

University of Calgary
Department of Sociology
Sociology 419.01 *Sociology of Health and Illness - Social Network Perspectives*
Fall, 2013

Instructor: Dr. Jenny Godley
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Class Hours: T, Th 9:30-10:45
Class Location: SS541

* Please use email for administrative concerns only. Substantive issues should be addressed in person, either in class, during office hours, or during an appointment time.

NOTE: this course outline is subject to revision. All changes will be announced in class. Last revised September 9, 2013

Overview:

This course focuses on the use of social network analysis to explore and understand the social determinants of health. We will bring together research on socio-economic inequalities in health with available studies of the effects of social networks on health. First, we will examine available quantitative data on the socio-economic determinants of health in Canada and globally. You will then be introduced to the methods of social network analysis through an in-class research project. You will receive instruction in UCINET, a social network analysis software program, and Netdraw, a network visualization program. You will learn how to analyze a variety of social network data using UCINET, SPSS, and Netdraw. Next, we will examine (and critique) empirical research that uses social network analysis to understand the social patterning of health outcomes, health behaviours, and health systems. This course is heavily quantitative, and assumes a familiarity with basic statistical modeling in sociology.

Text and Readings:

Analyzing Social Networks. By Stephen P. Borgatti, Martin G. Everett, and Jeffrey C. Johnson. 2013. Sage.

** Available for purchase at the U of C bookstore.

** Referred to as “BEJ” in course schedule.

Academic Articles: All articles listed on the course outline are available through the University of Calgary library website (electronic journal subscriptions). You must download and read these articles before class. It is recommended that you print the articles, and bring them to class. We will refer to the articles in class, and you will need a copy of each of the articles to review for the examinations.

Requirements:

A. Reading:

Readings are assigned for each day of class. Please come to class every day having read the materials. Bring any questions or comments you have about the readings with you to share with your classmates. Please bring your texts to class, as we will refer to them often.

B. In-Class Participation (Oral and Written):

You are encouraged to participate as fully as possible in classroom activities. Each class period may include numerous activities such as discussions, debates, presentations, and various forms of writing. Please take classroom participation seriously; respect your peers’ contributions, and provide feedback as constructively as possible.

C. Exams:

You will have two written mid-term examinations. The mid-terms will each be worth 20% of your final grade. The mid-terms will be held in class. The mid-terms will contain a mixture of short answer and essay questions. There are no make-up examinations in this class. If you miss a mid-term exam for an ‘acceptable reason’ (see below), the weight of the exam will be added to the other mid-term grade.

NOTE: The only acceptable reasons for missing an examination in this class, as listed in the Deferral of Final Examinations section of the University of Calgary Calendar (<http://www.ucalgary.ca/pubs/calendar/current/g-6.html>), are illness, domestic affliction, or religious conviction.

D. Homework Assignments:

There are four mandatory homework assignments throughout the semester. Each of these assignments will be worth 12% of your final grade, for a total of 48%. The homework assignments will be handed out in class. Each homework assignment will involve data analysis and interpretation. You will be required to use SPSS, UCINET, and Netdraw for these homework assignments, all of which are available in the Tri-Faculty Lab.

NOTE: The only acceptable reasons for handing in a homework assignment late in this class, as listed in the Deferral of Final Examinations section of the University of Calgary Calendar (<http://www.ucalgary.ca/pubs/calendar/current/g-6.html>), are illness, domestic affliction, or religious conviction. If you miss a homework assignment deadline, you must provide me with the appropriate documentation. Without appropriate documentation, you will receive a 15% reduction for each day that the homework is late, including weekend days.

E. Presentation:

During the last week of class, each student will present a proposed social network study to the class. These presentations will be worth 12% of your final grade. Details concerning the presentations will be provided in class.

Grades:

Your final grade will be computed as follow:

- Examinations	40%
- Homework	48%
- Presentation	12%

I will use the following scale to convert percentage grades to letter grades for this class.

A+ = 95-100	A = 90-94	A- = 85-89
B+ = 80-84	B = 75-79	B- = 70-74
C+ = 65-69	C = 60-64	C- = 55-59
D+ = 50-54	D = 45-49	
F = below 45		

The following description of letter grades comes from the University of Calgary Calendar.

A indicates superior performance, showing comprehensive understanding of the subject matter.

B indicates clearly above average performance, with knowledge of the subject matter generally complete.

C indicates satisfactory performance, with a basic understanding of the subject matter.

D indicates marginal performance and generally insufficient preparation for subsequent courses in the same subject.

F indicates unsatisfactory performance, or failure to meet course requirements.

