

SOCIAL NETWORKS

Sociology 430, Section 2
Spring 2008
TR 11:00-12:15
Soc. Sciences Bldg, Room 411

Instructor: Olga Mayorova
Office: 436A Soc. Sciences Bldg
Office Hours: TR 12:30-2:00
Office Phone: 621-3531
Email: ovm@email.arizona.edu

Social network analysis (SNA) provides special tools for studying relationships and connections between people, groups, organizations, and countries in our increasingly connected world. For example, we may use SNA to study the role networks play in job searches and business relations, in diffusing knowledge through webs of doctors, in providing support in time of need, in giving rise to biotech industry, or in supporting criminal activities. SNA is an effective way to examine cliques of friends in high schools, power networks of the business elites, as well as the intricate patterns of international trade. The goal of this class is for students to gain general knowledge of major concepts and techniques used in social network analysis, as well as to get some hands-on experience of collecting, analyzing, and mapping network data with SNA software.

COURSE REQUIREMENTS

Readings, Attendance, and Class Participation: You are expected to come to class having done your readings as assigned on the syllabus. Taking notes in class is your responsibility. Class attendance is not taken; however, participation in class discussions and group work is strongly encouraged. For regular participation in class activities and discussions you can earn up to 40 points (no more than 10 points per class time).

Labs: There are two lab exercises that will take place in the Social Sciences Building, Room 224. The lab assignments are worth 50 points each.

Exams: There are two short answer exams throughout the course. The exams are not cumulative. Exams can be made up within one week after the original scheduled time, if you have a legitimate excuse. Each exam is worth 100 points.

Presentation: Detailed description of this assignment will be given to you in advance. You will be asked to conduct your own small study: to collect your own network data, analyze them, and present results in class. Presentation is worth 100 points.

Extra-Credit: There will be no extra credit.

GRADING

Final grades will be assigned based upon the following cumulative points:

Course Requirement	Points	Grades	Points
2 Lab exercises (each 50 points)	100	A	396 or more
2 Exams (each 100 points)	200	B	352-395
Class participation	40	C	308-351
<u>Presentation</u>	<u>100</u>	D	264-307
Total	440	F	220 or less

READINGS:

1) Charles Kadushin. Introduction to Social Network Theory, Ch.2 (referred to in the class schedule as *Kadushin*) http://stat.gamma.rug.nl/snijders/Kadushin_Concepts.pdf

2) Robert A. Hanneman and Mark Riddle. 2005. Introduction to social network methods. (referred to in the class schedule as *Hanneman&Riddle*) <http://www.faculty.ucr.edu/~hanneman/nettext/>

Other readings are posted on the library course reserves at <http://eres.library.arizona.edu>.

You are responsible for downloading the readings and printing them.

CLASS SCHEDULE* :

What is a Social Network?

- January 17 Introduction
- January 22 Distance in a social network
- *Kadushin, Ch.2, pp.3-13*
 - *Travers & Milgram - An Experimental Study of the Small World Problem*
- January 24 Network data collection
- *Wasserman & Faust - Social Network Analysis, Ch. 2, pp.28-45*
- January 29 Network data collection
- *Wasserman & Faust - Social Network Analysis, Ch. 2, pp.45-66*

Cohesiveness in Personal Networks

- January 31 Birds of a feather
- *McPherson et al. - Birds of a Feather*
- February 5 Primary groups and cliques
- *Kadushin, Ch.2, pp.13-26, 33-36*
- February 7 Primary groups and cliques
- *Zisman & Wilson - Table Hopping in the Cafeteria*
- February 12 Social support
- *Unger & Powell - Supporting Families under Stress*
- February 14 Mapping networks. Identifying groups and cliques.
Lab 1 for group 1 (meet in Soc. Sciences Bldg, Room 224)
- *Hanneman & Riddle, Ch.7, 11*
- February 19 Mapping networks. Identifying groups and cliques.
Lab 1 for group 2 (meet in Soc. Sciences Bldg, Room 224)
- *Hanneman & Riddle, Ch.7, 11*

Positions in a Network

- February 21 Centrality
- *Pitts - The Medieval River Trade Network of Russia Revisited*
- February 26 Core-periphery structure
- *Nemeth & Smith - International Trade and World-System Structure*
- February 28 Affiliation networks
- *G. William Domhoff - Interlocking Directorates*
- March 4 Identifying centrality. Visualizing two-mode networks.
Lab 2 for group 1 (meet in Soc. Sciences Bldg, Room 224)
- *Hanneman & Riddle, Ch.10, 17*
- March 6 Identifying centrality. Visualizing two-mode networks.
Lab 2 for group 2 (meet in Soc. Sciences Bldg, Room 224)
- *Hanneman & Riddle, Ch.10, 17*
- March 11 Review
- March 13 **Exam 1**

March 18 Spring break - no classes
March 20 Spring break - no classes

Ties that Benefit

March 25 The strength of weak ties
• *Kadushin, Ch.2, pp.27-32*
• *Granovetter - The Strength of Weak Ties*
March 27 Social capital
• *Putnam - Bowling Alone*
April 1 Structural holes
• *Ronald Burt - Structural Holes, Ch.1*
April 3 Multiplexity
• *Padgett&Ansell - Robust Action and the Rise of the Medici*

Networks and Society

April 8 Cognitive maps
• *Carley&Palmquist - Extracting, Representing and Analyzing Mental Models*
April 10 Network wars
• *Krebs - Uncloaking Terrorist Networks*
April 15 Cyberspace and networks
• *Wellman - Physical Place and Cyber Place*
April 17 The rich getting richer
• *Barabasi – Linked, Ch. 7*
April 22 Review
April 24 ***Exam 2***
April 29 Student presentations
May 1 Student presentations
May 6 Student presentations
May 13 Student presentations

* The class schedule may change during the semester. The changes will be announced in class.