# Sociology 122: Social Networks

Professor Lewis

Fall 2024 Mon/Wed/Fri 10-10:50am Cognitive Science Building 002 Office hours: Wed 8-9am, 4-5pm (sign up on Canvas)

The 21<sup>st</sup> century has seen an explosion of network research in the social sciences. While social scientists have traditionally focused on the individual as the unit of analysis, network analysts instead examine the complex web of *relationships*—platonic, familial, professional, romantic—in which individual behavior is embedded. This course will provide an overview of the network approach to the study of society. Course material will cover networks of a variety of types and sizes (from murder networks among Chicago gangs to sexual networks among adolescents); focus on relatively recent advances in this rapidly-evolving field (while acknowledging the debt this scholarship owes to many classical sociological texts); and emphasize the complex, dynamic, and reciprocal relationship between the individual and her social environment: how we are all jointly authors and products of the social networks we live in.

# **Evaluation**

- ➤ 5 short writing assignments (10% each, for a total 50% of course grade)
- > Final paper (50% of course grade)

Details for both aspects of course evaluation will be discussed at length in lecture. *All assignments, including the final, will be take-home and asynchronous.* In other words, there is no in-class final and you do *not* need to be available at the time that is listed for our final in the Schedule of Classes.

Use of electronics (including laptops) during class is prohibited (unless you have a university accommodation). This is to ensure a learning environment that is free from distractions; the educational benefits of longhand have also been experimentally demonstrated.\*

# Required reading

Watts, Duncan J. 2003. Six Degrees: The Science of a Connected Age. New York: Norton.

While *Six Degrees* provides an overview of many central ideas in this course (and we will ultimately read this text in its entirety), the majority of course readings consist of articles published in top academic journals. These articles will be posted to the course website on Canvas.

<sup>\*</sup> Mueller, Pam A. and Daniel M. Oppenheimer. 2014. "The pen is mightier than the keyboard: Advantages of longhand over laptop note taking." *Psychological Science* 25:1159-1168.

## **Schedule**

#### Week 1: Background and terminology

Watts, Preface and Chapter 1

Borgatti, Stephen P., Ajay Mehra, Daniel J. Brass, and Giuseppe Labianca. 2009. "Network analysis in the social sciences." *Science* 323:892-895.

Marsden, Peter V. 2000. "Social Networks." Pp. 2727-2735 in *Encyclopedia of Sociology*, edited by E. F. Borgatta and R. J. V. Montgomery. New York: MacMillan.

#### Week 2: Weak ties and small worlds

Watts, Chapter 2

Milgram, Stanley. 1967. "The small-world problem." Psychology Today 1:61-67.

Granovetter, Mark S. 1973. "The strength of weak ties." *American Journal of Sociology* 78:1360-1380. Gladwell, Malcolm. 1999. "Six degrees of Lois Weisberg." *The New Yorker*.

### Week 3: Dyads, triads, and structural balance

Watts, Chapter 3

Blau, Peter M. [1964] 2007. "Exchange and power in social life." Pp. 99-110 in *Contemporary Sociological Theory (Second Edition)*, edited by Craig Calhoun, Joseph Gerteis, James Moody, Steven Pfaff, and Indermohan Virk. Malden, MA: Blackwell.

Simmel, Georg. 1950. "The triad." Pp. 145-169 in *The Sociology of Georg Simmel*, edited by Kurt H. Wolff. Glencoe, IL: Free Press.

#### Week 4: Romantic networks

Watts, Chapter 4

Liljeros, Fredrik, Christofer R. Edling, Luís A. Nunes Amaral, H. Eugene Stanley, and Yvonne Åberg. 2001. "The web of human sexual contacts." *Nature* 411:907-908.

Bearman, Peter S., James Moody, and Katherine Stovel. 2004. "Chains of affection: The structure of adolescent romantic and sexual networks." *American Journal of Sociology* 110:44-91.

#### Week 5: Friendship networks

Watts, Chapter 5

Wimmer, Andreas and Kevin Lewis. 2010. "Beyond and below racial homophily: ERG models of a friendship network documented on Facebook." *American Journal of Sociology* 116:583-642.

Lewis, Kevin. 2015. "How networks form: Homophily, opportunity, and balance." In *Emerging Trends in the Social and Behavioral Sciences*, edited by R. Scott and S. Kosslyn.

#### Week 6: Position and power

Watts, Chapter 6

Cornwell, Benjamin and Edward O. Laumann. 2011. "Network position and sexual dysfunction: Implications of partner betweenness for men." *American Journal of Sociology* 117:172-208. Stovel, Katherine and Lynette Shaw. 2012. "Brokerage." *Annual Review of Sociology* 38:139-158.

Week 7: Diffusion and contagion

Watts, Chapter 7

Coleman, James, Elihu Katz, and Herbert Menzel. 1957. "The diffusion of an innovation among physicians." *Sociometry* 20:253-270.

Gladwell, Malcolm. 1996. "The tipping point." The New Yorker.

Week 8: Influence and inequality

Watts, Chapter 8

Salganik, Matthew J., Peter Sheridan Dodds, and Duncan J. Watts. 2006. "Experimental study of inequality and unpredictability in an artificial cultural market." *Science* 311:854-856.

DiMaggio, Paul and Filiz Garip. 2012. "Network effects and social inequality." *Annual Review of Sociology* 38:93-118.

Week 9: Cooperation and conflict

Watts, Chapter 9

Papachristos, Andrew V. 2009. "Murder by structure: Dominance relations and the social structure of gang homicide." *American Journal of Sociology* 115:74-128.

Gladwell, Malcolm. 2010. "Small change." The New Yorker.

Week 10: Connection, isolation, and technology

Watts, Chapters 10 and 11

Wellman, Barry, Anabel Quan Haase, James Witte, and Keith Hampton. 2001. "Does the internet increase, decrease, or supplement social capital? Social networks, participation, and community commitment." *American Behavioral Scientist* 45:436-455.

Lazer, David, Alex Pentland, Lada Adamic, Sinan Aral, Albert-László Barabási, Devon Brewer, Nicholas Christakis, Noshir Contractor, James Fowler, Myron Gutmann, Tony Jebara, Gary King, Michael Macy, Deb Roy, and Marshall Van Alstyne. 2009. "Computational social science." *Science* 323:721-723.