Guidelines for Independent Projects

This course will culminate in an independent project using R that each of you will submit at the end of the semester. The hope is that you will challenge yourself to get something productive towards your thesis/dissertation or other research product. There are only a few loose criteria: (1) it should go beyond what we have gone over in class or done in your assignments, and (2) it should involve you learning to do something you did not know how to do before. I encourage you to try to tackle problems that might require you to learn new functions or packages—this is a great time to challenge yourself!

Timeline (see guidelines for each item):

Thursday, October 19: Submit Project Proposal (see guidelines below)

Tuesday, October 24: Proposal Presentation (in class: 1-2 slides: 4-5 min)

Tuesday/Thursday, December 5 & 7th: Presentation of Final Project (in class ~8 min)

Thursday, December 7: Submit Final Project

Some details:

Project proposal: (by October 19): This should be an approximately 2-page document that contains the following information:

- **Introduction** that sets the context for your project
- **Objectives** section that lays out what you are trying to accomplish in your project.
- **Methods** section that includes information on where the dataset is coming from (publication or your own), and how the data was collected.
- **References Cited**

Final Project:

You will conduct your project over the course of about 7 weeks. You will work on the project on your own, but we will also reserve at least half of the lecture time after Fall Break towards working on your projects.

On (or before) December 7st, you will submit these items on your independent projects repository:

(1) A final report written in RMarkdown (.rmd) and 'knitted' in .htm., .docx or .pdf format (html is my personal preference).

The report should have:

(i) A short *Introduction* that lays out the question and dataset (can be edited version from proposal)

(ii) A main section that walks through the codes in your workflow to produce the visualizations/analyses that you conducted.

(iii) *Discussion* section that interprets the results that you generated.

(2) The data file(s) that is needed to run the code scripts in your report.