

CAT 3: The New (Old) Connectivity

Spring 2013

TTh 2:00pm – 3:20pm, Peterson 110

Prof: James Fowler, SSB 392

<http://fowler.ucsd.edu>

Office Hours: Th 8am-10am

Course description

The public is obsessed with social networking and the new ways to connect online, but scholars have been studying connectivity for decades. New research shows that if you want to understand this new phenomenon, you have to start with the real, everyday, face-to-face networks we have always had, ever since we were huddled around campfires on the Serengeti. We will explore the many ways in which social networks have a powerful effect on a wide range of human behaviors. With a foundation in understanding real world networks, we can then consider how these networks function online.

The format of this course is social. Science is a *social* activity, so there will be a large emphasis on soliciting feedback from and providing feedback to your peers.

Course text

The main text we will use for this class is:

- Nicholas A. Christakis and James H. Fowler. 2011. *Connected: How Your Friends' Friends' Friends Affect Everything You Feel Think and Do*. New York: Little Brown, ISBN: 9780316036139.

The hardcover edition is nearly identical in all respects, but has a different subtitle (*The Surprising Power of Our Social Networks and How They Shape Our Lives*, ISBN: 9780316036146).

This book is available on Amazon and there is also a Kindle version. All scientific articles assigned are available via libraries.ucsd.edu. To set up remote access to these articles, visit <http://libraries.ucsd.edu/services/computing/remote-access/proxy-server.html>.

You should also have these texts to help with writing:

- Lunsford, A. A. 2009. *EasyWriter with 2009 MLA and 2010 APA Updates: A Pocket Reference*. Macmillan.
- Losh, E., Alexander, J., Cannon, K., & Cannon, Z. 2013. *Understanding Rhetoric: A Graphic Guide to Writing*. Macmillan.

Requirements

Your grade for this course will depend on (nearly) weekly assignments that should help you with your final project. For written assignments, please use the Chicago Manual of Style for citations: http://www.chicagomanualofstyle.org/tools_citationguide.html

1. **Blog Posts and Responses.** For several of the assignments you are asked to post entries to the TED section blog and respond to a different person each week using the blog commenting feature. Your participation in this format will be **15% of your grade**.
2. **List of Questions and Hypotheses.** Five questions about **social networks** and/or **social media** that you are interested in and three hypotheses related to each question are due to the course blog

by 3pm on April 11. Examples include: What makes networks work? Why do people occupy different positions in the network? What makes people influential? What makes them susceptible to influence? What kinds of networks work best and why? Replies to your discussion partner are due by Noon on April 14 as comments on your partner's blog entry. You should evaluate your partner's questions and hypotheses based on (a) how interesting they are, (b) how important they are, and (c) how plausible the hypotheses are.