Policies:

- A. You are responsible for all the material covered in the books, in supplemental readings, during lectures, and during lab sessions.
- B. In the event that you have to miss class, you are responsible for getting the lecture notes from another student in the class.
- C. I will not distribute my personal notes to students under any circumstances.
- D. You may work with other students in the class on the homework assignments. However, all submitted work must be YOUR OWN INDIVIDUAL WORK. It is your responsibility to make sure you understand the definition of plagiarism, and that you avoid submitting any work that could be considered plagiarized. Students are advised to consult the University of Calgary Calendar, which presents a Statement of Intellectual Honesty and definitions and penalties associated with plagiarism, cheating, and other academic misconduct. (<http://www.ucalgary.ca/pubs/calendar/current/k.html>)
- E. Cell phones, pagers, blackberries, surfing the internet, checking email, and listening to music are disruptive to other students. **No electronic devices** are allowed during class or during lab sessions, with the exception of using a computer to take notes, conduct statistical analysis, or complete lab assignments. If you are caught using electronic devices for any other reason during class or lab, you will be asked to leave the classroom.
- F. There are no re-writes on any assignments or examinations in this class, and no extra credit work will be given. **I do not grant extensions, unless there is an emergency, as defined in the Deferral of Final Examinations section of the University of Calgary Calendar** (<http://www.ucalgary.ca/pubs/calendar/current/g-6.html>).
- G. If you expect to have trouble meeting *any* of the class deadlines, please make sure to discuss your concerns with me *before* the deadline.
- H. If you wish to discuss any grades in the class (on examinations, homework assignments, or labs) you must meet with me IN

PERSON, either during office hours or during an appointment time. We will not discuss grades over email.

- I. The U of C Statement on Principles of Conduct, reproduced in the University of Calgary Calendar , applies to all work in this class. Please familiarize yourself with this statement.

Additional Information:

A. FOIP:

The Freedom of Information and Protection of Privacy (FOIP) legislation disallows the practice of having students retrieve assignments from a public place, e.g., outside instructor's office, the department office, etc. Term assignments must be returned to students individually, during class or during the instructor's office hours; if students are unable to pick up their assignments from the instructor, they provide the instructor with a stamped, self-addressed envelope to be used for the return of the assignment.

B. Academic Accommodation:

Students with a disability, who require academic accommodation, need to register with the Disability Resource Centre (MC 295, telephone 220-8237). Academic accommodation letters need to be provided to course instructors no later than fourteen (14) days after the first day of class. It is the student's responsibility to register with the Disability Resource Centre and to request academic accommodation, if required.

C. Plagiarism:

Intellectual honesty is the cornerstone of the development and acquisition of knowledge and requires that the contribution of others be acknowledged. As a result, cheating or plagiarism on any assignment or examination is regarded as serious academic offenses. Students are advised to consult the University of Calgary Calendar, which presents a Statement of Intellectual Honesty and definitions and penalties associated with plagiarism, cheating, and other academic misconduct

D. Safewalk:

The University of Calgary provides a safewalk service to any location on Campus, including the LRT, parking lots, bus zones, and campus housing. For Campus Security/Safewalk call 220-5333. Campus Security can also be contacted from any of the "Help" phones located around Campus.

- E. Sociology Web Page:
<http://www.soci.ucalgary.ca>

- F. USRI: At the completion of this course each student will be asked to complete an online Universal Student Ratings of Instruction (USRI) form.

- G. Research Ethics:
Students are advised that any research with human subjects--including any interviewing (even with friends and family), opinion polling, or unobtrusive observation--must have the approval of the Departmental Ethics Committee. In completing course requirements, students must not undertake any human subjects' research without discussing their plans with the instructor, to determine if ethics approval is required.

Weekly Schedule:

Week One: Introduction and Review

T, 10 Sept. Introduction to course

Th, 12 Sept. Review: health as a social process

Reading:

1. Frohlich, K.L., N. Ross and C. Richmond. "Health disparities in Canada today: Some evidence and a theoretical framework." *Health Policy*, 2006;79:132-143.
2. House, J.S. "Understanding social factors and inequalities in health: 20th century progress and 21st century prospects." *Journal of Health and Social Behavior*, 2002;43:125-142.

Week Two: Theorizing and Researching the Social Determinants of Health

T, 17 Sept. Population health

Reading:

1. Link, B.G. and J. Phelan. "Social conditions as fundamental causes of disease." *Journal of Health and Social Behavior*, 1995;Extra Issue:80-94.
2. Rose, G. "Sick individuals and sick populations." *International Journal of Epidemiology*, 2001;30:427-32.
3. Lynam, M.J. "Health as a socially mediated process: Theoretical and practice imperatives emerging from research on health inequalities." *Advances in Nursing Science*, 2005;28:25-37.

** Class Project – Ethics Discussion

Th, 19 Sept. Measuring social class in health research

Reading:

1. Adler, N.E. and J. M. Ostrove. "Socioeconomic status and health: what we know and what we don't." *Annals of the New York Academy of Sciences*, 1999;896:3-15.
2. Krieger, N., D.R. Williams, N.E. Moss. "Measuring social class in US public health research: concepts,

methodologies, and guidelines.” *Annual Review of Public Health*, 1997;18:341-78.

3. Tugwell, P. and B. Kristjansson. “Moving from description to action: Challenges in researching socio-economic inequalities in health.” *Canadian Journal of Public Health*, 2004; 95:85-87.

** Class Project – Informed Consent Discussion, Data Collection begins

Week Three: Social Networks and Health

T, 24 Sept. Introduction to social networks and health

Reading:

1. Abel, T. and Frohlich, K.L. “Capitals and capabilities: Linking structure and agency to reduce health inequalities.” *Social Science and Medicine*, 2012; 74:236-244.
2. Smith, K.P. and Christakis, N.A. “Social Networks and Health.” *Annual Review of Sociology*, 2008; 34:405-429.

