

MEJO 890: Network Theories and Methods



School of Media and Journalism | University of North Carolina at Chapel Hill Fall 2017 | Fridays at 9:05–11:55 a.m. in CA 338

Schedule | Assignments | Final Paper & Presentation

Instructor: Adam Saffer, Ph.D. Phone: 919-962-3372

Office hours: W 10 a.m.-12 p.m. | F 12:30-2:30 p.m.* Email: adam.saffer@unc.edu

Office: 378 Carroll Skype: Adam.Saffer

Course Overview

This course will review theoretical, conceptual, and analytical elements of network research. You will read and discuss the literature on network theories and learn the foundations of social network analysis using UCINET and NodeXL (and r when applicable). This course is designed to expose you to the numerous theories and methods of network research. Based on your research interests, you will identify additional readings to design and/or complete a network research study. We will walk through the steps of selecting a suitable network theory or conceptual framework, an applicable source for network data, and an appropriate network analytic method for studying a communication or media phenomenon of interest to you.

Course Objectives

- → Gain an understanding of academic research using network theories and methods;
- → Become familiar with the philosophies of social network science and various processes of network inquiry;
- → Explore the theoretical and analytical uses of a network perspective in communication or media research;
- → Use the basic principles of social network methods of design, measurement, reasoning, and analysis;
- → Recognize the limitations in various methodologies and in specific research studies;
- → Discuss ethical considerations of the research process;
- → Demonstrate the ability to organize, execute, and evaluate a social network analysis research study.

Readings & Software

Required Readings:

Borgatti, S. P., Everett, M. G., & Johnson, J. C. (2013). Analyzing social networks. London: Sage.

* Available on Amazon on \$21.14 | ISBN: 1446247414

Kadushin, C. (2012). Understanding social networks: Theories, concepts, and findings. Oxford: Oxford UP.

* Available on <u>Amazon for \$19.96</u> | ISBN: 0195379470

Suggested Readings:

American Psychological Association. (2009). Publication manual of the American Psychological Association (6th ed.).

Washington DC: American Psychological Association.

- *Available on Amazon on \$28.42 | ISBN: 978-1433805615
- **You can also use <u>Purdue OWL website</u> as a resource in a pinch but it is not complete.

Provided Software:

Smith, M., Ceni A., Milic-Frayling, N., Shneiderman, B., Mendes Rodrigues, E., Leskovec, J., Dunne, C., (2010).

NodeXL: a free and open network overview, discovery and exploration add-in for Excel

2007/2010/2013/2016, http://nodexl.codeplex.com/ from the Social Media Research Foundation,

http://www.smrfoundation.org * Student version \$29/year at http://www.smrfoundation.org/license/

Borgatti, S.P., Everett, M.G. & Freeman, L.C. 2002. Ucinet for Windows: Software for Social Network Analysis. Harvard, MA: Analytic Technologies. * Student version \$40 at this website.

Accessing readings and other scholarly articles: Some of the required readings will be available on Sakai under "Resources" but I have also tried to link to the articles when possible in the schedule below. You must be on campus (or have a VPN connection) to access those articles. These links will send you to sources via the university library system.

→ Google Scholar via UNC library system

→ <u>Academic Search Premier</u>

Participation

One goal of graduate courses is to promote peer discussion. I have assembled a selection of readings to serve as the springboard for our weekly discussions. Please keep up with the readings and be prepared for a critical discussion. I will take notes of your participation. This includes actively engaging and asking thoughtful questions.

