

COMM 4665: Human Communication in Social Networks

Wednesday and Friday 2:20 - 3:40
Denney Hall 214

Instructor: Robert Bond, Derby Hall 3072, bond.136@osu.edu

Office Hours: Wednesday 10-12 and by appointment.

Top Hat Course URL: <https://app.tophat.com/e/391393>

Top Hat Course Code: 391393

SMS Response Number: +1 (315) 636-0905}

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 Goals

Upon completion of this course, students will:

1. Understand how and why social networks are a critical component of social and behavioral science;
2. Gain familiarity with social science research pertaining to social networks in a variety of application areas (communication, health, economics, politics, etc.) and be able to relate the work in the various areas to each other;
3. Gain familiarity with social network terminology and theories of connectivity and interaction;
4. Be able to relate their own research questions and ideas, both formally and informally, to peers, and to provide constructive feedback to one another.

Course Materials

- **Textbook:** 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.

This book is available on Amazon and there is also a Kindle version.

- All scientific articles assigned are available via Carmen.
- **Students will need to create a free Top Hat account.** Top Hat is a mobile audience response system has been adopted campus-wide at OSU. Starting in Fall 2015, it is free to use for students. We will use it throughout the course for both reading quizzes and class participation. You can access the system via the URL on the front page of the syllabus or use an app on your iOS or Android device. At minimum, you will need a phone capable of sending SMS text messages, but to take advantage of the full functionality of the system (particularly for class participation), I strongly encourage those who do not have a laptop or tablet they can bring to class to purchase one. An inexpensive Android tablet can be found online for \$50 or less. A limited number of iPads are available for checkout for free at the library.

Requirements

1. *Daily Reading Quiz and Participation (15%)*

Students are required to complete the required readings for each day prior to the start of class. In the beginning of each lecture, students will use Top Hat to complete a short multiple-choice quiz testing basic comprehension and recall of major facts from the readings assigned for that day. There will be no trick questions, although students who do not do the readings carefully (e.g., just skim them) will not do well. Quizzes missed due to absences cannot be made up, but **the lowest four quiz scores will be dropped** prior to the calculation of the final grades. At times, I will use Top Hat to poll the class or ask questions related to the lecture that are for participation credit only. Combined, the reading quizzes and participation opportunities will comprise **15% of your course 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 in class on September 7**. 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?

3. *Topic and annotated bibliography (5%)*

You must choose a topic for your first paper and write annotations of five scientific articles related to your topic (four to six sentences per article entry) and bring this to class on September 19. At least three of these must be from sources outside the syllabus. Your annotations should answer questions such as these: (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? **5% of your course grade.**

4. *First paper draft*

A draft of your first paper is due in class on September 26. **BRING 2 HARD COPIES:** One for peer review and one to turn in. Your partner will evaluate the draft for (a) clarity, (b)

structure, and (c) fulfilling the goals of the assignment (see below).

5. *First paper (20%)*

A 1500 to 2000 word synthetic literature review is due on October 3. Please submit via CARMEN. 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 the second paper! **20% of your course grade.**

6. *Second paper (20%)*

A 3000 to 4000 word research design is due on November 28. You and at least two (but no more than 5 total) other students of your choosing must work together to compose a research design that addresses a component of social network analysis of your choosing. 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 a research design to better understand some aspect of networks, and (c) your ability to critically reflect on how your research project would address previous research that you cite.

7. *Midterm and Final exams (20% each)*

This course will employ a midterm and a final exam. These exams will be designed to evaluate your comprehension and ability to apply the information presented in the course, and will include both objective and subjective components. If the times/dates for the exams conflict with religious holiday, bring this to my attention by the end of the first week of class so we can negotiate potential alternative arrangements. Having more than one exam on the same day or plans to miss class to travel for a holiday does not constitute a reason to miss an exam in this course.

My grading system is largely a percentage based system where 90%+ = A, 80% - 90%+ = B, 70% - 80%+ = C, 60% - 70%+ = D, less than 60% = E, and any + or - determinations are based on proximity of your grade to the cutoffs. I reserve the right to modify this system *downward* depending on the distribution of grades. In other words, if only one student exceeds the 90% threshold, but five hit 89%, I may choose to move the cutoff for an A- to 89%.

Schedule of Lectures and Readings

Introduction to Social Networks (August 22 & August 24)

- August 30
 - *Connected*, Chapter 1

Social Network ideas and terminology (August 29, 31 & September 5)

- August 29
 - Hanneman, Chapters 1-3
- August 31 – NO CLASS
- September 5
 - Hanneman, Chapters 4-5

Emotional Contagion (September 7, 12 & 14)

- September 7
 - *Connected*, Chapter 2
 - **5 questions and 3 hypotheses for each question due**
- September 12
 - 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.
- September 14
 - Coviello, Lorenzo, et al. “Detecting Emotional Contagion in Massive Social Networks.” *PloS one* 9.3 (2014): e90315.

