

## **SOCIOLOGY 6008F – SOCIAL NETWORKS**

Alexandra Marin  
275 Spadina Rm. 362  
[alexandra.marin@utoronto.ca](mailto:alexandra.marin@utoronto.ca)  
416-946-5880

### **COURSE DESCRIPTION**

Social network analysts (or structural analysts) take primary interest in relationships between actors rather than in properties or characteristics of the actors themselves. Network analysis focuses on understanding patterns of relationships between social actors (e.g. people, organizations) or socially-relevant units (e.g. computers, books or articles, ideas). The social networks perspective and the methods used to study it can be applied to a wide variety of sociological questions, thus they should be seen as perspectives or tools for studying the social world, not as topics in themselves.

My expectation is that by the end of the semester you should understand this perspective, and be able to think about how to apply it to your own areas of substantive interest. Therefore, this course will not focus on a particular application of social networks, but rather cover a wide range of sociological topics, demonstrating how social networks approaches are being used fruitfully to study each. The course begins with an overview of the field of social networks, including some theoretical treatises and readings on the history of this approach. Next, because they were so different from the attribute data with which many of you are familiar, we focus briefly on the nature of social network data and on issues associated with collection of this data. The next six weeks we look at substantive applications: Social support and community; job search; social capital; organizational networks; innovation and diffusion; and cognitive social structure. Finally, we return to the theory behind the applications with a classic piece in which Simmel foresees many of the empirical findings and theoretical developments you will have studied.

While this is not a methods course, you will gain some familiarity with social network analysis methods through the course of the semester.

### **EVALUATION**

Participation: 20%

Paper Presentation: 20%

Final Paper: 60%

### **DISCUSSION LEADING**

Students will take turns leading class discussions. Please sign up for your chosen weeks on the first day of class. Discussions will focus on the substance of papers and the issues they raise. However, because some methods or measures used may be unfamiliar to many students, discussion leaders should do some background work on understanding any new methods presented in the readings. Where clarification of methods would be useful in understanding the readings, discussants should be prepared to offer such clarification. Useful resources for learning about these methods are presented below.

### **RESPONSE PAPERS**

Students are required to submit each week short (1-2 pages) reading responses. These response papers should not summarize the readings, but rather engage the ideas they present. Because response papers are intended to prepare students to participate in class discussions, response papers will be accepted *only* in class; absent students may not submit response papers, and late response papers will not be accepted. No formal grade will be assigned. However, completion and quality of response papers will be one basis of evaluation for the participation portion of each student's mark.

### **FINAL PAPERS**

Sixty percent of each student's mark will be based on their final paper. Papers may be critical literature reviews, research proposals, research papers. The paper need not deal with any of the specific substantive topics covered in the course, but it must incorporate a social network perspective. Please discuss paper topics with me before beginning any serious work.

It is my hope that students will produce final papers that will serve them beyond the completion of this course. Specifically, I strongly encourage students to use this assignment as a springboard from which to begin (or continue) a project which can be revised for conference presentation and eventual publication. If you can produce a research paper: Do it! If you cannot produce a research paper at this point, produce a proposal for a research project you could feasibly complete and publish. If you cannot produce a proposal just yet, write a literature review that identifies open questions that you could eventually address with your research.

### **PAPER PRESENTATIONS**

To aid and encourage students to revise and continue working with their final papers after the course has concluded, the last two (or three depending on the number of students) class sessions will be devoted to paper presentations. I hope to devote 40-60 minutes to each paper, allowing time for each student to do a short presentation of their work and leave time for extensive feedback. This feedback will include both suggestions for submitting the best possible course paper, and suggests for revising or extending the paper to make it suitable for conference presentation and eventual publication.

### **USEFUL RESOURCES**

#### **I. Web Sites**

*International Network for Social Network Analysis*

*[www.insna.org](http://www.insna.org)*

INSNA is the professional organization for social network analysts. The web site includes information about joining INSNA as well as links to journals, reading lists, data sets, software packages, and most importantly the Sunbelt International Social Networks Conference (where you can present if you take my advice and produce a paper destined to be more than just a term paper!). Also be sure to check out the SOcNET listserv where you can get sign up to get email from Social Networks' best and brightest!