3. **Topic and annotated bibliography.** You must choose a topic and post annotations of five scientific articles related to your topic (four to six sentences per article entry) to the blog by 3pm on April 18. At least three of these must be from sources outside the syllabus. Your annotations should answer these questions: (a) What is the main thesis of the article? Summarize its conclusions in a couple of sentences. (b) Who is the author? Has s/he written other articles or books? (c) What kind of journal is the article published in? Who is its audience? (d) How did the article help you in trying to narrow the focus of your research? (e) What is the scope of the article? Does it present a broad overview? Does it zero in on a very specific topic? Replies to your discussion partner are due by Noon on April 21 as comments on your partner's blog entry. Your partner will evaluate them based on (a) how relevant the articles are to your topic, and (b) how well you are doing in summarizing the information.
4. **First Paper Draft.** A draft of your first paper is due in section during Week 4 (April 21-25). BRING 2 HARD COPIES: One for peer review and one for your TA. Your partner and TA will evaluate the draft for (a) clarity, (b) structure, and (c) fulfilling the goals of the assignment (see below).
5. **First Paper.** A 1200 to 1500 word *synthetic* literature review is due IN LECTURE on May 6. Please also submit via Turnitin on Ted and to the blog. Replies to your discussion partner are due by Noon on May 6. The goal of this paper is to use course material from the syllabus and outside sources to (a) describe a topic, (b) show why it is important, (c) analyze what we currently know about the topic based on current scientific research, and (d) explain what a next step would be in advancing our understanding of the topic. This next step can be very, very small, but it must be your own idea, and it will be very helpful if you can use this to guide your thinking for a potential final project! **20% of your grade.**
6. **Final project proposal.** You and at least two other students of your choosing must draft a one-page proposal that describes your final project. Final projects may use any medium or method to address a topic on *social media* or *social networks*. The goal is test your hypotheses about how networks work. These could include oral presentation, a computer program, poetry, mathematical analysis, artistic visualization (with or without computer aids), graphic novel, video mockumentary or documentary, fake advertisement, performance, or any other method that communicates ideas that *advance* our understanding of your topic. The proposal should specifically outline (a) goals of the project, (b) related work by others, (c) your methods, and (d) your expected results. Your proposal is due in lecture on May 8. Be prepared to discuss your proposals in section during Week 7 (May 12-16).
7. **Final project.** All final projects will be presented in a showcase at Pepper Canyon Hall during lecture times on Week 10 (June 2-6). **20% of your grade**
8. **Final project paper draft.** A 1500-2000 word paper about your project and how it fits into the course material is due to your TA in lecture on May 29. Bring a second hard copy to section during Week 10 (June 2-6) for peer review. This paper could take the form of a scientific article, white paper, proposal (to a council, funding agency, leader, etc.), review, or critical analysis (reviews and critical analyses must be about *other* students' projects). In this paper, you are required to demonstrate your understanding of a) the framework/theories of the course (with reference to at least three scientific articles), b) your use of research in building/creating/critiquing the final project, and c) your ability to critically reflect on your or your peer's project within the context of the course.

- 9. Final project paper.** This paper should incorporate feedback from your peers and is due by 3pm on June 9 on Turnitin on TED and in hard copy to your TA (location TBA). **25% of your grade**
- 10. Extra Credit.** You can add one point to your final grade if you attend an upper division CAT event. Examples include COMIC SUTRA (an evening of comedy and comic books presented by the CAT Practicum that features stand-up from the students of the DIVINE COMEDY improv performance workshop and a gallery showcase of work from the COMICRAFT graphic novel seminar); ARTifact Gallery (housed in the CAT Program Offices, curated by current CAT undergraduates, and showcases art conceptually related to the CAT sequence that has been produced by Sixth College students); Edgeland Futurism (features art produced by Sixth College students that re-imagines the future of the San Diego/Tijuana region); and Animating the Community (exhibits 3-minute student produced films that explore the social and legal complexities of consent, representations of the female body, and image-sharing as meaning-making in the digital age). You can earn extra credit by writing a one-page paper reflection of how the event relates to this class. Due when you turn in your final project paper in week 11 (3pm June 9th).
- 11. TA evaluation.** At the end of the class, TAs will evaluate your participation. **20% of your grade**

Tentative Schedule and Assigned Readings

Week 1 (April 1, 3) *Introduction to Social Networks* **Library Session during class on April 1**

- *Connected*, Chapter 1
- *Understanding Rhetoric*, Chapter 5

Week 2 (April 8, 10) *Emotional Contagion* **Guest Lecture April 10 – Barbara Bush**

- *Connected*, Chapter 2
- Choose one:
 - R. A. Easterlin, "Explaining Happiness," *Proceedings of the National Academy of Sciences* 100, no. 19 (2003): 11176-11183.
 - J. H. Fowler and N. A. Christakis, "Dynamic Spread of Happiness in a Large Social Network: Longitudinal Analysis Over 20 Years in the Framingham Heart Study," *British Medical Journal* 337 (2008): a2338.
 - Coviello, Lorenzo, et al. "Detecting Emotional Contagion in Massive Social Networks." *PloS one* 9.3 (2014): e90315.

