Syllabus

Stat/CSSS 567

Fall 2020, University of Washington

Figure from Salter-Townshend & McCormick (2017) using data from Banerjee et al. (2013)

First, a note

This term is unlike any before and requires that we use additional thoughtfulness and compassion in going about activities that previously seemed normal. I do not see this as a situation where it is reasonable to expect that we would "do what we did before, but online." I've updated the course content to reflect that our meetings are online, but also adjusted the course expectations to (hopefully) be more amenable to the additional pressures that many of us are under at the moment. If there's something I haven't thought of that would be helpful, please just ask. A few specific things:

- Please participate as much as possible. This could mean attending syncronously, asking questions during class, participating in the discussion board, and so forth. No need to let me know if you can't do these things at times; I understand.

- You're never required to have on video/audio. Again, please participate as much as you can.
- There are no firm due dates for assignments. You don't need to ask for extensions. We'll grade things as they come in and assign grades at the end of the quarter only for those who have completed all the assignments. For those who haven't, we'll record incomplete until you're able to finish.

- Please let me know if you have questions or suggestions.

Logistics

Instructor: Tyler McCormick; Email: tylermc@uw.edu; Office Hours: Tuesday 12:30-1:30 (Sign up) or Thursday 1-3pm (Sign up). Please use the zoom link on the sign up calendar. **TA:** Shane Lubold (sl223@uw.edu); Office Hours: TBA

Course meetings: T/Th 2:30-3:50pm & F 2:30-3:20

Overview & objectives

This course is a practical, hands-on introduction to design and analysis of social network data, set against a backdrop of theory from sociology, economics, epidemiology, and other disciplines.

Where do I find...

- Email: Please use tylermc@uw.edu to contact me. I won't check messages on Canvas very frequently.
- Slides and papers: On the course calendar (see link above)
- Lecture and lab recordings: Available through Canvas.
- Questions on course material: We'll be using Piazza for discussions. If you run into issues or have a question, start with Piazza! Signup link here.

Course components & grading

Component	% Grade
Approx 4 HWs	20
In-class presentation and referee report	35
Final project & poster	45

In-class presentation and referee report: In weeks 4-9, Tuesday lectures will present statistical methods and Thursday lectures will be student presentations. Presentations will either highlight social science papers that use the methods discussed on Tuesday or present more advanced statistical techniques. Presentations will be in small groups (3-4 students).

- Papers for presentation are listed on the course schedule. Please sign up for papers here.

- There are four slots (80 minutes) per class period. Give the size of the class, all slots will likely fill, so please sign up early!
- You're *encouraged* (but not required) to upload a video presentation to Canvas beforehand and use the time during class for questions and discussion.
- Along with your presentation, your group should prepare a referee report on the paper you read. The goal is to be constructive, not critical. There is no due date for the referee report, but you should post your referee report in a new thread on Piazza when you finish it so others can read and respond. Posting before your presentation is encouraged. The best reports will raise questions that could lead to new research ideas. This document should be 2-5 pages in length and include

  - A brief synopsis of the paper (including main points, key evidence, and areas for future work)
  - A series of "major points" listed as questions or open areas for further development by the author(s).

Final project: The final project should be an in-depth exploration of a question related to social networks using techniques learned during the course. Projects can also take the form of additional statistical work, but each project must include a substantial data analysis component. If you have data from your own research, you're welcome to use it. If you have questions about the project or are looking for group members, please post in the project heading of Piazza. Group work in teams of 3-4 is highly encouraged.

- Deliverables:
  - A poster of quality acceptable for presentation at an academic conference. We will hold a virtual poster session in the last week of classes.
  - A GitHub repository containing all the code and data required to reproduce *both* your results and the poster. If you cannot share your data you should simulate data with similar characteristics.
- Grading:
  - Appropriate and thoughtful use of network analysis techniques.
  - Graphics and visual appeal of the poster.
  - Contribution to social science question and/or statistical methodology.
  - GitHub repo. As part of grading, someone will download and attempt to run the code in your GitHub repo. Your code should run beginning to end and be thoroughly documented.

Lab: Hands on practice with network data. Labs count as part of homeworks. If you run into questions between lab meetings, please post them on Piazza.

Collaborative work: Working together is highly encouraged! Each student must, however, turn in their own homework using Github (see below). Writing must be your own, or appropriately cited.

Policies:

- Only assignments turned in through GitHub will count for credit. More info below.

- All empirical assignments must also include code. More info below.
- There are no due dates for the homework assignments.

In-class: Lectures will be recorded and available on Canvas. Please

Submitting code:

- You must sign up for a Github account. I recommend applying for an educational discount. All assignments must be submitted through Github. You'll walk through this process in detail in the first lab.

- Your code should stand alone. More information here. For each repo you submit you should include a readme file describing the contents of the repo and thoroughly document your code. As part of grading, someone will attempt to run your code.
- I suggest following the tidyverse style guide.

Academic accommodations: To request academic accommodations, please contact the DRS office, 448 Schmitz Hall, (206) 543-8924. Myself and your TA will be happy to provide academic accommodations if you have a letter requesting such from DRS. Please feel free to see me during office hours to discuss this.

Related courses: There are many great social network methods courses. This course is inspired by a few of them, including Matthew Salganik's Soc 596 at Princeton; James Moody's Seminar on Social Networks at Duke; and previous UW versions of this course taught by, among others, Peter Hoff & Miruna Petrescu-Prahova.