*The Oracle of Bacon*

*<http://oracleofbacon.org/>*

You may have heard of the game "Six Degrees of Kevin Bacon" in which the goal is to link an actor to Kevin Bacon based on co-starring networks in movies. Now, through the miracle of social network analysis and associated computer algorithms, you can cheat. Try it out. See if you can find an actor who's at least four degrees from Kevin Bacon. Find the pope's Bacon Number,

or head over to wikipedia for a discussion of Paul Erdos' Bacon number.

*Orgnet*

<http://www.orgnet.com/index.html>

Cool pictures of interesting networks and short descriptions and analyses of each. Always something new and interesting.

## **II. Journals**

*Social Networks*

This is the main journal of the International Network for Social Network Analysis. A great first place to turn for all things social network related, but particularly technical or methodological articles.

*Connections*

This is a smaller journal also published by the International Network for Social Network Analysis. Though peer-reviewed, its function is closer to that of a newsletter. Look here for news, reviews, and short timely articles.

*Journal of Social Structure* (<http://www.cmu.edu/joss/>)

A peer-reviewed online journal, also associated with INSNA. *Joss* publishes empirical and theory pieces as well as book reviews. Look here for all the cool pictures and animations you won't find in a paper journal!

*Field Methods*

Field methods does not focus on social network specifically, but the editor is a social network analyst and they frequently publish papers dealing with social networks, particularly social network data. Look here if you're interested in data collection strategies.

## **III. Books**

There are more books dealing with social networks than I could possibly list here, and listing even the highlights would greatly increase the tree-killing power of this syllabus. The books I list here are those most useful for weekly discussion leaders to use in learning more about the methods used in the assigned papers. Each book takes different approaches. Feel free to ask for suggestions on which book is likely to be most useful for given methods.

*Wasserman, Stanley and Katherine Faust. 1994. Social Network Analysis: Methods and Applications. Cambridge: Cambridge University Press.*

This is the bible of methods social network analysis. If the method existed in 1994, you can bet it's in here. However, the book is extremely detailed and technical. You may want to start somewhere else for the big picture and turn to this when you want and need the details.

*Carrington, Peter J., John Scott, and Stanley Wasserman (eds.). 2005. Models and Methods in Social Network Analysis. Cambridge: Cambridge University Press.*

This book sells itself as a companion to Wasserman and Faust, covering new developments in Social Network Analysis since 1994. Unlike Wasserman and Faust which is a monograph, this is an edited volume with one chapter devoted to each methodological topic and each chapter written by an expert in the relevant method. For the most up-to-date information and the latest and greatest in social network methods, this is your book.

*Scott, John. 2001. Social Network Analysis: A Handbook. Thousand Oaks, Ca: Sage.*

This is a not-terribly-technical introduction to social network methods, written for social scientists interested in the approach but not looking to get heavily involved in graph theory or matrix algebras. This is a good place to start.

*Degenne, Alain and Michel Forsé. 1994. Introducing Social Networks. Thousand Oaks, CA: Sage.*

This is another not-so-technical introduction to social networks. Unlike Scott's book, this book presents substantive applications of methods as they are explained and organizes chapters based on these substantive topics. The authors are less reluctant than Scott to present formulas, making this book somewhat more detailed in its descriptions of methods.

*De Nooy, Wouter, Andrej Mrvar and Vladimir Batagelj. 2005. Exploratory Social Network Analysis with Pajek. Cambridge: Cambridge University Press.*

This book is intended primarily as a guide for the software *Pajek*, however, it includes clear descriptions of many of the social network measures that it teaches the reader to compute.

#### **IV. Software**

##### *UCInet*

Created at and named for the University of California at Irvine, this package does it all (well, not all...nothing does it all..but this does lots of stuff), though the interface isn't always the most intuitive.

##### *Pajek*

A relatively new kid on the block but gaining popularity fast (in fact is probably already more popular than UCInet). This is also a do-it-all kind of program. It's free and there's a great book (listed above) to teach you how to use it.

##### *Egotistics*

Written by U of T's own Bernie Hogan, this program specializes in the analysis of egocentric data. No more, must you trick SPSS into doing things it wasn't designed for.

##### *Multinet*

Multinet analyzes both social network data (both whole and egonet) and traditional attribute data, and is thus well-suited to projects seeking to combine the two kinds of data.

