

## CPSC 229 – Lecture Tentative Schedule\*

\*Subject to change.

Date: Lecture Topic | [Pre-class Reading Assignments](#)

Tue Aug 27: Introduction to the Course, Icebreakers. Why Learn *R*? | [None](#)

Thu Aug 29: How We See | [None](#)

Tue Sept 3: Hands-on Introduction to *R* and RStudio | [Cotton Ch. 1 – 2](#)

Thu Sept 5: Getting to Know Your Workspace | [Cotton Ch. 3 – 5](#)

Tue Sept 10: Importing Data & Basic Plotting | [Chang Ch. 1 – 2](#)

Thu Sept 12: Scripting | [R for Data Science: Workflow Scripts;](#)  
[Software Carpentry: Best Practices for R Code](#)

Tue Sept 17: Basic Data Analysis | [None](#)

Thu Sept 19: **Workshop Day 1: Basic analysis**

Tue Sept 24: Basics of Data Visualization | [McCandless TED talk](#)

Thu Sept 26: Grammar of Graphics Basics | [Chang Appendix A; Cotton Ch. 14](#)

Tue Oct 1: Student Presentations with `ggplot2` | [Assigned Chapter of Chang](#)

Thu Oct 3: **Workshop Day 2: Graphing**

Tue Oct 8: Environments, Factors, & Functions | [Cotton Ch. 6, 7](#)

Thu Oct 10: Flow Control (Conditionals) | [Cotton Ch. 8](#)

Tue Oct 15: Flow Control (Looping) | [Cotton Ch. 8 – 9](#)

Thu Oct 17: **Workshop Day 3: Automating**

Tue Oct 22: Advanced Data Importing | [Cotton Ch. 12](#)

Thu Oct 24: Cleaning & Transforming Data | [Cotton Ch. 13](#)

Tue Oct 29: Version Control & Best Practices | [Wilson et al. 2014;](#)

[Software Carpentry:Version Control with Git](#)

Thu Oct 31: Automating Data Analysis | [none](#)

Tue Nov 5: **Workshop Day 4: Debugging & Troubleshooting** | [Cotton Ch. 16](#)

Thu Nov 7: Basics of Communicating Data | [TBD](#)

Tue Nov 12: Scientific Papers | [Assigned papers](#)

Thu Nov 14: Grant Proposals | [Assigned proposals](#)

Tue Nov 19: Oral Presentations | **none**

Thu Nov 21: Poster Presentations | **Better Posters readings**

Tue Nov 26: no class (Thanksgiving week)

Thu Nov 28: no class (Thanksgiving week)

Tue Dec 3: What can you do with data science? Dr. El-Askary visits | **none**

Thu Dec 5: Project Conferences

### **Tentative Final Project Schedule\***

Fri Nov 8 (5 pm): Data set for final project must be approved by Dr. Waldrop

Mon Nov 18 – Fri Nov 22: Individual progress conferences with Dr. Waldrop

Mon Dec 2 (5 pm): Deadline for first drafts of oral presentations (posters and talks)

Tue Dec 3 & Thu Dec 5: Individual conferences for feedback on oral presentations

Fri Dec 6: Deadline for first drafts of written assignment (uploaded to Blackboard)

Wed Dec 11 (9 am): Printing deadline for posters (email to Cheryl Stark, cc Dr. Waldrop)

Thu Dec 12 (9 am): Deadline for submitting talk powerpoint slides to Dr. Waldrop

Thu Dec 12 (10:45 am – 1:15 pm): **Final presentations held during exam period**

Thu Dec 12 (2 pm): **Final written assignment due (uploaded to Blackboard)**