Grades

The graduate scale (H, P, L, F) is in effect for all assignments for this course. Yes, it's a bit ambiguous, so I have given you a *general* idea of how the assignments are distributed with the "points" listed below. Here are my criteria:

- **H** (100–95) = Your very best work. You have read and critically engaged with all materials. Your class participation and written assignments demonstrate the ability to apply the materials, extrapolate ideas, expand the material into new areas of thought, and contribute to the body of scholarship in the area. Your research study is rigorous and would be a manuscript I'd say is ready for acceptance with minor revisions. *Reserved for truly extraordinary work I will actually say "wow!"*
- **P** (94.99–80) = You give commendable effort and present acceptable work. You read and critically engage with all materials. You are able to apply the material and to extrapolate ideas in many instances. Your assignments are submitted on time. Your research paper would receive a revise-and-resubmit decision.
- L (79.99–60) = You read some of the material but do not often critically engage with it. You are able to apply the material and extrapolate ideas in some instances. Your research paper is rejectable.
- \mathbf{F} (59.99–0) = You miss two or more classes without prior arrangement, do not always read the material, and fail to critically engage with it.

Basic Ground Rules

Please see my list of ground rules of graduate level classes here. You're welcome to offer changes or additions.

Academic Integrity

Please to adhere to the UNC Honor Code. You can read the Honor Code here: http://honor.unc.edu/.

Accommodations

If you require accommodations to attend or participate in this course, please let me know ASAP. If you need information about disabilities, visit the Accessibility Services website at https://accessibility.unc.edu/

Diversity

The University of North Carolina at Chapel Hill is committed to equality of educational opportunity. The University does not discriminate in offering access to its educational programs and activities on the basis of age, gender, race, color, national origin, religion, creed, disability, veteran's status, sexual orientation, gender identity, or gender expression. The Dean of Students handles inquiries about the University's nondiscrimination policies.

ACEJMC Competencies

The Accrediting Council on Education in Journalism and Mass Communications (ACEJMC) requires that, irrespective of their particular specialization, all graduates should be aware of certain core values and competencies. The full list of competencies is available here. This course is particularly relevant to the following competencies:

- Understand concepts and apply theories in the use and presentation of images and information;
- Apply basic numerical and statistical concepts;
- Apply tools and technologies appropriate for the communications professions in which they work.
- Think critically, creatively and independently;
- Conduct research and evaluate information by methods appropriate to the communications professions in which they work.

MEJO 890 ASSIGNMENTS¹

Grades	%	Points
Engaged classroom participation	10%	100
Discussion questions	10%	100
Discussion coordinator	10%	100
Labs	20%	200
Paper and presentation	50%	500
Total	100%	1,000

- 1. <u>Engaged classroom participation (10% of overall grade, 100 points)</u>: This is a graduate-level course, which means everybody must contribute to classroom discussions. Please keep up with the readings for each class, prepare questions (see next assignment) you would like to ask, challenge, or disagree with, whatever.
- 2. Discussion questions (10% of overall grade, 100 points): Prior to class, you must draft three questions from the readings. Your questions must be written to start a discussion in class. Therefore, you should give context to your questions and explain what prompted your questions. Your questions might stem from what the researchers investigated and found, and how that contrasts to what other articles found. Your questions should be broad, not narrowly asking why they studied a specific element. In essence, I (or one of your peers) should not be able to point you to the answer within the readings. You need to consider the broader implications of the research. While, there are no dumb questions, your questions will be assessed for thoughtfulness and articulateness.

Your questions must be posted to Sakai in the appropriate discussion forum 24 hours before class begins (that is, 9 a.m. on the Thursday before class). No late questions will be accepted. The discussion coordinator (see next assignment) will use these questions in class.