Love and Sex (September 19 & 21)

- September 19
 - *Connected*, Chapter 3
 - **Annotated bibliography due in class**
- September 21
 - P. S. Bearman, J. Moody, and K. Stovel, “Chains of Affection,” *American Journal of Sociology* 110 (2004): 4491.
 - D. T. Gilbert, and others, “The Surprising Power of Neighborly Advice,” *Science* 323 (2009): 1617-1619.

The Spread of Health Behaviors (September 26 & 28)

- September 26
 - *Connected*, Chapter 4
 - **Paper 1 draft due in class – bring 2 copies**
- September 28
 - Centola, D. “The Spread of Behavior in an Online Social Network Experiment”, *Science*, 329, 1194-1197.

Economic Networks (October 3, 5 & 10)

- October 3
 - *Connected*, Chapter 5
 - **PAPER 1 DUE**
- October 5

- 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): 447504, 447-465.
- October 10
 - J. Henrich, “Does Culture Matter in Economic Behavior? Ultimatum Game Bargaining Among the Machiguenga,” *American Economic Review* 90 (2000): 973979.
 - D. Cesarini and others, “Heritability of Cooperative Behavior in the Trust Game,” *Proceedings of the National Academy of Sciences* 105 (2008): 37213726.

MIDTERM EXAM (October 12)

Political Networks (October 17, 19 & 24)

- October 17
 - *Connected*, Chapter 6
- October 19
 - J. H. Fowler, “Connecting the Congress: A Study of Cosponsorship Networks,” *Political Analysis* 14 (2006): 456487.
 - 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): 3643.
- October 24
 - J. Kelly and B. Etling, “Mapping Iran’s Online Public: Politics and Culture in the Persian Blogosphere,” *Berkman Center Research Publication* 2008-01 (2008): 136.

The Evolutionary Basis of Social Life (October 26 & 31, November 2 & 7)

- October 26
 - *Connected*, Chapter 7
- October 31
 - J.H. Fowler, C.T. Dawes, and N.A. Christakis, “Model of Genetic Variation in Human Social Networks,” *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): 426429.
- November 2 – NO CLASS
- November 7
 - R. Dunbar, “Coevolution of Neocortex Size, Group Size, and Language in Humans,” *Behavioral and Brain Sciences* 16 (1993): 681735.

Social Media (November 9, 14 & 16)

- November 9
 - *Connected*, Chapter 8
- November 14
 - Garcia-Harranz, M., et al. “Using Friends as Sensors to Detect Global-Scale Contagious

Outbreaks”, *PLOS one* 9 (4): e92413.

- November 16
 - Kramer, A. D. I., et al. “Experimental evidence of massive-scale emotional contagion through social networks”, *Proceedings of the National Academy of Sciences* 111 (24, 8788-8790.

The Human Superorganism (November 28, 30, & December 5)

- November 28
 - *Connected*, Chapter 9
 - **PAPER 2 DUE**
- November 30
 - 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): 664667.
- December 5
 - Wrap-up and review

FINAL EXAM (December 12 @ 12:00 - 1:45)

Course Policies and Miscellaneous

Late or Absent Assignments and Missed Exams

Unless otherwise notified, assignments are due by the beginning of class on the date due. An assignment will not be accepted more than 24 hours after the due date. The only exceptions to these rules are totally unforeseen circumstances that are convincingly documented no later than 24 hours after the due date. If you are late turning in an assignment, you delay progress in the course for myself and others.

Grade Appeals

You have one week from when the grades or assignments are posted on Carmen or returned in class (whichever occurs first) to appeal the grade. You must submit a typed, double-spaced statement to the instructor explaining why you are appealing your grade and justify it with evidence from your paper, exam, readings, lectures, and/or answer keys. If you choose to appeal your grade, I reserve the right to decrease the original grade if a grading mistake or oversight resulted in it being erroneously high.

Attendance

There is no formal attendance policy for this course. However, you should always attend class. If I believe attendance is slipping, I reserve the right to create an attendance policy. Not attending class

will make learning the course material difficult. Some of the material that you will be responsible for will only be presented during lecture.

Academic Misconduct

The term “academic misconduct” includes all forms of student academic misconduct wherever committed; illustrated by, but not limited to, cases of plagiarism and dishonest practices in connection with examinations. I will report all violations to the Committee of Academic Misconduct. Unless otherwise notified, you should complete all assignments by yourself. See the Student Code of conduct for more information. <http://studentaffairs.osu.edu/csc/>.

Tentative Nature of the Syllabus

This syllabus represents a contract in the works. Events that transpire over the semester may require me to modify the administration of this course and therefore the syllabus. In the event I need to modify the syllabus, I will announce the modification in class and on CARMEN. Ultimately, it is your responsibility to keep up with any such modifications.

School of Communication Diversity Statement

The School of Communication at The Ohio State University embraces and maintains an environment that respects diverse traditions, heritages, experiences, and people. Our commitment to diversity moves beyond mere tolerance to recognizing, understanding, and welcoming the contributions of diverse groups and the value group members possess as individuals. In our School, the faculty, students, and staff are dedicated to building a tradition of diversity with principles of equal opportunity, personal respect, and the intellectual interests of those who comprise diverse cultures.