Week 3 (April 15, 17) *Love and Sex*

- *Connected*, Chapter 3
- Choose one:
 - P. S. Bearman, J. Moody, and K. Stovel, "Chains of Affection," *American Journal of Sociology* 110 (2004): 44–91.
 - D. T. Gilbert, and others, "The Surprising Power of Neighborly Advice," *Science* 323 (2009): 1617-1619.

Week 4 (April 22, 24) *The Spread of Health Behaviors*

- *Connected*, Chapter 4
- *Understanding Rhetoric*, Chapter 6

Week 5 (April 29, May 1) *Economic Networks*

- *Connected*, Chapter 5
- Choose one:
 - M. Granovetter, "The Strength of Weak Ties," *American Journal of Sociology* 78 (1973): 1360-1380, p. 1372.
 - B. Uzzi and J. Spiro, "Collaboration and Creativity: The Small World Problem," *American Journal of Sociology* 111 (2005): 447–504.
 - J. Henrich, "Does Culture Matter in Economic Behavior? Ultimatum Game Bargaining Among the Machiguenga," *American Economic Review* 90 (2000): 973–979.
 - D. Cesarini and others, "Heritability of Cooperative Behavior in the Trust Game," *Proceedings of the National Academy of Sciences* 105 (2008): 3721–3726.

Week 6 (May 6, 8) *Political Networks*

TA sections will meet in the Smart Classroom this week

- *Connected*, Chapter 6
- Choose one:
 - J. H. Fowler, "Connecting the Congress: A Study of Cosponsorship Networks," *Political Analysis* 14 (2006): 456–487.
 - L. A. Adamic and N. Glance, "The Political Blogosphere and the 2004 U.S. Election: Divided They Blog," *Proceedings of the 3rd International Workshop on Link Discovery* (New York: Association for Computing Machinery, 2005): 36–43.
 - J. Kelly and B. Etling, "Mapping Iran's Online Public: Politics and Culture in the Persian Blogosphere," *Berkman Center Research Publication* 2008-01 (2008): 1–36.
 - Bond, Robert M., et al. "A 61-million-person experiment in social influence and political mobilization." *Nature* 489.7415 (2012): 295-298.

Week 7 (May 13, 15) *The Evolutionary Basis of Social Life*
Guest Lecture May 13 – Erica Fontana

- *Connected*, Chapter 7
- Choose one:
 - J.H. Fowler, C.T. Dawes, and N.A. Christakis, "Model of Genetic Variation in Human Social Networks," *PNAS: Proceedings of the National Academy of Sciences* 2009; 106: 1720-1724.
 - J. C. Flack and others, "Policing Stabilizes Construction of Social Niches in Primates," *Nature* 439 (2006): 426–429.
 - R. Dunbar, "Coevolution of Neocortex Size, Group Size, and Language in Humans," *Behavioral and Brain Sciences* 16 (1993): 681–735.
 - Fowler, James H., Christopher T. Dawes, and Nicholas A. Christakis. "Model of genetic variation in human social networks." *Proceedings of the National Academy of Sciences* 106.6 (2009): 1720-1724.

Week 8 (May 20, 22) *Social Media*
May 20 – TAs will meet with groups to discuss final projects

- *Connected*, Chapter 8
- *Understanding Rhetoric*, Chapter 7

Week 9 (May 27, 29) *The Human Superorganism*
Guest Lecture May 29 – Liz Losh

- *Connected*, Chapter 9
- Choose one:
 - Fowler, James H., and Nicholas A. Christakis. "Cooperative behavior cascades in human social networks." *Proceedings of the National Academy of Sciences* 107.12 (2010): 5334-5338.
 - G. Palla, A. L. Barabasi, and T. Vicsek, "Quantifying Social Group Evolution," *Nature* 446 (2007): 664–667.
 - R. Dunbar, "Coevolution of Neocortex Size, Group Size, and Language in Humans," *Behavioral and Brain Sciences* 16 (1993): 681–735.

