Welcome To Advanced Network Analysis

Olga Chyzh

About me…

- Associate Professor of Political Science, University of Toronto, since June 2020
- My research areas are network analysis, spatial statistics, substantive focus on non-state violent actors
- www.olgachyzh.com, olga.chyzh@utoronto.ca
- How about you?

Outline

- Introduction
- Objectives, software, modules
- Assessment/Grades
- What do you already know?
- Getting started

"Tall-Order" Objective

- Become proficient in network theory and analysis, including implementation in R

Objectives

- Learn how to deal with complex messy networks data
- Use graphics to visualize and understand networks
- Gain familiarity with formatting/managing networks data
- Become fluent in common networks packages in R
- Learn to perform inferential network analysis using a variety of cutting-edge tools

Set-up

- Complete assigned readings before each class
- Learn the theory/concepts and applications
- About 2:1 split of class between teaching:practice

Assessments

- 3 homework assignments, 15% each
- Attendance and participation, 15%
- Research Project, 40%

Lectures

- We have a course website: https://networkanalysis.netlify.app/
- All class materials, including slides, R-scripts, and homeworks will be posted there.
- Follow along with in-class demos or you will get swamped.

What do you know already?

- Have you taken an Intro to Statistics? Multiple Regression?
- Have you used R before?
- For more than a year?