



UNIVERSITY OF
SOUTHERN DENMARK

Social Networks

Fall 2016

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Class Time Thursday, 8:15 – 10:00
Location: U109, Alsion 2, DK-6400 Sønderborg
Office hours: Thursday, 10:15 – 12:15, or by appt. (room 404)
Teaching language: English
ECTS / weighting: 5 ECTS / 0.083 full-time equivalent

Introduction

Social Networks aims at exploring the various conceptual and methodological challenges experienced by social network analysis. The first part of the course critically discusses the fundamental concepts developed by social network analysis, such as centrality, cohesion, subgroups, and structural equivalence, as well as the main theoretical areas developed since the 1930s, including embeddedness, social capital, and brokerage. After providing a theoretical foundation, we will apply a relational approach to a range of substantive issues and examine how a formal approach of networks can contribute to better understand social, economic, and political structures. *Social Networks* will also introduce students to data collection, study design, and surveys. Empirical data collected by the instructor on policy networks in Europe and on terrorist networks in Africa will allow them to actively engage with quantitative reasoning.

Goal description

This course provides an intensive introduction to the field of social network analysis. It covers theory, concepts, and methods related to network analysis. At the end of the course, you will be able to apply the major concepts of social network analysis to a wide range of social, economic, and political issues. You will also be able to identify the characteristics of network analysis compared with other attribute-based approaches, such as econometrics. Finally, you will be able to design a survey and analyze your own data using a relational approach.

The course is delivered in a mixture of lectures (first part) and workshops (second part). Students will be expected to choose one of the empirical datasets provided by the instructor or available online, and apply social network analysis to analyze it. The workshop will lead you to master some of the software tools as well as analytical strategies developed by network analysts.

Form of instruction

2 hours per week. The course includes lectures, class-room discussions, tutorial exercises, and case studies.

Detailed schedule

Sept 15, 2016	Introduction to social networks <i>Readings: Borgatti et al. (2009)</i>
Sept 29	Centrality <i>Readings: Borgatti et al. (2013: 163-180)</i>
Oct 6	Power, embeddedness and brokerage <i>Readings: Burt (2005: 10-57), Brass and Krackhardt (2012)</i>
Oct 13	Social networks and economic performance <i>Readings: Schmidt and Jensen (2012)</i>
Oct 27	Policy networks <i>Readings: Knoke (2012), Walther and Reitel (2013)</i>
Nov 3	Space and social networks, social media <i>Readings: Radil et al. (2010), Takhteyev et al. (2012)</i>
Nov 10	Dark networks <i>Readings: Duijn et al. (2014), Walther and Christopoulos (2015)</i>
Nov 17	Workshop 1: Introduction to UCINET, study design and surveys <i>Readings: Borgatti et al. (2013: 24-61), Borgatti et al (2014)</i>
Nov 24	Workshop 2: Descriptive statistics <i>Readings: Borgatti et al. (2013: 149-162), Everton (2013: 92-125)</i>
Dec 1	Workshop 3: Netdraw, graphs, visualization <i>Borgatti et al. (2013: 100-124)</i>
Dec 8	Workshop 4: Analysis (homophily) <i>Readings: Borgatti et al. (2013: 133-138)</i>
Dec 15	Workshop 5: Analysis (brokerage) <i>Readings: Kadushin (2012: chap. 12)</i>
Dec 16 (8:15-10, room U106)	Course overview, questions and answers

Literature

The textbooks for the course are:

- Borgatti SP, Everett MG, Johnson JC. 2013. *Analyzing Social Networks*. London, Sage.
- Kadushin C. 2012. *Understanding Social Networks. Theories, Concepts and Findings*. Oxford, Oxford University Press.

