



# Sociology UNIVERSITY OF TORONTO

## **Network Analysis I - SOC6008**

**Winter 2024**

Instructor: Jeffrey Boase (jboase@utoronto.ca)

Class: Mondays, 12-2 PM, 700 University Ave., 17<sup>th</sup> floor, Rm. 17146

Website: Quercus

### Course Description

Social network analysis assumes that connections between actors fundamentally influence social reality. This course uses a sociological lens to explore influential theoretical, empirical, and methodological work in the field of social network analysis. Topics covered in this course include tie strength, homophily, network diversity, tie formation and development, diffusion, influence, social capital, network measures, network composition, longitudinal network change, social support, and inequality.

### Goals and Outcomes

1. Describe major theoretical, empirical, and methodological work in the field of social network analysis.
2. Critically assess key debates and topics within the field of social network analysis.
3. Draw on network literature to develop an original argument in the form of a literature review or research proposal.

### Evaluation

#### *Weekly Discussion Questions (10%, Weeks 2-11)*

On weeks 2-11, each week, you will contribute a single discussion question for each required reading. For example, if a week has four required readings, then you will post a total of four discussion questions – one question per reading. Questions must be posted to Quercus before the start of class.

Each question should be no more than two sentences in length. We will draw on these questions during class, and so you will have the opportunity to elaborate on your questions if you so desire.

at that time. Each question must be unique, which means that you will need to review other questions posted to Quercus that week before posting your own.

As long as your questions are unique, at the appropriate level for a PhD course, and posted before the start of class, you will receive 1% per class, for a maximum of 10%. If there is a week in which you post your questions late, if a question that you post is not unique, or if a question is not at the appropriate level for a PhD class, you will receive 0 that week.

### *Weekly Reading Assignments (20%, Weeks 2-11)*

On weeks 2-11, each week, you will answer each of the follow questions for each required reading:

1. What is the purpose or objective of this reading? (1-2 sentences)
2. How is this reading situated within the literature? (4-6 sentences)
3. What is one critical thought that you have regarding this reading? (4-6 sentences)

Given that there are three questions per reading, if there are four required readings in a given week, you must submit a total of 12 responses. Responses will be submitted using Quercus. Your answers should be concise, and demonstrate a strong understanding of each required reading. As long as your answers for a given week are submitted before the start of class and at an appropriate level for a PhD class, you will receive a total of 2% for that week. Late or weak answers will receive 0.

### *Class Participation (10%, Ongoing)*

This grade is based on the quality and frequency of your contributions to class discussion. You are expected to contribute actively and respectfully to class discussion every week. In order to ensure a successful class discussion, you must closely read and reflect on every required reading before the start of class.

### *Final Paper Proposal (15%, Due Before Class on Week 7)*

The final paper proposal should be a maximum of 5 pages (double spaced, 12 point Time New Roman font, 1 inch margins), not including references. The late penalty is 10% of the proposal's maximum grade (i.e. 1.5%) per day.

The final paper will take the form of a literature review or a research proposal. A literature review should draw strategically on network literature to formulate an original argument. You are encouraged to use the literature review to explore how a network approach could be used to understand a topic that interests you. Your literature review should *not* simply be a summary of literature without an original purpose or goal.

A research proposal is a literature review, with the addition of a question that requires empirical research, and a section outlining the methods that would be required to address that question.

*Final Paper (45%, Due Before the Final Class)*

Final papers should be a maximum of 20 pages (double spaced, 12 point Time New Roman font, 1 inch margins), not including references. The late penalty is 10% of the paper's maximum grade (i.e. 4.5%) per day.

Course Schedule and Readings

Week	Readings
1	<p><b>Introduction</b>  Kadushin, Charles. 2011. <i>Understanding Social Networks: Theories, Concepts, and Findings</i>. Oxford: Oxford University Press. Pp. 3-43.</p> <p>Scott, John, and Peter J. Carrington. 2011. <i>The SAGE Handbook of Social Network Analysis</i>. SAGE: London. Pp. 1-25</p> <p><i>Supplemental</i>  Emirbayer, Mustafa. 1997. "Manifesto for a Relational Sociology." <i>American Journal of Sociology</i> 103: 281-317.</p>
2	<p><b>Tie Strength – Theory and Measurement</b>  Granovetter, Mark. 1973. "The Strength of Weak Ties." <i>American Journal of Sociology</i> 78:1360-80.</p> <p>Marsden, Peter V. and Karen E. Campbell. 1984. "Measuring Tie Strength." <i>Social Forces</i> 63:482-501.</p> <p>Marsden, Peter V. and Karen Campbell. 2012. "Reflections on Conceptualizing and Measuring Tie Strength." <i>Social Forces</i> 91: 17-23.</p> <p><i>Supplemental</i>  Granovetter, Mark. 1983. "The Strength of Weak Ties: A Network Theory Revisited." <i>Sociological Theory</i> 1: 201–33.</p>
3	<p><b>Homophily, Diversity, and Tie Development</b>  McPherson, J. Miller, Lynn Smith-Lovin and J. M. Cook. 2001. "Birds of a Feather: Homophily in Social Networks." <i>Annual Review of Sociology</i> 27:415-44.</p> <p>Feld, Scott. 1981. "The Focused Organizations of Social Ties." <i>American Journal of Sociology</i> 86:1015-1035.</p>

