | **Read prior to class (sections correspond to the online textbook)** | **Homework**  Videos (due in D2L at 8am), Labs (due in GS at 8pm), Assignments (due in GS at 8pm) |
| **1** | Wed 8/24 | Syllabus Review | -- | Instructor bio (*optional*) (D2L)  Starting\_with\_R (*optional*) (D2L) |
|  | Fri 8/26 | Week 1 Lab: Observational units, variable, types of bias - NEW | §1.1; §1.2; §1.3 | *Lab 0 (GS) (optional)* |
| **2** | Mon 8/29 | Week 2 Activity A: American Indian Address Part 1  Biased sampling method | §1.4; §1.5; §1.6; §1.8 | 1.2.1\_1.2.2 (D2L at 8am)  1.2.3\_1.2.4\_1.2.5 (D2L at 8am)  1.3 (D2L at 8am)  1.4to1.6 (D2L at 8am)  Assignment 1 (GS at 8pm) |
|  | Wed 8/31 | Week 2 Activity B: American Indian Address Part 2  Unbiased sampling method |  |  |
|  | Fri 9/2 | Week 2 Lab: Study Design  Obs Study vs Exp – SofI |  | Week 2 Lab (GS at 8pm) |
| **3** | Mon 9/5 | **No class – Presidents Day** | §1.7; §2.1; §2.3; §2.4; §2.5 | 2.1 (D2L at 8am)  MosaicPlots (D2L at 8am)  2.3 (D2L at 8am)  Assignment 2 (GS at 8pm) |
|  | Wed 9/7 | Week 3 Activity: Myopia and Nightlights  Categorical data/plots |  |  |
|  | Fri 9/9 | Week 3 Lab: IPEDS  Quantitative data/plots |  | Week 3 Lab (GS at 8pm) |
| **4** | Mon 9/12 | Week 4 Activity A: Movie Profits – Linear Regression | §3.1; §3.2; §3.3; §3.4; §3.5; §4.1; §4.2; §4.4 | Chapter3 (D2L at 8am)  Chapter4 (D2L at 8am)  Assignment 3 (GS at 8pm) |
|  | Wed 9/14 | Week 4 Activity B: Movie Profits – Correlation |  |  |
|  | Fri 9/16 | Week 4 Lab: Penguins |  | Week 4 Lab (GS at 8pm) |
| **5** | Mon 9/19 | Week 5 Activity: Exam 1 Review |  | Islands\_Introduction\_F21 (D2L at 8am)  Assignment 4 (GS at 8pm) |
|  | Wed 9/21 | **Group Midterm Exam 1** |  |  |
|  | Fri 9/23 | **Midterm Exam 1** |  |  |
| **6** | Mon 9/26 | Week 6 Activity A: Helper/Hinderer - Simulation Hypothesis Testing | §5.1.1; §5.1.2; §5.1.3; §5.3.1 §5.3.2 | 5.1 (D2L at 8am)  5.3SimTest (D2L at 8am)  5.3SimInterval (D2L at 8am) Bootstrapping *(optional)* (D2L at 8am)  One-Vs-Two-sided-Tests (D2L at 8am)  Helper-Hinderer Experiment (D2L at 8am) |
|  | Wed 9/28 | Week 6 Activity B: Helper/Hinderer (cont.) – Sim HT |  |  |
|  | Fri 9/30 | Week 6 Lab Helper/Hinderer – Simulation Confidence Intervals |  | Week 6 Lab (GS at 8pm) |
| **7** | Mon 10/3 | Week 7 Activity A: Handedness of Male Boxers – Theory-based Inference HT – Impacts on p-value | §5.1.4; §5.2; §5.3.3; §5.3.4; §5.4 | 5.2 (D2L at 8am)  5.3TheoryInf (D2L at 8am)  5.4 (D2L at 8am)  Assignment 5 (GS at 8pm) |
|  | Wed 10/5 | Week 7 Activity B: Theory-based Inference CI – What does Conf mean |  |  |
