

**Sociology 295  
Fall 2008**

**Tipping Points, Bandwagons, and Cascades:  
Individual Behavior and Social Dynamics**

Professor Elizabeth Bruch  
Office: LSA 4020  
Email: ebruch@umich.edu

Lecture Tu/Th 8:30-10am  
3242 LSA  
Office Hours Th 2:30-4:30pm

**Course Objectives:** There are many situations in which how we behave depends on the behavior of others. We can be influenced by our friends and also by complete strangers. Social influence may be trivial and fleeting, or enduring and highly consequential. For example, whom a person dates or marries depends on both her attraction to potential suitors as well as the characteristics and preferences of the competition. Similarly, racially integrated neighborhoods often end up completely segregated due to the domino effect produced by the out-migration of a few less tolerant whites.

In this class, we examine how interdependent behaviors of individuals can lead to some surprising and unexpected social outcomes. We will explore both theoretical models and empirical applications of social dynamics, including sexual networks and marriage markets, the formation and transformation of neighborhoods, the success or failure of social movements, and patterns of technological innovation. The course follows a seminar format, and student participation counts for a significant portion of the total grade. Students will be required to submit several shorter writing exercises and to produce a final research paper engaging the broad themes of the course

**Grading:** This is a small seminar class, so there will be no midterm or final exam. You will be graded based on your understanding of course material as evidenced by in-class presentations, class discussion, and the successful completion of three assignments. You can find more details about the assignments at the end of the syllabus. To help focus your reading, I provide discussion questions for the next week's readings at the end of our Thursday lecture. You will be expected to come to class with preliminary written responses to these questions. The grading breakdown is as follows:

Class participation:	25%
Assignment 1: "Micro-Macro Interactions in Sociology"	25%
Assignment 2: "Tipping and other Models of Interdependent Behavior"	25%
Assignment 3: "Using Agent-Based Models to Study Social Dynamics"	25%

Each assignment will be 5 double-spaced pages (excluding references).

**Attendance:** I expect you to attend all scheduled meetings. You are responsible

for all material discussed in class, as well as any announcements. At various points in the semester I will take time during class to work through ideas or talk about the written assignments. Regular attendance and thoughtful class participation is key to getting a good grade in this course.

**Plagiarism:** Plagiarism is representing the work of others as your own (including copying other students' work or using Internet resources without proper citation). Those who plagiarize will receive an F, and any sanctions imposed by the university. My apologies for having to issue this warning.

**Late Work and Incompletes:** Late work will not be accepted except under devastating circumstances. I do not give out incompletes.

**Required Texts:** I will post many of the readings on the course website. You can print and read them at your convenience. We will also be reading substantial sections of the following books. I will not post them on-line, so you are strongly encouraged to purchase your own copy. These books have been ordered for our class, and are available in the Ulrich Bookstore.

Gladwell, Malcolm. 2003. *The Tipping Point: How Little Things Can Make a Big Difference*. Back Bay Books.

Miller, John and Scott Page. 2007. *Complex Adaptive Systems: An Introduction to Computational Modeling*. Princeton, NJ: Princeton University Press.

Poundstone, William. 1992. *Prisoner's Dilemma: John Von Neuman, Game Theory, and the Puzzle of the Bomb*. New York: Random House.

Schelling, Thomas. 2006. *Micromotives and Macrobehavior*. New York: Norton.

Watts, Duncan. 2004. *Six Degrees: The Science of a Connected Age*. New York: Norton.

**Recommended Texts:** These books are worth owning if you have a strong interest in the subject. However, I will make electronic copies of our readings available to the class.

Rogers, Everett. 2003. *Diffusion of Innovations*. New York: Free Press.

Hechter, Michael and Christine Horne [eds.]. 2003. *Theories of Social Order*. Stanford: Stanford University Press.

# SOCIOLOGY 295 COURSE OUTLINE

Professor Elizabeth Bruch

## **WEEK 1: THE MICRO-MACRO PROBLEM IN SOCIOLOGY**

**9/2: Introductions, Overview of social mechanisms**

**9/4: Social Interactions and Laws of Human Aggregation**

Schelling, Thomas. 1978. *Micromotives and Macrobehavior*. New York: Norton. Chapter 1, pp. 9-44.

Coleman, James. 1990. *Foundations of Social Theory*. Boston: Harvard University Press. Chapter 1. Pp. 1-23.