##### *Sienna*

Siena is used to analyze longitudinal network data. If you have data on the same network at two different points in time, you'll want this.

#### **Course Outline**

Week #	
1	Introduction

2	<p><b>Structural Perspectives</b></p> <p>Breiger, Ron. 1974. "The duality of persons and groups." <i>Social Forces</i>. 53:181-190.</p> <p>Wellman, Barry. 1988. <i>Structural Analysis: From Method and Metaphor to Theory and Substance</i>. In Barry Wellman and S.D. Berkowitz (eds.) <i>Structural Analysis: A Network Approach</i>. Cambridge: Cambridge University Press. pp. 19-61</p> <p>Emirbayer, Mustafa. 1997. "Manifesto for a Relational Sociology." <i>American Journal of Sociology</i>. 103:281-317</p> <p>Blau, Peter. 1994. <i>Structural Contexts of Opportunities</i>. Chicago: University of Chicago Press (Selections TBA)</p>
3	<p><b>Origins of Network Analysis</b></p> <p>Bott, Elizabeth. <i>Family and Social Network: Roles, Norms, and External Relationships in Ordinary Urban Families</i>. London: Tavistock (Chapters 3-4)</p> <p>Freeman, Linton C. 2004. <i>The Development of Social Network Analysis: A Study in the Sociology of Science</i>. Vancouver: Empirical Press. Chapters 1-2, 8-10</p> <p>Scott, John. 1991. <i>Social Network Analysis: A Handbook</i>. London: Sage. (Chapters 1 and 2)</p>
4	<p><b>Data and Issues in Data Collection</b></p> <p>Marsden, Peter. 2005. "Recent Developments in Network Measurement." in Peter J. Carrington, John Scott, and Stanley Wasserman (eds.) <i>Advances in Social Network Analysis</i>. Cambridge: Cambridge University Press. Pp. 8-30</p> <p>Marin, Alexandra. 2004. "Are Respondents More Likely to List Alters with Certain Characteristics?: Implications for Name Generator Data." <i>Social Networks</i> 26: 289-307.</p> <p>Killworth, P. H. R. Bernard. 1976. Informant Accuracy in Social Network Data. <i>Human Organization</i>. 35:269-286</p> <p>Freeman, Linton C., A. Kimball Romney and Sue C. Freeman. "Cognitive Structure and Informant Accuracy." <i>American Anthropologist</i>. 2:310-325</p>

5	<p><b>Social Support and Community</b></p> <p>Wellman, Barry. 1979. "The Community Question: The Intimate Networks of East Yorkers." <i>American Journal of Sociology</i>. 84:1201-1231</p> <p>Feld, Scott. 1981. "The Focused Organization of Social Ties." <i>American Journal of Sociology</i>. 86:1015-1035.</p> <p>McPherson, Miller, Lynn Smith-Lovin, and James M. Cook. 2001. "Birds of a Feather: Homophily in Social Networks." <i>Annual Review of Sociology</i>. 27:415-444.</p> <p>McPherson, Miller, Lynn Smith-Lovin and Matthew E. Brashears. 2006. "Social Isolation in America: Changes in Core Discussion Networks Over Two Decades." <i>American Sociological Review</i>. 71:353-375</p>
6	<p><b>Social Networks and Job Search</b></p> <p>Granovetter, Mark. 1973. "The Strength of Weak Ties." <i>American Journal of Sociology</i>. 78:1360-1380.</p> <p>Lin, Nan. 1999. "Social Networks and Status Attainment" <i>Annual Review of Sociology</i>. 22:467-87</p> <p>Fernandez, Roberto M. and Nancy Weinberg. 1997. "Sifting and Sorting: Personal Contacts and Hiring in a Retail Bank." <i>American Sociological Review</i>. 62:883-902</p> <p>Fernandez, Roberto M. and M. Lourdes Sosa. 2005. "Gendering the Job: Networks and Recruitment at a Call Centre". <i>American Journal of Sociology</i>. 111:859-904</p> <p>Smith, Sandra S. "'Don't put my name on it': Social Capital Activation and Job-Finding Assistance among the Black Urban Poor." <i>American Journal of Sociology</i>. 111:1-57</p>