Week 10 (June 3, 5) **Final Project Presentations**

June 9 **Final Project Paper Due by 3pm**

The Fine Print

1. ATTENDANCE

On-time attendance in lecture and section is required. Please notify your TA if you must be absent for illness or family emergency. Excessive absence (more than three class sessions, either lectures or sections) may be grounds for failing the course. Excessive tardiness will also impact your grade and may be grounds for failure.

2. CLASS PARTICIPATION

Contributions to class discussions and active participation in small group work are essential to both the momentum of the course and the development of your ideas. This requires that you come to class prepared (having completed assigned reading and writing) and ready to participate in class activities. Because CAT 3 is based on collaborative, project-based learning, you are also expected to contribute as a responsible member of a group. See the participation evaluation rubric below for more information.

3. ASSIGNMENT SUBMISSION

A. Due Dates

An assignment may receive an F if a student does not participate in **every** phase of the development of the project and **meet all deadlines** for preliminary materials (proposals, drafts, etc). Failure to submit **any** of the graded course assignments is grounds for failure in the course. If a final draft, plus required addenda, is not submitted **in class on the date due**, it will be considered late and will lose one letter grade for each day or part of a day past due (A to B, etc.).

Assignments are due in hard copy as well as via turnitin. You must submit your assignments directly to your TA; you will not be able to leave papers for your TA at the Sixth College Offices. Any late submissions must be approved by your TA and/or faculty instructor well in advance of the due date.

B. Turnitin

Final drafts must be submitted to Turnitin via TED **BY MIDNIGHT** on the day it is submitted in class. A grade will not be assigned to an assignment until it is submitted to Turnitin via TED. Failure to submit an assignment to Turnitin via TED is grounds for failure of the assignment.

4. CAT GRADING CRITERIA – PARTICIPATION

Here is a description of the kind of participation in the course that would earn you an A, B, C, etc. Your TA may use pluses and minuses to reflect your participation more fairly, but this is a general description for each letter grade.

A – Excellent

Excellent participation is marked by near-perfect attendance and rigorous preparation for discussion in lecture and section. You respond to questions and activities with enthusiasm and insight and you listen and respond thoughtfully to your peers. You submit rough drafts on time, and these drafts demonstrate a thorough engagement with the assignment. You respond creatively to the feedback you receive (from both your peers and TA) on drafts, making significant changes to your writing between the first and final drafts that demonstrate ownership of your own writing process. Finally, you are an active contributor to the peer-review and collaborative writing processes.

B – Good

Good participation is marked by near-perfect attendance and thorough preparation for discussion in lecture and section. You respond to questions with specificity and make active contributions to creating a safe space for the exchange of ideas. You submit rough drafts on time, and these drafts demonstrate thorough engagement with the assignment. You respond effectively to the feedback you receive (from both your peers and TA) on drafts, making changes to your writing between the first and final drafts. You are a regular and reliable contributor to the peer-review and collaborative writing processes.

C – Satisfactory

Satisfactory participation is marked by regular attendance and preparation for discussion in lecture and section. You respond to questions when prompted and participate in classroom activities, though you may sometimes be distracted. You are present in lecture and section, with few absences, and have done some of the reading some of the time. You submit rough drafts on time and make some efforts toward revision between the first and final drafts of an assignment. You are involved in peer-review activities, but you offer minimal feedback and you may not always contribute fully to the collaborative writing process.

D – Unsatisfactory

Unsatisfactory participation is marked by multiple absences from section and a consistent lack of preparation. You may regularly be distracted by materials/technology not directly related to class. You submit late or incomplete drafts and revise minimally or only at a surface level between drafts. You are absent for peer-review activities, offer unproductive feedback, or do not work cooperatively in collaborative environments.

F—Failing

Failing participation is marked by excessive absences, a habitual lack of preparation, and failure to engage in the drafting, revision, and collaborative writing processes.