- 3. <u>Discussion coordinator (10% of overall grade, 100 points):</u> You will serve as the discussion coordinator once during the semester. As the discussion coordinator, you are not lecturing to the class, you are charged with priming the class for discussion. While some of you may want to make presentation slides, please know that this should <u>not</u> be a lecture. If you make slides, please use Google Slides or PowerPoint (no Prezi).
 - To be an effective discussion leader, you should begin by offering a summary of the readings and posing an initial discussion question to the class. You do not need to cover every chapter, article or research brief. You may use the questions your peers posted on Sakai. Others in the class are expected to contribute just as much as the discussion leader. I may chime in to offer my expertise when necessary. My comments will be offered to help clarify or expand the discussion, not critique you. Ideally your summary will take 10 minutes and our discussions will last half a class period.
- 4. Labs (20% of overall grade, 200 points): There are five (40 points each) labs during the semester. I have designed these labs for you to become familiar with network analysis software packages (UCINET and NodeXL). You will learn to import data, transform data, pair relational data with attribute data, and calculate some of the most commonly used network measures. I will provide the network data set to you in class and make the files available on Sakai. We will begin the labs in class but you may need to finish the lab after class and submit it on Sakai. I will provide detailed instructions and supplemental materials for each lab.

MEJO 890- Fall 2017 - p. 3

¹ This is a preview of the assignments. Detailed instructions will be provided on Sakai under the "Assignments" tab.

- 5. Paper and Presentation (50% of overall grade, 500 points): This is a five-part (not including final paper and presentation) assignment. The points for each potion below total 500 (or 50% of your overall grade). This assignment is broken into segments to help you prepare a conference paper by the end of the semester.
 - a. Research Paper Ideas (2.5% of overall grade, 25 points): You will pitch three of your best *network* research paper ideas. You need to provide a clear and concise problem statement, how you will address that problem with your research, why it is important to the literature, scholars and/or practitioners, and how this furthers your research agenda. You should also have some idea of how/where you will get the data for each idea. Your research ideas should be approximately 300 words total (all three ideas). Here is a framework to guide you (please note you're basically doing the problem statement).
 - b. Intro + Literature Review (7.5% of overall grade, 75 points): You need to submit a revised version of your research idea and add five pages of a literature review. To be clear, this should include an introduction and literature review. Neither needs to be perfect but there should be a clear problem statement and rationale in the introduction. The literature review should have a coherent structure and the outline of a theoretical framework. You should critically assess at least ten sources that will help you develop your final paper. These sources should be academic in nature books, academic journals. More details will be provided.

Below are a few sources to help guide you in this endeavor but note that you are not doing a annotated bibliography. An annotated bibliography is useful when you are writing a literature review.

- 1. UCSC Library How to write an annotated bibliography: http://library.ucsc.edu/ref/howto/annotated.html
- 2. Online Writing Lab (OWL) Annotated bibliographies http://owl.english.purdue.edu/owl/resource/614/01/
- c. **RQs/Hypotheses (5% of overall grade, 50 points):** Research questions or hypotheses. How will you apply the theory/theories you've explored in your paper? Or, what do you predict, based on prior research, will happen with network variables? You should have clearly identifiable variables (independent & dependent).
- d. <u>Methods (5% of overall grade, 50 points):</u> You need to write a complete methods section. This should include a description of the participants or sample, as well as any sampling strategy that will be used. Please also include the variables and measures, and the analysis plan that will be used. More details will be provided.
- e. <u>Results (5% of overall grade, 50 points):</u> For student completing a research paper (second year Ph.D. students), you need to write-up the results. That is, you should address your research questions or answer your hypotheses. Please follow APA style for reporting results. More details will be provided.
- f. Final Paper (20% of overall grade, 200 points) This is your masterpiece (...that is in progress because research in a continuous state of progress)! Your final paper should be a culmination of your entire semester's work, incorporate the comments I made about each of the above components, and have a discussion and conclusion section. To be clear, the final paper must be a much improved version of the assignments from throughout the semester. The final paper you submit should be of such quality that it would be accepted to an academic conference. The writing must follow APA style (formatting, in-text citations, headings, results, etc), have very few grammatical errors, and absolutely no misspellings. If you wrote a proposal, your final paper will be 25% of your overall grade and out of 200 points. More details will be provided.
- g. <u>Presentation of Final Paper (5% of overall grade, 50 points)</u>: This assignment is designed to give you practice presenting in a conference-style format and to receive feedback on your work. More details will be provided.