## **WEEK 2: THEORIES OF CROWD BEHAVIOR**

**9/9: Crowds are less than the sum of their parts: Mobs, Panics, and Riots**

Le Bon, Gustave. 1969. *The Crowd: A Study of the Popular Mind*. New York: Ballantine Books. Chapters 1-3.

Surowiecki, James. 2004. *The Wisdom of Crowds*. New York: Anchor Books. Introduction.

**9/11: Crowds are more than the sum of their parts: Diversity, Problem Solving, and Optimization**

Surowiecki, James. 2004. *The Wisdom of Crowds*. New York: Anchor Books. Chapters 1 & 3.

Page, Scott. 2007. *The Difference: How the Power of Diversity Creates Better Groups, Firms, Schools, and Societies*. Princeton: Princeton University Press. Chapter 6-7.

## **WEEK 3: SOCIAL NORMS**

**9/16: Social Norms: Origins and Definitions**

Coleman, James. 1990. *Foundations of Social Theory*. Boston: Harvard University Press. Chapter 10. "The Demand for Effective Norms." Pp. 241-65.

Horne, Christine. 2003. "Sociological Perspectives on the Emergence of Norms."

Pp.129-139 in *Theories of Social Order*, edited by Michael Hechter and Christine Horne. Stanford: Stanford University Press.

### **9/18: Enforcement of Norms**

Garfinkel, Harold. 1967. *Studies in Ethnomethodology*. New Jersey: Prentice Hall.

Coleman, James. 1990. *Foundations of Social Theory*. Boston: Harvard University Press. Chapter 11. "The Realization of Effective Norms." Pp. 266-99.

## **WEEK 4: SELF-FULFILLING PROPHECIES, HUMAN PERCEPTION, AND THE ROLE OF BELIEFS IN SOCIAL BEHAVIOR**

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\*   **ASSIGNMENT 1 DUE IN CLASS**   \*  
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### **9/23: Self-Fulfilling Prophecies**

Merton, Robert. 1968. "The Self-Fulfilling Prophecy." Pp. 475-492 in *Social Theory and Social Structure*. New York: Free Press.

Rosenthal, Robert and Lenore Jacobson. 1968. *Pygmalion in the Classroom: Teacher Expectations and Pupils Intellectual Development*. New York: Holt, Rinehart, and Winston Inc. Chapters 1, 2, 5, & 6.

### **9/25: Perception, Beliefs, and Social Proof**

Daniel Gilbert. 2005. "In the Blind Spot of the Mind's Eye." Pp. 83-105 in *Stumbling on Happiness*. New York: Vintage Books.

Asch, Solomon. 1952. "Group Forces in the Modification and Distortion of Judgments." Pp. 450-501 in *Social Psychology*. New Jersey: Prentice-Hall.

## **WEEKS 5 & 6: TIPPING, EPIDEMICS, AND OTHER MODELS OF INTERDEPENDENT BEHAVIOR**

### **9/30: Threshold Models**

Granovetter, Mark. 1978. "Threshold Models of Collective Behavior." *American Journal of Sociology* 83: 1420.

Gladwell, Malcolm. 2003. *The Tipping Point: How Little Things Can Make a Big Difference*. Back Bay Books. Introduction. Chapter 1.

## **10/2: Epidemic and “Contagion” Models**

Gladwell, Malcolm. 2003. *The Tipping Point: How Little Things Can Make a Big Difference*. Back Bay Books. Chapters 2-3.

Crane, Jonathan. 1991. “An Epidemic Theory of Ghettos and Neighborhood Effects on Dropping Out and Teenage Childbearing.” *American Journal of Sociology* 96: 1226-.

## **10/7: Feedback Effects**

Gladwell, Malcolm. 2003. *The Tipping Point: How Little Things Can Make a Big Difference*. Back Bay Books. Chapters 4-7.

Schelling, Thomas. 1977. “Thermostats, Lemons, and other Families of Models.” Pp. 81-133 in *Micromotives and Macrobehavior* New York: Norton and Company.

## **10/9: Theories of Collective Behavior**

Coleman, James. 1991. *Foundations of Social Theory*. Cambridge: Belknap. Chapter 9. “Collective Behavior.”

## **WEEK 7: SOCIAL INTERACTIONS AND SOCIAL INEQUALITY**

### **10/14: Neighborhood Segregation**

Schelling, Thomas. 1971. "Dynamic Models of Segregation." *Journal of Mathematical Sociology* 1:143-86.