Students with Disabilities or Special Needs

Students with disabilities that have been certified by the Office for Disability Services (ODS) will be appropriately accommodated. Students who need accommodations are responsible for coordinating all accommodations and services through the Office for Disability Services at 614-292-3307 TDD 292-0901; <http://www.ods.ohio-state.edu/>) in room 150 Pomerene Hall. Students are also responsible for making their needs known to the instructor by providing a written letter from ODS specifying the accommodations or services for which they have been approved as soon as possible after it has been approved by ODS.

Unpaid Fees

Faculty rules specify that students are to have their fees paid by the first day of enrollment for the quarter. [Faculty Rule 3335-9-12]. If you have not paid your fees, you will not be allowed to continue attending class until: 1. your fees are paid, OR 2. You have met with a Communication Advisor and Financial Aid and are working to get your fees paid.

Copyright and Appropriate Use of Course Materials

Professor Robert Bond owns the copyright to the syllabus, exams, handouts, study aides, in-class lectures and other materials distributed or demonstrated in this course. They are provided solely for the educational use of students enrolled in this course. You are not permitted to copy or redistribute them for purposes unapproved by the instructor; in particular you are not permitted to publicly post or otherwise redistribute course materials or your lecture notes. Unauthorized use of course materials may be considered academic misconduct and a violation of copyright law.

A few FAQ about Top Hat

1. *I have a personal/medical emergency or must miss class for other legitimate reasons. How can I make up the points I lose?*

I do not make distinctions between excused and unexcused absences, because doing so would put me in the uncomfortable position of having to decide what constituted a sufficient reason to make an absence an excused one. To accommodate all of our students diverse experiences, challenges, and needs without drawing arbitrary lines, I simply allow every student to miss up to four classes without penalizing their quiz grade, regardless of the reason for the absence(s).

2. *What if I have to miss more than four classes?*

If you expect to miss more than four classes, I strongly encourage you not take this class. Although it will still be possible to pass the course, you will likely miss a great deal of material and will probably not get the grade you want. If unexpected circumstances result in you missing many classes during the course of the semester, your best course of action is to withdraw prior to the deadline. If you must withdraw after the deadline due to an emergency, I am happy to write a letter of support to get your withdrawal processed retroactively. Please see an academic advisor to learn about your options.

3. *How can I review the quiz questions I missed?*

The grade book on Top Hat will indicate which questions you answered correctly and which you got wrong. It will also show you the first few words of each question. If you would like to see the full question and/or the correct answer, please come see me at office hours. (This option is available only to students who attended class on the day the quiz was given.) Also, feel free to write down/take a screen shot of each question for study purposes, although remember that the questions will also be available to you for review prior to the exam using the Top Hat tournament.

4. *I am having problems connecting to the OSU wi-fi during class. How can I complete the reading quiz and participation questions if I can't connect to the internet?*

Make sure that you have registered your cell phone number on your Top Hat student account and have your phone with you in class. This will allow you to submit answers via SMS text message if you run into internet problems. Another option is to connect to Top Hat using your mobile internet, if you have a data plan.

If the internet connection is lost unexpectedly during a Top Hat session and you are using the Top Hat app on your phone or mobile device, the app will give you the option of saving your answers in "Offline Mode." You will need to record the four-digit question code and your responses will be automatically uploaded to Top Hat when the internet connection is re-established. You can find more information about Offline Mode here: <https://support.tophatmonocle.com/hc/en-us/articles/200200514-Offline-Submission-Mode-Video-Tutorial>. Note that Offline Mode is available only to students who are logged in while the question is active, and the app records an internal timestamp to verify that this is indeed the case. You cannot use this feature to submit answers late if you were not logged in when the questions are available.

*****Please be sure that you understand all of these options and know what to do if you run into problems using Top Hat. You will be responsible for making***

sure your answers are submitted and recorded correctly. Please contact Top Hat directly at support@tophat.com if you run into problems with anything.**

5. *I My internet connection is fine, but for some reason Top Hat will not let me submit my response.*

If you encounter an error message saying “Submission Failed, Please Retry” or see that the submission button is disabled (but there is still time available to submit an answer), click the answer you are trying to submit and take a screenshot of the question. Send the screenshot to support@tophat.com. Be sure to CC me on your e-mail.

If the question won't load on your device, submit your response via SMS text message.

6. *I've submitted my response via SMS text message, but Top Hat responded with an error message saying the question code is incorrect. I verified the question code I'm using and it is indeed correct.*

Carefully check the question code again. If it is correct, your response was likely recorded successfully, despite the error message. You can check in the Top Hat grade book to verify that this was the case. If the response was not recorded, take a screenshot of your text message (including timestamp and error message) and e-mail it to Top Hat technical support at the e-mail listed above. Again, CC me on the e-mail.