7	<p><b>Social Capital: Not just for job searches...</b></p> <p>Coleman, James S. 1988. "Social Capital in the Creation of Human Capital." American Journal of Sociology. 94: S95-S120.</p> <p>Erickson, Bonnie H. 1996. "Culture, Class, and Connections." American Journal of Sociology. 102:217-251</p> <p>Harding, David J. 2005. "Neighborhood Violence and the Age Structure of Peer Networks: Socialization of Adolescent Boys in Disadvantaged Neighborhoods." Population Studies Center: Research Report 05-586</p> <p>Portes, Alejandro and Patricia Landolt. "The Downside of Social Capital." American Prospect. 26:18-21</p> <p>Kadushin, Charles. 2004. "Too Much Investment in Social Capital?" Social Networks. 26:75-90</p>
8	<p><b>Organizational Networks</b></p> <p>Granovetter, Mark. 1985. "Economic Action and Social Structure: The Problem of Embeddedness." American Journal of Sociology. 91: 481-510</p> <p>Uzzi, Brian 1996. "Sources and Consequences of Embeddedness for the Economic Performance of Organizations: The Network Effect." American Sociological Review</p> <p>Gerlach, Michael. 1992. "The Japanese Corporate Network: A Blockmodel Analysis." Administrative Science Quarterly 105-139.</p> <p>Ron Burt. 1992. "The Social Structure of Competition." Chapter 1 in Structural Holes. Cambridge: Harvard University Press.</p> <p>Baum, Joel and Christine Oliver. 1991. "Institutional Linkages and Organizational Mortality" Administrative Science Quarterly. 36:187-218</p> <p>Podolny. 2005. Joel. Status Signals: A Sociological Study of Market Competition. Princeton, NJ: Princeton University Press. (Chapters 1-2)</p>

9	<p><b>Innovation and Diffusion</b></p> <p>Hargadon, Andrew Robert I. Sutton. 1997. "Technology Brokering and Innovation in a Product Development Firm". <i>Administrative Science Quarterly</i>. 42:716-749</p> <p>Burt, Ronald S. 2004. "Structural Holes and Good Ideas." <i>American Journal of Sociology</i>. 110:349-399.</p> <p>Liebeskind, Julia Porter, et. al. 1996. "Social Networks, Learning, and Flexibility: Sourcing Scientific Knowledge in the New Biotechnology Firms." 7:428-443</p> <p>Coleman, James. Elihu Katz and Herbert Menzel. 1957. "The Diffusion of an Innovation among Physicians". <i>Sociometry</i>. 4:253-270</p> <p>Gibson, David. 2005. "Concurrency and Commitment: Network Scheduling and Its Consequences for Diffusion" <i>Journal of Mathematical Sociology</i>. 29:295-323</p> <p>Lai, Gina and Odalia Wong. 2002. "The Tie-Effect on Information Dissemination: The Spread of a Commercial Rumor in Hong Kong." <i>Social Networks</i>. 24:49-75</p>
10	<p><b>Cognitive Networks</b></p> <p>Pattison, Phillippa. "Social Cognition in Context: Some Applications of Social Network Analysis." pp. 79-112 in Stanley Wasserman and Joseph Galaskiewicz (eds.) <i>Advances in Social Network Analysis</i>. Thousand Oaks, CA: Sage.</p> <p>Casciaro, Tiziana. 1998. Seeing Things Clearly: Social Structure, Personality and Accuracy in Social Network Perception. <i>Social networks</i>. 20:331-351.</p> <p>Krackhardt, David. 1990. "Assessing the Political Landscape: Structure, Cognition, and Power in Organizations." <i>Administrative Science Quarterly</i>. 35:342-369.</p> <p>Kumbasar, Ece, A. Kimbal Romney, and William H. Batchelder. 1994. "Systemic Biases in Social Perception." <i>American Journal of Sociology</i>. 100:477-505</p> <p>Freeman, Linton. 1992. "Filling in the Blanks: A Theory of Cognitive Categories and the Structure of Social Affiliation. <i>Social Psychology Quarterly</i>. 55:118-127.</p>
11	<p><b>Back to the Big Theoretical Picture</b></p> <p>Simmel, Georg. 1955. "The Web of Group-Affiliations." Pp. 125-195 in <i>Conflict and The Web of Group-Affiliations</i>. New York, the Free Press.</p>
12	Paper Presentations and Discussions
13	Paper Presentations and Discussions
	<b>Papers Due</b>