5. ACADEMIC INTEGRITY

UCSD has a university-wide Policy on Integrity of Scholarship, published annually in the General Catalog, and online at <http://students.ucsd.edu/academics/academic-integrity/policy.html>. All students must read and be familiar with this Policy. All suspected violations of academic integrity will be reported to UCSD's Academic Integrity Coordinator. Students found to have violated UCSD's

standards for academic integrity may receive both administrative and academic sanctions. Administrative sanctions may extend up to and include suspension or dismissal, and academic sanctions may include failure of the assignment or failure of the course. Specific examples of prohibited violations of academic integrity include, but are not limited to, the following:

Academic stealing refers to the theft of exams or exam answers, of papers or take-home exams composed by others, and of research notes, computer files, or data collected by others.

Academic cheating, collusion, and fraud refer to having others do your schoolwork or allowing them to present your work as their own; using unauthorized materials during exams; inventing data or bibliography to support a paper, project, or exam; purchasing tests, answers, or papers from any source whatsoever; submitting (nearly) identical papers to two classes.

Misrepresenting personal or family emergencies or health problems in order to extend deadlines and alter due dates or requirements is another form of academic fraud. Claiming you have been ill when you were not, claiming that a family member has been ill or has died when that is untrue are some examples of unacceptable ways of trying to gain more time than your fellow students have been allowed in which to complete assigned work.

Plagiarism refers to the use of another's work without full acknowledgment, whether by suppressing the reference, neglecting to identify direct quotations, paraphrasing closely or at length without citing sources, spuriously identifying quotations or data, or cutting and pasting the work of several (usually unidentified) authors into a single undifferentiated whole.

Receipt of this syllabus constitutes an acknowledgment that you are responsible for understanding and acting in accordance with UCSD guidelines on academic integrity.

6. UCSD's PRINCIPLES OF COMMUNITY

The CAT program affirms UCSD's Principles of Community, and expects all students to understand and uphold these principles, both in their daily interactions and in their spoken, written and creative work produced for CAT classes:

The University of California, San Diego is dedicated to learning, teaching, and serving society through education, research, and public service. Our international reputation for excellence is due in large part to the cooperative and entrepreneurial nature of the UCSD community. UCSD faculty, staff, and students are encouraged to be creative and are rewarded for individual as well as collaborative achievements.

To foster the best possible working and learning environment, UCSD strives to maintain a climate of fairness, cooperation, and professionalism. These principles of community are vital to the success of the University and the well being of its constituents. UCSD faculty, staff, and students are expected to practice these basic principles as individuals and in groups.

- We value each member of the UCSD community for his or her individual and unique talents, and applaud all efforts to enhance the quality of campus life. We recognize that each individual's effort is vital to achieving the goals of the University.
- We affirm each individual's right to dignity and strive to maintain a climate of justice marked by mutual respect for each other.
- We value the cultural diversity of UCSD because it enriches our lives and the University. We celebrate this diversity and support respect for all cultures, by both individuals and the University as a whole.
- We are a university that adapts responsibly to cultural differences among the faculty, staff, students, and community.
- We acknowledge that our society carries historical and divisive biases based on race, ethnicity, sex, gender identity, age, disability, sexual orientation, religion, and political beliefs. Therefore, we seek to foster understanding and tolerance among individuals and groups, and we promote awareness through education and constructive strategies for resolving conflict.
- We reject acts of discrimination based on race, ethnicity, sex, gender identity, age, disability, sexual orientation, religion, and political beliefs, and, we will confront and appropriately respond to such acts.
- We affirm the right to freedom of expression at UCSD. We promote open expression of our individuality and our diversity within the bounds of courtesy, sensitivity, confidentiality, and respect.
- We are committed to the highest standards of civility and decency toward all. We are committed to promoting and supporting a community where all people can work and learn together in an atmosphere free of abusive or demeaning treatment.
- We are committed to the enforcement of policies that promote the fulfillment of these principles.
- We represent diverse races, creeds, cultures, and social affiliations coming together for the good of the University and those communities we serve. By working together as members of the UCSD community, we can enhance the excellence of our institution.

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