MEJO 890 Week-by-Week Schedule*

Week	ME JO 890 W eek-by-w eek Schedule* eek Topic, Readings, Labs, and Assignment Due Dates		
	- Topic, Readings, Labs, and Assignment Due Dates		
Date	Notes: When pages are highlight, please note that you are to read only those pages, not the entire chapter.		
l	Topic/Agenda: Meet and greet, discuss course goals, go over syllabus, discuss research interests, etc.		
/25	Required Readings:		
	Borgatti, S. P., Mehra, A., Brass, D. J., & Labianca, G. (2009). Network analysis in the social sciences. Science,		
	323(5916), 892-895. <u>Link to Article at Dook</u>		
	Carrington, P. J. & Scott, J. (2011). Introduction. In J. Scott, J., & P. J. Carrington (Eds.), <i>The SAGE handbook of social network analysis</i> (pp. 1–8). Thousand Oaks, CA: Sage. <u>Link to Dropbox</u>		
	network analysis (pp. 1-8). Thousand Oaks, CA: Sage. Link to Dropbox		
	Topic: Network Theories I: Foundations for Communication/Media Research [Heavy Reading Load]		
/1	Required Readings:		
	Borgatti, S. P., & Martínez-López, B. (2011). Network theory. In J. Scott, J., & P. J. Carrington (Eds.), <i>The SAGE</i>		
	handbook of social network analysis (pp. 40–54). Thousand Oaks, CA: Sage. Link to Dropbox		
	Erikson, E., & Occhiuto, N. (2017). Social Networks and Macrosocial Change. Annual Review of Sociology, 43, 229-248		
	Link to UNC Library Access		
	Fu, J. S. (2016). Leveraging Social Network Analysis for Research on Journalism in the Information Age. <i>Journal Of Communication</i> , 66(2), 299–313. doi:10.1111/jcom.12212 Link to UNC Library Access		
	Liu, W., Sidhu, A., Beacom, A. M., & Valente, T. W. (2017). Social network theory. In R.Patrick (Ed.). <i>The</i>		
	International Encyclopedia of Media Effects (pp. 1–12). Hoboken, NJ: Wiley-Blackwell. Link to ResearchGate		
	Pick 1 of the Following:		
	Ognyanova, K. & Monge, P. A. (2013). A multitheoretical, multilevel, multidimensional network model of the media		
	system: Production, content, and audiences. In E. Cohen (Ed.), Communication Yearbook (pp. 67-93), 37(1). Link		
	to ResearchGate		
	Shumate, M., Pilny, A., Catouba, Y., Kim, J., Pena-y-Lillo, M., Rcooper, K., & Yang, S. (2013). A taxonomy of		
	communication networks. Annals of the International Communication Association, 37(1), 95–123. Link to		
	ResearchGate		
	Wellman, B. (1988). Structural analysis: From method and metaphor to theory and substance. In B. Wellman & S. D. Berkowitz (Eds.), <i>Social structures a network approach</i> (pp. 19–61), Cambridge, Cambridge University Press.		
	Link to Other University's Site		
	Emik to Other Oniversity's orce		
	Application: Theory Checklist		
	Assignments Due:		
	 Discussion Questions (due 24 hours in advance) Research Paper Ideas 		
	 FYI: Here is a framework to guide you (please note you're basically doing the problem statement). 		
	- 1 rece to a traine work to garde you (please note you're basically doing the problem statement).		

