

| Date     | Day  | Discussion Due by 4:00pm | Lecture Topic                                                     | Unit | Assignment Due by 11:59pm |
|----------|------|--------------------------|-------------------------------------------------------------------|------|---------------------------|
| Jan 19   | Tues |                          | Syllabus and R/RStudio                                            | 0    |                           |
| Jan 21   | Thur | L1                       | Tidyverse (the verbs)                                             |      |                           |
| Jan 26   | Tues | L2                       | Causation: Logic models, DAGS, and Potential Outcomes             | 1    | HW 1                      |
| Jan 28   | Thur |                          |                                                                   |      |                           |
| Feb 2    | Tues | L3                       | Simple Regression                                                 |      |                           |
| Feb 4    | Thur | L4                       | Multiple Regression                                               |      |                           |
| Feb 9    | Tues | L5                       | Regression with Categorical Variables                             |      |                           |
| Feb 11   | Thur |                          | Exam 1                                                            |      |                           |
| Feb 16   | Tues | L6                       | Assumptions of Regression                                         | 2    | HW 2                      |
| Feb 18   | Thur | L7                       | Diagnostics (Detecting Irregularities)                            |      |                           |
| Feb 23   | Tues |                          |                                                                   |      |                           |
| Feb 25   | Thur | L8                       | Missing Data and Other Real-World Problems                        |      |                           |
| Mar 2    | Tues | L9                       | Threats to Validity (including measurement error, multiple tests) |      |                           |
| Mar 4    | Thur |                          | Exam 2                                                            |      |                           |
| Mar 9    | Tues | L10                      | Effect Sizes (including partial dependence plots)                 | 3    | HW 3                      |
| Mar 11   | Thur |                          |                                                                   |      |                           |
| Mar 16   | Tues | L11                      | Linear Interaction                                                |      |                           |
| Mar 18   | Thur |                          |                                                                   |      |                           |
| Mar 23   | Tues | L12                      | Nonlinear Relationships                                           |      |                           |
| Mar 25   | Thur | L13                      | Intro to Generalized Linear Models                                |      |                           |
| Mar 30   | Tues |                          | Catch Up Day                                                      |      |                           |
| Apr 1    | Thur |                          | Exam 3                                                            |      |                           |
| Apr 6    | Tues | L14                      | Logistic Regression                                               | 4    | Final Project             |
| Apr 8    | Thur |                          |                                                                   |      |                           |
| Apr 13   | Tues | L15                      | Other GLMs                                                        |      |                           |
| Apr 15   | Thur |                          |                                                                   |      |                           |
| Apr 20   | Tues | L16                      | Mediation Analysis                                                |      |                           |
| Apr 22   | Thur | L17                      | Miscellaneous (variable selection methods)                        |      |                           |
| Apr 27   | Tues |                          | Catch Up Day                                                      |      |                           |
| April 29 | Thur |                          | Exam 4                                                            |      |                           |