	<p>Feld, Scott. 1982. "Social Structural Determinants of Similarity among Associates." <i>American Sociological Review</i> 47:797-801.</p> <p>Coser, Rose Laub. 1975. "The Complexity of Roles as a Seedbed of Individual Autonomy." Pp. 237-262 in Louis A. Coser (ed.), <i>The Idea of Social Structure: Papers in Honor of Robert K. Merton</i>. New York: Harcourt Brace Jovanovich.</p> <p><i>Supplementary</i></p> <p>Lewis, Kevin. 2016. "Preferences in the Early Stages of Mate Choice." <i>Social Forces</i> 95:283-320.</p> <p>Small, Mario L., and Laura Adler. 2019. "The Role of Space in the Formation of Social Ties." <i>Annual Review of Sociology</i> 45:111-32.</p>
4	<p><b>Diffusion and Influence</b></p> <p>Burt, Ronald S. 2004. "Structural Holes and Good Ideas." <i>American Journal of Sociology</i>. 110:349-399.</p> <p>Uzzi, Brian and Jarrett Spiro. 2005. "Collaboration and Creativity: The Small World Problem." <i>American Journal of Sociology</i> 111: 447-504. Read 447-465 and 492-498.</p> <p>Brashears, Matthew E., and Eric Quintane. 2018. "The Weakness of Tie Strength." <i>Social Networks</i> 55:104-115.</p> <p><i>Supplemental</i></p> <p>Centola, Damon and Michael Macy. 2007. "Complex Contagion and the Weakness of Long Ties." <i>American Journal of Sociology</i> 113: 702-34.</p> <p>Arai, Sinan and Marshall Van Alstyne. 2011. "The Diversity-Bandwidth Trade-off." <i>American Journal of Sociology</i> 117:90-171. Read 90-110.</p>
5	<p><b>Social Capital – Theory and Measurement</b></p> <p>Lin, Nan. 2001. "Building a Network Theory of Social Capital." Pp. 3-29 in Nan Lin, Karen Cook, and Ronald S. Burt (eds.), <i>Social Capital: Theory and Research</i>. New York: Aldine de Gruyter.</p> <p>Lin, Nan, Yang-Chih Fu, and Ray-May Hsung. 2001. "The Position Generator: Measurement Techniques for Investigations of Social Capital." Pp. 57-81 29 in Nan Lin, Karen Cook, and Ronald S. Burt (eds.), <i>Social Capital: Theory and Research</i>. New York: Aldine de Gruyter.</p> <p>Lin, Nan, and Bonnie H. Erickson. 2008. "Theory, Measurement, and the Research Enterprise on Social Capital." Pp. 1-26 in Nan Lin and Bonnie H. Erickson</p>