71 0

- Marin, A., & Wellman, B. (2011). Social network analysis: An introduction. In J. Scott, J., & P. J. Carrington (Eds.), *The SAGE handbook of social network analysis* (pp. 11–25). Thousand Oaks, CA: Sage. <u>Link to Dropbox</u>
- Monge, P. R., & Contractor, N. (2003). Chapter 2: Network Concepts, Measures, and the Multitheoretical, Multilevel Analytic Framework. In P. R. Monge & N. Contractor, *Theories of communication networks* (pp. 29–48). New York: Oxford University Press. Link to Dropbox
- Borgatti, S. P., Everett, M. G., & Johnson, J. C. (2013). Chapter 1: Introduction. In S. P. Borgatti, M. G. Everett, Johnson, J. C. *Analyzing social networks* (pp. 1–10). London: Sage.
- Borgatti, S. P., Everett, M. G., & Johnson, J. C. (2013). Chapter 2: Mathematical Foundations. In S. P. Borgatti, M. G. Everett, Johnson, J. C. *Analyzing social networks* (pp. 11–23). London: Sage.
- Borgatti, S. P., Everett, M. G., & Johnson, J. C. (2013). Chapter 10: Centrality. In S. P. Borgatti, M. G. Everett, Johnson, J. C. *Analyzing social networks* (pp. 163–180). London: Sage.

Pick 1 of the Following:

Required Readings:

- Su, C. (2012). Who knows who knows what in the group? The effects of communication network centralities, use of digital knowledge repositories, and work remoteness on organizational members' accuracy in expertise recognition. *Communication Research*, 39(5), 614–640. <u>Link to UNC Library</u>
- Freeman, L. (2011). The Development of Social Network Analysis with an Emphasis on Recent Events. In J. Scott, J., & P. J. Carrington (Eds.), *The SAGE handbook of social network analysis* (pp. 26–39). Thousand Oaks, CA: Sage. Link to Dropbox

Lab: UCINET, import data, calculate frequency of relations and calculate centrality measures, and assign attributes. **Lab Supplement:**

- Hanneman, R. A. and Riddle, M. (2005). <u>Chapter 6: Working with network data.</u> In Hanneman, R. A. and Riddle, M., *Introduction to social network methods*. Riverside, CA: University of California, Riverside. Retrieved from http://faculty.ucr.edu/~hanneman/
- Hanneman, R. A. and Riddle, M. (2005). <u>Chapter 7: Connection</u>. In Hanneman, R. A. and Riddle, M., *Introduction to social network methods*. Riverside, CA: University of California, Riverside. Retrieved from http://faculty.ucr.edu/~hanneman/
- Hanneman, R. A. and Riddle, M. (2005). <u>Chapter 10: Centrality & power.</u> In Hanneman, R. A. and Riddle, M., *Introduction to social network methods*. Riverside, CA: University of California, Riverside. Retrieved from http://faculty.ucr.edu/~hanneman/
- Borgatti, S.P. 1994. A quorum of graph theoretic concepts. *Connections 17*(1): 47–49. <u>Link to Google Site</u>
 Marsden, P.V. (1990). Network data and measurement. *Annual Review of Sociology, 16*, 435–463. <u>Link to UNC Library</u>

Assignments Due: Discussion Questions (due 24 hours in advance)

4 -----9/15 **Topic:** Network Theories II: Theories of Self-Interest & Collective Action

Student: Laurie

Special Guest:: Andy Pilny from University of Kentucky Please plan attend his Junck Talk.

Required Readings:

Diani, M. (2011). Social movements & Collective actions. In J. Scott, J., & P. J. Carrington (Eds.), *The SAGE handbook of social network analysis* (pp. 223–235). Thousand Oaks, CA: Sage. <u>Link to Dropbox</u>

Monge, P. R., & Contractor, N. (2003). Chapter 5: Theories of self-interest and collective action. In P. R. Monge & N. Contractor, *Theories of communication networks* (pp. 141–172). New York: Oxford University Press. <u>Link to Dropbox</u>

Pilny, A., & Shumate, M. (2012). Hyperlinks as extensions of offline instrumental collective action. *Information, Communication & Society*, 15(2), 260–286. <u>Link to Article</u>

Pick 1 of the Following:

Sommerfeldt, E. J., & Taylor, M. (2011). A social capital approach to improving public relations' efficacy: Diagnosing internal constraints on external communication. *Public Relations Review*, *37*(3), 197–206.