Bruch, Elizabeth and Robert Mare. 2008. “Segregation Processes.” Forthcoming in the *Oxford Handbook of Analytic Sociology*. Oxford: Oxford University Press.

### **10/16: Social Networks and the Spread of “Disease”**

Bearman, Peter, James Moody, and Kate Stovel. 2004. “Chains of Affection: The Structure of Adolescent Romantic and Sexual Networks.” *American Journal of Sociology* 110:44-91.

Christakis, Nicholas and James Fowler. 2006. “The Spread of Obesity in a Large Social Network over 32 Years.” *New England Journal of Medicine* 357:370-9.

## **WEEK 8: DIFFUSION OF INNOVATION**

**10/21: Fall Break... no class!**

**10/23: Fads, Fashion, and the Diffusion of Innovation**

Rogers, Everett. 2003. *The Diffusion of Innovations*. New York: Free Press. Chapters 1-2. "Elements of Diffusion Research" and "A History of Diffusion Research."

## **WEEK 9: GAME THEORY, PRISONER'S DILLEMA, AND THE EVOLUTION OF COOPERATION**

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\* **ASSIGNMENT 2 DUE IN CLASS** \*  
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### **10/28: Game Theory and the Prisoner's Dilemma**

Poundstone, William. 1992. *Prisoner's Dilemma: John Von Neuman, Game Theory, and the Puzzle of the Bomb*. New York: Random House. Chapters 3, 6, 11, and 12.

### **10/30: The Evolution of Cooperation**

Axelrod, Robert. 1984. *The Evolution of Cooperation*. New York: Basic Books. Chapters 1, 2, and 4.

## **WEEK 10: INTRODUCTION TO AGENT-BASED MODELING**

### **11/4: What is Agent-Based Modeling?**

Miller, John and Scott Page. 2007. *Complex Adaptive Systems: An Introduction to Computational Modeling*. Princeton, NJ: Princeton University Press. Chapter 2.

Macy, Michael, and Robert Willer. 2002. "From Factors to Actors: Computational Sociology and Agent-based Modeling." *Annual Review of Sociology* 28:143-66.

### **11/6: How to Build an Agent-Based Model**

Miller, John and Scott Page. 2007. *Complex Adaptive Systems: An Introduction to Computational Modeling*. Princeton, NJ: Princeton University Press. Chapters 6 and 7.

Gilbert, Nigel and Klaus Troitzsch. 2005. *Simulation for the Social Scientist*. Pp. 151-71 in Ch. 7-9 (Ch. 7 on cellular automata includes an introduction to Netlogo); Chapters 8-9 discuss multi-agent models and systems).

## **WEEKS 12 AND 13: NETLOGO PROGRAMMING IN THE CENTER FOR THE STUDY OF COMPLEX SYSTEMS (CSCS)**

**11/11: Getting Started with Netlogo, simple example models**

**11/13: Segregation Model**

**11/18: Standing Ovation Problem**

John Miller and Scott Page. "The Standing Ovation Problem." Handout.

**11/20: Lab Time for Assignment #4**

**WEEKS 13-14: SOCIAL NETWORKS**

**11/25: A Science of the "Connected Age"**

Watts, Duncan. 2004. *Six Degrees: The Science of a Connected Age*. New York: Norton. Introduction, Chapters 1-3.

**11/27: No Class – Happy Thanksgiving!**

**12/2: The Small World Problem**

Travers, J. and Stanley Milgram. 1969. "An experimental study of the small world problem." *Sociometry* 32:425-443

Granovetter, Mark. 2003. "Ignorance, knowledge, and outcomes in a small world." *Science* 301:773-774

Watts, Duncan. 1999 "Networks, dynamics, and the small world phenomenon." *American Journal of Sociology* 105:493-527

**12/5: The Strength of Weak Ties**

Granovetter, Mark. 1973. "The strength of weak ties." *American Journal of Sociology* 78:1360-1380.

Yakubovich, Valery. 2005. "Weak ties, information, and influence: How workers find jobs in a local Russian labor market." *American Sociological Review* 70:408-421.

**WEEK 15: CLOSING THOUGHTS**

**12/9: Project Presentation and Wrap Up**

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\* **ASSIGNMENT 4 DUE IN CLASS** \*  
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