	<p>(eds.), <i>Social Capital: An International Research Program</i>. Oxford, UK: Oxford University Press.</p> <p>Kadushin, Charles. 2004. "Too Much Investment in Social Capital?" <i>Social Networks</i> 26: 75-90.</p> <p><i>Supplemental</i></p> <p>Burt, Ronald S. 1997. "The Contingent Value of Social Capital." <i>Administrative Science Quarterly</i> 42: 339-365.</p> <p>Van der Gaag, Martin, Tom A. B. Snijders, and Henk Flap. 2008. "Position Generator Methods and Their Relationship to Other Social Capital Measures." Pp. 27-48 in Nan Lin and Bonnie H. Erickson (eds.), <i>Social Capital: An International Research Program</i>. Oxford, UK: Oxford University Press.</p>
6	<p><b>Measuring Networks</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>McCarty, Christopher, Peter D. Killworth, H. Russell Bernard, Eugene C. Johnsen, and Gene A. Shelley. 2001. "Comparing Two Methods for Estimating Network Size." <i>Human Organization</i> 60 (1): 28-39.</p> <p>Smith, Edward Bishop, Raina A. Brands, Matthew E. Brashears, and Adam M. Kleinbaum. 2020. "Social Networks and Cognition." <i>Annual Review of Sociology</i>.</p> <p>Fischer, Claude S. 1982. "What do we mean by 'friend'? An inductive study of social networks." <i>Social Networks</i> 3: 287-306.</p> <p><i>Supplemental</i></p> <p>Killworth, Peter. et. al. 1990. "Estimating the Size of Personal Networks." <i>Social Networks</i>. 12: 289-312.</p> <p>Doreian, Patrick. 1999. "An Intuitive Introduction to Blockmodeling with Examples." <i>Bulletin de Methodologie Sociologique</i> 61:5-34.</p>
7	<p><b>The Composition of Personal Communication Networks – Findings and Methods</b></p> <p>Marsden, Peter V. 1987. "Core Discussion Networks of Americans." <i>American Sociological Review</i> 52:122-31.</p> <p>Bearman and Parigi. 2004. "Cloning Headless Frogs and Other Important Matters: Conversation Topics and Network Structure." <i>Social Forces</i> 83(2):535-557.</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>Boase, Jeffrey. 2008. "Personal Network and the Personal Communication System." <i>Information, Communication and Society</i> 11 (4): 490–508.</p>
8	<p><b>Measuring Longitudinal Network Change</b></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> <p>McPherson, Miller, Lynn Smith-Lovin, and Matthew E. Brashears. 2009. "Models and marginals." <i>American Sociological Review</i>, 74(4).</p> <p>Fischer, Claude. 2009. "The 2004 GSS finding of shrunken social networks: An artifact?" <i>American Sociological Review</i> 74(4), 657-669.</p> <p><i>Supplemental</i></p> <p>Fischer, Claude. 2011. <i>Still Connected: Family and Friends in America Since 1970</i>. New York: Sage. (Available at Robarts)</p>
9	<p><b>Social Support Within Networks</b></p> <p>Song, Lijun, Joonmo Son, and Nan Lin. 2011. "Social Support." Pp. 116-128 in <i>The Sage Handbook of Social Network Analysis</i>, edited by J. Scott, and P. Carrington. London: Sage.</p> <p>Uehara, Edwina 1990. "Dual Exchange Theory, Social Networks and Informal Social Support." <i>American Journal of Sociology</i>, 96(3), 521-57.</p> <p>Schafer, Markus, and Nicholas Vargas. 2016. "The Dynamics of Social Support Inequality: Maintenance Gaps by Socioeconomic Status and Race." <i>Social Forces</i> 94:1795-1822.</p> <p><i>Supplemental</i></p> <p>Offer, Shira, and Claude S. Fischer. 2018. "Difficult People: Who is Perceived to be Demanding in Personal Networks and Why are They There?" <i>American Sociological Review</i> 83:111-142.</p>
10	<p><b>Networks and Inequality</b></p> <p>DiMaggio, Paul, and Filiz Garip. 2011. "How Networks Externalities Can Exacerbate Intergroup Inequality." <i>American Journal of Sociology</i>. 116:1887-1933</p> <p>Erickson, Bonnie H. 1996. "Culture, Class, and Connections." <i>American Journal of Sociology</i>. 102:217-251.</p>

	<p>Erickson, Bonnie H. 2003. "Social Networks: The Value of Variety." <i>Contexts</i> Vol. 2, No. 1: 25-31.</p> <p>McDonald, Steve, Nan Lin, and Dan Ao. 2009. "Networks of Opportunity: Gender, Race, and Job Leads." <i>Social Problems</i> 56: 385-402.</p> <p><i>Supplemental</i></p> <p>Flap, Henk and Beate Volker. 2008. "Social, Cultural, and Economic Capital and Job Attainment: The Position Generator as a Measure of Cultural and Economic Resources." Pp. 65-80 in Nan Lin and Bonnie H. Erickson (eds.), <i>Social Capital: An International Research Program</i>. Oxford, UK: Oxford University Press.</p>
11	<p><b>Current Topics</b></p> <p>Lazer et al. 2009. "Computational Social Science." <i>Science</i> 323:721-723.</p> <p>Boase, J. 2016. "Augmenting Survey and Experimental Designs with Digital Trace Data." <i>Communication Methods and Measures</i> 10 (2-3).</p> <p>Kane, Gerald C., Maryam Alavi, Giuseppe (Joe) Labianca, and Stephen P. Borgatti. 2014. "What's Different About Social Media Networks? A Framework and Research Agenda." <i>MIS Quarterly</i> 38 (1): 275-304.</p>
12	<b>Final Presentations</b>

## Academic Integrity Clause

Copying, plagiarizing, falsifying medical certificates, or other forms of academic misconduct will not be tolerated. Any student caught engaging in such activities will be referred to the Dean's office for adjudication. Any student abetting or otherwise assisting in such misconduct will also be subject to academic penalties. Students are expected to cite sources in all written work and presentations. See this link for tips for how to use sources well:  
[\(http://www.writing.utoronto.ca/advice/using-sources/how-not-to-plagiarize/\)](http://www.writing.utoronto.ca/advice/using-sources/how-not-to-plagiarize/).