Sommerfeldt, E. J. (2013a). Networks of social capital: Extending a public relations model of civil society in Peru. *Public Relations Review, 39*(1), 1–12. <u>Link to Article</u>

Shumate, M. (2012). The evolution of the HIV/AIDS NGO hyperlink network. *Journal of Computer-Mediated Communication*, 17(2), 120–134. <u>Link to Article</u>

Assignments Due:

- Discussion Questions (due 24 hours in advance)
- See the assignment due next week.

5 -----9/22 Topic: Network Concepts & Measures II (Density, SH, Transitivity, Subgroups)

Student: Jordan

Required Readings:

Kadushin, C. (2012). Chapter 3: Basic Network Concepts, Part II: Whole Social Networks. In C. Kadushin, Understanding social networks: Theories, concepts, and findings (pp. 27–43). New York: Oxford University Press.

Kadushin, C. (2012). Chapter 4: Basic Network Concepts, Part III: Network Segmentation. In C. Kadushin, Understanding social networks: Theories, concepts, and findings (pp. 44–55). New York: Oxford University Press.

Borgatti, S. P., Everett, M. G., & Johnson, J. C. (2013). Chapter 9: Characterizing Whole Networks. In S. P. Borgatti, M. G. Everett, Johnson, J. C. *Analyzing social networks* (pp. 149–162). London: Sage.

Borgatti, S. P., Everett, M. G., & Johnson, J. C. (2013). Chapter 11: Subgroups. In S. P. Borgatti, M. G. Everett, Johnson, J. C. *Analyzing social networks* (pp. 181–205). London: Sage.

Pick 1 of the Following:

Granovetter, M. (1973). The strength of weak ties. *American Journal of Sociology, 78*(6), 1360-1380. Link to Other University's Site

Southwell, B. G., & Yzer, M. C. (2009). When (and Why) Interpersonal Talk Matters for Campaigns. *Communication Theory*, 19(1), 1–8. <u>Link to Article</u>

Lab: UCINET, import data (again), calculate network density, structural holes, transitivity, and subgroups.

Lab Supplements:

Hanneman, R. A. and Riddle, M. (2005). <u>Chapter 8: Embedding</u> In Hanneman, R. A. and Riddle, M., *Introduction to social network methods*. Riverside, CA: University of California, Riverside. Retrieved from http://faculty.ucr.edu/~hanneman/

Hanneman, R. A. and Riddle, M. (2005). <u>Chapter 11: Cliques</u> In Hanneman, R. A. and Riddle, M., *Introduction to social network methods*. Riverside, CA: University of California, Riverside. Retrieved from http://faculty.ucr.edu/~hanneman/

Assignments Due: Literature Review

6

Topic: Network Theories III: Theories of Semantic Networks, Homophily, & Social Support

9/29

Required Readings:

Monge, P. R., & Contractor, N. (2003). Chapter 6: Contagion, Semantic, and Cognitive Theories. In P. R. Monge & N. Contractor, *Theories of communication networks* (pp. 186–192). New York: Oxford University Press. <u>Link to Dropbox</u>

Kadushin, C. (2012). Chapter 10: Networks as social capital. In C. Kadushin, *Understanding social networks: Theories, concepts, and findings* (pp. 162–181). New York: Oxford University Press.

Pick 2 of the Following:

Himelboim, I., McCreery, S., & Smith, M. (2013). Birds of a feather tweet together: Integrating network and content analyses to examine cross-ideology exposure on Twitter. *Journal of Computer-Mediated Communication*, *18*(2), 40–60. doi: 10.1111/jcc4.12001 Link to Article

Doerfel, M. L., & Barnett, G. A. (1999). A semantic network analysis of the international communication association. *Human Communication Research*, 25(4): 589–603. http://dx.doi.org/10.1111/j.1468-2958.1999.tb00463.x
Link to Article

Saffer, A. J. (2016). A message-focused measurement of the communication dimension of social capital: Revealing shared meaning in a network of relationships. *Journal of Public Relations Research*, 28(3-4), 170–192.

