Plan for Remaining Lectures in Statistical Computing Course with Ian McLeod

November 23, 2017

R for Data Science

- 1. Explore (Completed)
 - 1.1. Data Visualization with ggplot2
 - 1.2. Workflow Basics
 - 1.3. Data Transformation with dplyr
 - 1.4. Scripts
 - 1.5. Exploratory Data Analysis
 - 1.6. Projects
- 2. Wrangle (5 Lectures:

Lectures: Oct Monday 23 & Tuesday 25. No lecture: Friday Oct 27, Lectures Monday Oct 30 & Nov 1. No Lecture: Friday Nov 3.

- 2.1. Tibbles with tibble
- 2.2. Data Import with readr
- 2.3. Tidy Data with tidyr
- 2.4. Relational Data with dplyr
- 2.5. Strings with stringr
- 2.6. Factors with forcats
- 2.7. Dates and Times with lubridate
- 3. Program (3 Lectures: Monday Nov 6, Wed. Nov 8, No Lecture: Friday Nov 10)
 - 3.1. Pipes with magrittr
 - 3.2. Functions
 - 3.3. Vectors
 - 3.4. Iteration with purr

- 4. Model (3 Lectures: MWF week of Nov 13-17)
 - 4.1. Model Basics with modelr
 - 4.2. Model Building
 - 4.3. Many Models with purrr and broom
- 5. Communicate (3 Lectures: MWF week of Nov 20-24)
 - 5.1. R Markdown
 - **5.2.** Graphics for Communication with ggplot2
 - 5.3. R Markdown Formats
 - 5.4. R Markdown Workflow

Further Lectures

Parallel Computing with R. November 27.

The EM Algorithm. November 29.

Dynamic and Interactive Graphics with GGobi. December 1 through 8 This book is available electronically from Western Libraries.