** Class Project: Data Collection continues.

Th, 26 Sept. Social capital, social networks and health

Reading:

1. Cattell, V. “Poor people, poor places, and poor health: the mediating role of social networks and social capital.” *Social Science and Medicine*, 2001; 52:1501-1516.
2. Verhaeghe, P-P. et al. “The association between network social capital and self-rated health: Pouring old wine in new bottles?” *Health and Place*, 2012; 18:358-365.

** Class Project: Data Collection ends.

Week Four: MT 1 and Social Network Analysis - Introduction

T, 1 Oct. Midterm Examination 1

Th, 3 Oct. Social network analysis – theoretical background

Reading:

1. Wellman, B. "Network analysis: Some basic principles." *Sociological Theory*, 1983:1;155-200.
2. BEJ – Preface and Chapter 1

Week Five: Introduction to Social Network Analysis – Research Design and Data Collection

T, 8 Oct.

Reading:

1. Morris, Martina. "Overview of network survey designs." Pp. 8-21 in *Network Epidemiology: A handbook for survey design and data collection*, 2004. New York: Oxford University Press.
2. Marsden, P.V. "Network data and measurement." *Annual Review of Sociology*, 1990:16;435-463.

Th, 10 Oct.

Reading:

1. BEJ – Chapter 3 and Chapter 4
- LAB – Introduction to data, ego-centered data analysis
Hand out Homework 1

Week Six: Social Network Analysis – Ego-centered data analysis

T, 15 Oct.

Reading:

1. BEJ– Chapter 15

Th, 17 Oct.

LAB – Ego-centered data analysis, contd.
Homework 1 due

Week Seven: Social Network Analysis – Whole network analysis

T, 22 Oct.

Reading:

1. BEJ – Chapter 9, Chapter 10, Chapter 11

Th, 24 Oct.

LAB – Whole network analysis

Handout Homework 2

Week Eight: Social Network Analysis – Two-Mode Data and Visualization

T, 29 Oct.

Reading:

1. Breiger, R.L. “The duality of persons and groups.” *Social Forces*, 1974:53;181-190.
2. BEJ – Chapter 13

Th, 31 Oct.

Reading:

1. BEJ – Chapter 7

LAB – Two-mode data and visualization

Homework 2 due

Week Nine: MT 2 and Social Networks and Health

T, 5 Nov.

Mid term examination 2

Th, 7 Nov

Reading:

1. Luke, D.A., and Stamatakis, K.A. “System science methods in public health: Dynamics, networks, and agents.” *Annual Review of Public Health*, 2012; 33: 357-376.

LAB – as needed

Hand out Homework 3

Week Ten: Networks and Health

Th, 14 Nov.

Reading:

1. Valente, A.M. and Auerswald, C.L. “Gender differences in sexual risk and sexually transmitted infections correlate with gender differences in social networks among San Francisco homeless youth.” *Journal of Adolescent Health*, 2013: 1-6. (in press).
2. Schafer, M.H. “Discussion networks, physician visits, and non-conventional medicine: Probing the relational correlates of health care utilization.” *Social Science and Medicine*, 2013; 87:176-184.

LAB – as needed

Homework 3 due

Week Eleven: Networks and Health Behaviour

T, 19 Nov.

Reading:

1. Christakis, N.A., and Fowler, J.H. “The spread of obesity in a large social network over 32 years.” *New England Journal of Medicine*, 2007; 357: 370-379.
2. De la Haye, K.. et al. “Obesity-related behaviors in adolescent friendship networks.” *Social Networks*, 2010; 32:161-167.

Th, 21 Nov.

Reading:

1. Mercken, L. et al. “A longitudinal social network analysis of peer influence, peer selection, and smoking behavior among adolescents in British schools.” *Health Psychology*, 2012; 31:450-459.
2. De la Haye, K. et al. “Selection and influence mechanisms associated with marijuana initiation and use in adolescent friendship networks.” *Journal of Research on Adolescence*, 2013; 23: 474-486.

LAB –as needed

Hand out Homework 4

Week Twelve: Networks and Health Systems Research

T, 26 Nov.

Reading:

1. Valente, T.W. “Network interventions.” *Science*, 2012; 337:49-53.
2. Blanchet, K., and James, P. “How to do (or not to do) ... a social network analysis in health systems research.” *Health Policy and Planning*, 2012; 27: 438-446.

Th, 28 Nov.

Reading:

1. Landon, B.E. et al. “Variation in patient-sharing networks of physicians across the United States.” *JAMA*, 2012; 308: 265-273.
2. Wonodi, C.B. et al. “Using social network analysis to examine the decision-making process on new vaccine introduction in Nigeria.” *Health Policy and Planning*, 2012; 27: ii27-ii38.

Homework 4 due

Week Thirteen: Social Network Research Proposal Presentations

T, 3 Dec.

Student Presentations – in class

Th, 5 Dec.

Student Presentations – in class