<u>Link to Article</u>

Hyun Kim, J. (2012). A hyperlink and semantic network analysis of the triple helix (university-government-industry): The interorganizational communication Structure of nanotechnology. *Journal of Computer-Mediated Communication*, 17(2), 152–170. <u>Link to Article</u>

Assignments Due:

- Discussion Questions (due 24 hours in advance)
- If necessary, your IRB application should be submitted this week.

7

Topic: Network Research Design, RQs, & Hypotheses

10/6

Required Readings:

Borgatti, S. P., Everett, M. G., & Johnson, J. C. (2013). Chapter 3: Research Design. In S. P. Borgatti, M. G. Everett, Johnson, J. C. *Analyzing social networks* (pp. 24–43). London: Sage.

Borgatti, S. P., Everett, M. G., & Johnson, J. C. (2013). Chapter 4: Data Collection. In S. P. Borgatti, M. G. Everett, Johnson, J. C. *Analyzing social networks* (pp. 44–61). London: Sage.

Borgatti, S. P., Everett, M. G., & Johnson, J. C. (2013). Chapter 8: Testing Hypotheses. In S. P. Borgatti, M. G. Everett, Johnson, J. C. *Analyzing social networks* (pp. 125-148). London: Sage.

Other Readings (not required):

Hanneman, R. A. and Riddle, M. (2005). <u>Chapter 1: Social network data</u>. In Hanneman, R. A. and Riddle, M., *Introduction to social network methods*. Riverside, CA: University of California, Riverside. Retrieved from http://faculty.ucr.edu/~hanneman/

Hanneman, R. A. and Riddle, M. (2005). <u>Chapter 2: Why formal methods.</u> In Hanneman, R. A. and Riddle, M., *Introduction to social network methods*. Riverside, CA: University of California, Riverside. Retrieved from http://faculty.ucr.edu/~hanneman/

**Based on your research paper, I may assign you readings that are more specific to your study. Please see me.

Assignments Due:

- Discussion Questions (due 24 hours in advance)
- Please make sure you download NodeXL.
- See the assignment due next week.

8 -----1 10/13 **Topic:** Network Data: Social Media, Online, & Computational Sources (NodeXL)

Student: Michele

Required Readings:

Barash, V., & Golder, S. (2011). Twitter: Conversation, entertainment, and information all in one network. In D. Hansend, B. Shneiderman, & M. Smith (Eds.), *Analyzing social media network with NodeXL: Insights from a connected world* (pp. 143–164). Burlington, MA: Morgan-Kaufmann. <u>Link to Google Books</u>

Ackland, R. (2011). WWW hyperlink networks. In D. Hansend, B. Shneiderman, & M. Smith (Eds.), *Analyzing social media network with NodeXL: Insights from a connected world* (pp. 181–200). Burlington, MA: Morgan-Kaufmann. Link to Google Books

Pick 2 of the Following:

Golan, G. J., & Himelboim, I. (2016). Can World System Theory predict news flow on twitter? The case of government-sponsored broadcasting. *Information, Communication & Society, 19*(8), 1150–1170. <u>Link to ResearchGate</u>

Himelboim, I., Golan, G. J., Moon, B. B., & Suto, R. J. (2014). A social networks approach to public relations on Twitter: Social mediators and mediated public relations. *Journal of Public Relations Research*, 26(4), 359–379. <u>Link to Article.</u>

Meraz, S. (2011). Using time series analysis to measure intermedia agenda-setting influence in traditional media and political blog networks. *Journalism & Mass Communication Quarterly*, 88(1), 176–194. <u>Link to Article</u>

Himelboim, I., Gleave, E., & Smith, M. (2009). Discussion catalysts in online political discussions: Content importers and conversation starters. *Journal Of Computer-Mediated Communication*, *14*(4), 771–789. doi:10.1111/j.1083-6101.2009.01470.x Link to Article

Lab: NodeXL (crash course), importing social media and online data, calculating standard measures and subgroups. Assignments Due:

- Discussion Questions (due 24 hours in advance)
- Research Questions and Hypotheses
- See the assignment due in two weeks.