Books and software: Briatte F. 2016. Awesome Network Analysis
<https://github.com/briatte/awesome-network-analysis>

Mandatory readings

- Borgatti S.P, Everett M.G, Freeman C. 2014. *UCINET Quick Start Guide*, available at: <https://docs.google.com/viewer?a=v&pid=sites&srcid=ZGVmYXVsdGRvbWFpbm91Y2luZXRxZb2Z0d2FyZXxneDo3ZThjMzYzMmZiMTFiMDM1>.
- Borgatti S, Mehra A, Brass D, Labianca G. 2009. Network analysis in the social sciences. *Science* 323: 892-895.
- Brass DJ, Krackhardt DM. 2012. Power, politics, and social networks in organizations, in Ferris GR, Treadway DC. (eds) *Politics in Organizations: Theory and Research Consideration*. New York, Routledge: 355-375.
- Burt R.S. 2005. *Brokerage and Closure. An Introduction to Social Capital*. Oxford, Oxford University Press: 10-57.
- Duijn PA, Kashirin V, Sloot P. 2014. The relative ineffectiveness of criminal network disruption. *Nature* 4: 4238: 1-15
- Everton SF. 2012. Tracking, destabilizing and disrupting dark networks, Naval Postgraduate School, http://calhoun.nps.edu/bitstream/handle/10945/34415/Everton_Disrupting-Dark-Networks-using-SNA-Manual.pdf?sequence=1
- Kadushin C. 2012. *Understanding Social Networks. Theories, Concepts and Findings*. Oxford, Oxford University Press, chap. 12.
- Knock D. 2012. Policy networks, in Scott J, Carrington PJ (eds) *The SAGE Handbook of Social Network Analysis*. London, SAGE: 210-222.
- Radil S, Flint C, Tita G. 2010. Spatializing social networks: Using Social Network Analysis to investigate geographies of gang rivalry, territoriality, and violence in Los Angeles. *Annals of the Association of American Geographers* 100(2): 307–326.
- Schmidt TD, Jensen PS. 2012. Social networks and regional recruitment of foreign labour: Firm recruitment methods and spatial sorting in Denmark. *Papers in Regional Science* 91(4): 795–821.
- Takhteyev Y, Gruzd A, Wellman B. 2012. Geography of Twitter networks. *Social Networks* 34: 73–81.
- Walther O, Reitel B. 2013. Cross-border policy networks in the Basel region: the effect of national borders and brokerage roles. *Space & Polity* 17(2): 217-236.
- Walther O, Christopoulos D. 2015. Islamic terrorism and the Malian rebellion. *Terrorism and Political Violence* 27(3): 497-519.

Other useful references

- Burt R.S. 2010. *Neighbor Networks. Competitive Advantage Local and Personal*. Oxford, Oxford University Press.
- Hanneman RA, Riddle M. 2005. *Introduction to Social Network Methods*. Riverside, CA: University of California. <http://www.faculty.ucr.edu/~hanneman/nettext/>.
- McCulloh I, Armstrong H, Johnson A. 2013. *Social Network Analysis with Applications*. Hoboken, Wiley.
- Newman M.E.J. 2010. *Networks. An Introduction*. Oxford, Oxford University Press.
- Scott J. 2006. *Social network analysis. A handbook*. London, Sage.

Students must install the network analysis program UCINET, downloadable as a trial version here: <https://sites.google.com/site/ucinetsoftware/downloads>.

Methods of evaluation

The final grade will be determined based on a **15-page paper** in which you will be requested to formulate a research question related to the evolution of social networks, select a relevant dataset provided by the instructor or available on-line, and perform a network analysis of the data.

The final paper contains a common thread and is not a collection of individual tutorial exercises. The final paper will be written in English, will not exceed 15 pages (all included, no appendix) and must be submitted electronically via SDU-Assignment in Blackboard.

Only students having participated in the ordinary examination and failed to pass are admitted to the re-examination in the same examination period, e.g. cancelling registration or not showing up to the ordinary examination do not provide students access to the re-examination. Please note that the type and form of the re-examination is announced when registration is closed and may differ from that of the ordinary examination.

Ethics

Research papers will be dealt according to the University of Southern Denmark integrity policy available here: http://www.sdu.dk/en/information_til/studerende_ved_sdu/eksamen/snyd

The tool SafeAssign will be used to detect plagiarism.

Other information

The official course description is available here:

http://fagbesk.sam.sdu.dk/study/fagbasen/admin/fagbesk_admin.shtml?fag_id=34055

Books and articles can be accessed using SDU Library: <http://www.sdu.dk/en/bibliotek> or the national portal Bibliotek.dk <https://bibliotek.dk/eng>

Students must bring their own computer to all classes (Macs are fine but PCs work best with social network analysis programs used in class).