According to Section B.I.1.(e) of the Code of Behaviour on Academic Matters it is an offence "to submit, without the knowledge and approval of the instructor to whom it is submitted, any academic work for which credit has previously been obtained or is being sought in another course or program of study in the University or elsewhere."

By enrolling in this course, you agree to abide by the university's rules regarding academic conduct, as outlined in the Calendar. You are expected to be familiar with the *Code of Behaviour on Academic Matters* (<https://governingcouncil.utoronto.ca/secretariat/policies/code-behaviour-academic-matters-july-1-2019>) and *Code of Student Conduct* (<http://www.viceprovoststudents.utoronto.ca/publicationsandpolicies/codeofstudentconduct.htm>)

which spell out your rights, your duties and provide all the details on grading regulations and academic offences at the University of Toronto.

Normally, students will be required to submit their course essays to [www.ouriginal.com](http://www.ouriginal.com) for a review of textual similarity and detection of possible plagiarism. In doing so, students will allow their essays to be included as source documents in the [www.ouriginal.com](http://www.ouriginal.com) reference database, where they will be used solely for the purpose of detecting plagiarism. The terms that apply to the University's use of the [www.ouriginal.com](http://www.ouriginal.com) service are described on the [www.ouriginal.com](http://www.ouriginal.com) web site.

## Accessibility Services

It is the University of Toronto's goal to create a community that is inclusive of all persons and treats all members of the community in an equitable manner. In creating such a community, the University aims to foster a climate of understanding and mutual respect for the dignity and worth of all persons. Please see the University of Toronto Governing Council “Statement of Commitment Regarding Persons with Disabilities” at <http://www.governingcouncil.utoronto.ca/Assets/Governing+Council+Digital+Assets/Policies/PDF/ppnov012004.pdf>.

In working toward this goal, the University will strive to provide support for, and facilitate the accommodation of individuals with disabilities so that all may share the same level of access to opportunities, participate in the full range of activities that the University offers, and achieve their full potential as members of the University community. We take seriously our obligation to make this course as welcoming and accessible as feasible for students with diverse needs. We also understand that disabilities can change over time and will do our best to accommodate you.

Students seeking support must have an intake interview with a disability advisor to discuss their individual needs. In many instances it is easier to arrange certain accommodations with more advance notice, so we strongly encourage you to act as quickly as possible. To schedule a registration appointment with a disability advisor, please visit Accessibility Services at <http://www.studentlife.utoronto.ca/as>, call at 416-978-8060, or email at: [accessibility.services@utoronto.ca](mailto:accessibility.services@utoronto.ca). The office is located at 455 Spadina Avenue, 4<sup>th</sup> Floor, Suite 400.

Additional student resources for distressed or emergency situations can be located at [distressedstudent.utoronto.ca](http://distressedstudent.utoronto.ca); Health & Wellness Centre, 416-978-8030, <http://www.studentlife.utoronto.ca/hwc>, or Student Crisis Response, 416-946-7111.

## Equity and Diversity

The University of Toronto is committed to equity and respect for diversity. All members of the learning environment in this course should strive to create an atmosphere of mutual respect. As a course instructor, I will neither condone nor tolerate behaviour that undermines the dignity or



self-esteem of any individual in this course and wish to be alerted to any attempt to create an intimidating or hostile environment. It is our collective responsibility to create a space that is inclusive and welcomes discussion. Discrimination, harassment and hate speech will not be tolerated.

Additional information and reports on Equity and Diversity at the University of Toronto is available at <http://equity.hrandequity.utoronto.ca>.

### Copyright Statement

Course materials prepared by the instructor are considered by the University to be an instructor's intellectual property covered by the *Copyright Act*, RSC 1985, c C-42. These materials are made available to you for your own study purposes, and cannot be shared outside of the class or "published" in any way. Lectures, whether in person or online, cannot be recorded without the instructor's permission. Posting course materials or any recordings you may make to other websites without the express permission of the instructor will constitute copyright infringement.

### The Use Of Generative AI

The use of generative artificial intelligence tools and apps is strictly prohibited in all course assignments unless explicitly stated otherwise by the instructor in this course. This includes ChatGPT and other AI assistants. Using AI without explicit permission may be considered cheating.

That said, this is a new and quickly evolving technology, and I am open to considering instances where AI may be useful. If you feel that I should make an exception to this policy, please speak with me directly.