|  | Fri 10/7 | Week 7 Lab: Errors and Power |  | Week 7 Lab (GS at 8pm) |
| **8** | Mon 10/10 | Week 8 Activity A: Good Samaritan - Simulation Hypothesis Testing | §5.5.1; §5.5.2 | 5.5SimInf (D2L at 8am)  Assignment 6 (GS at 8pm) |
|  | Wed 10/12 | Week 8 Activity B: Good Samaritan - Simulation Confidence Intervals – Review types of errors |  |  |
|  | Fri 10/14 | Week 8 Lab – Poisonous Mushrooms - **NEW** |  | Week 8 Lab (GS at 8pm) |
| **9** | Mon 10/17 | Week 9 Activity A: Head Injuries by Helmet Use - Theoretical Hypothesis Testing – Needs more questions!! | §5.5.3; §5.6; §5.7; §5.8 | 5.5TheoryInf (D2L at 8am)  Assignment 7 (GS at 8pm) |
|  | Wed 10/19 | Week 9 Activity B: Head Injuries by Helmet Use - Theoretical Confidence Intervals – Effect of sample size |  |  |
|  | Fri 10/21 | Week 9 Lab – Diabetes |  | Week 9 Lab (GS at 8pm) |
| **10** | Mon 10/24 | Week 10 Activity: Exam 2 Review |  | Assignment 8 (GS at 8pm) |
|  | Wed 10/26 | **Group Midterm Exam 2** |  |  |
|  | Fri 10/28 | **Midterm Exam 2** |  |  |
| **11** | Mon 10/31 | Week 11 Activity A: COVID-19 and Air Pollution – Simulation Inference | §6.1; §6.2 | 6.1 (D2L at 8am)  6.2 (D2L at 8am) |
|  | Wed 11/2 | Week 11 Activity B: Color Interference – Theoretical Inference |  |  |
|  | Fri 11/4 | Week 11 Lab: Swearing |  | Week 11 Lab (GS at 8pm) |
| **12** | Mon 11/7 | Week 12 Activity: Rudeness – NEW Simulation Inference | §6.3; §6.4; §6.5; §6.6 | 6.3 (D2L at 8am)  Assignment 9 (GS at 8pm) |
|  | Wed 11/9 | Week 12 Lab: Triple Crown – Theoretical Inference |  | Week 12 Lab (GS at 8pm) |
|  | Fri 11/11 | **No class – Veterans Day** |  |  |
| **13** | Mon 11/14 | Week 13 Activity A: Diving Penguins –Simulation Inference | §7.1; §7.2; §7.3 | 7.1and7.2 (D2L at 8am)  Assignment 10 (GS at 8pm) |
|  | Wed 11/16 | Week 13 Activity B: Golf Driving Distance – Theoretical Inference |  |  |
|  | Fri 11/18 | Week 13 Lab: Big Mac Index - NEW |  | Week 13 Lab (GS at 8pm) |
|  | 11/21 – 11/25 | Fall Break – No classes |  |  |
| **14** | Mon 11/28 | Week 14 Activity A: What’s the probability | §2.2; §5.5.1.4 | 2.2 (D2L at 8am)  Relative\_Risk (D2L at 8pm)  Assignment 11 (GS at 8pm) |
|  | Wed 11/30 | Week 14 Activity B: Titanic Survivor – Relative Risk |  |  |
|  | Fri 12/2 | Week 14 Lab: Efficacy of the COVID Vaccination- ADD |  | Week 14 Lab (GS at 8pm) |
| **15** | Mon 12/5 | Week 15 Activity: Final exam review |  | Assignment 12 (GS at 8pm) |
|  | Wed 12/7 | **Group Exam Part 1** |  |  |
|  | Fri 12/9 | **Group Exam Part 2** |  |  |
| **16** | Mon 12/12 – Thurs 12/15 | **Final Exam –**  **Thursday December 13th,**  **6 - 7:50pm** |  |  |