9 ------ 10/20

Fall Break

Work on your research project assignments.

10 **Topic:** Network Data: Qualitative Approaches | Ego-Centric Approaches [Heavy Reading Load] Student: Josh 10/27 **Required Readings** (Pick 1 of the approaches, read those readings, and one from the other approach): **Qualitative Approaches** Hollstein, B. (2011). Qualitative Approaches. In J. Scott, J., & P. J. Carrington (Eds.), The SAGE handbook of social network analysis (pp. 404–416). Thousand Oaks, CA: Sage. Link to Dropbox Dubois, E., & Ford, H. (2015). Qualitative political communication trace interviews: An actor-centered approach. International Journal of Communication, 9, 25. Link to Article Pick 1 of the Following: Löblich, M., & Pfaff-Rüdiger, S. (2011). Network analysis: A qualitative approach to empirical studies on communication policy. International Communication Gazette, 73(7), 630-647. Link to Article Borgatti, S.P. and Molina, J.L. (2005). Toward ethical guidelines for network research in organizations. Social *Networks.*,27(2): 107–117. Link to Article Smilde, D. (2005). A qualitative comparative analysis of conversion to Venezuelan evangelicalism: How networks matter. American Journal of Sociology, 111(3), 757-796. Link to Article Gluesing, J., Riopelle, K., & Danowski, J. A. (2010). Innovation networks in global organizations: Understanding network practices and dynamics by mixing ethnography and information technology data. In S. Domínguez & B. Hollstein (Eds.), Mixed methods social networks research: Design and applications (pp. 203–234). New York: Cambridge University Press. Link to Google Book Smith, S. S. (2005). "Don't put my name on it": Social capital activation and job-finding assistant among the black urban poor. *American Journal of Sociology*, 111(1), 1–57. Link to Article

Ego-Centric Approaches

Borgatti, S. P., Everett, M. G., & Johnson, J. C. (2013). Chapter 15: Ego Networks. In S. P. Borgatti, M. G. Everett, Johnson, J. C. *Analyzing social networks* (pp. 262–283). London: Sage.

Perry, B. L., & Pescosolido, B. A. (2010). Functional specificity in discussion networks: the influence of general and problem-specific networks on health outcomes. *Social Networks*, *32*(4), 345–357. <u>Link to Article</u>

Ramanadhan, S., Nagler, R. H., McCloud, R., Kohler, R., & Viswanath, K. (2017). Graphic health warnings as activators of social networks: A field experiment among individuals of low socioeconomic position. *Social Science & Medicine*, 175, 219–227. Link to Article

Wellman, B. (2007). Challenges in collecting personal network data: The nature of personal network analysis. *Field Methods* 19, 111–15. <u>Link to Article</u>

Assignments Due:

- Discussion Questions (due 24 hours in advance)
- Methods

Topic: Network Data: Media Sources & Two-Mode Data

Special Guest (tentative): Matt Weber from Rutgers Please plan to attend his Junk Talk.

Required Readings:

11/3

Kadushin, C. (2012). Chapter 9: Networks, influence, and diffusion: Network Segmentation. In C. Kadushin,
 Understanding social networks: Theories, concepts, and findings (pp. 135–148). New York: Oxford University Press.
 Borgatti, S. P., & Halgin, D. S. (2011). Analyzing Affiliation Networks. In J. Scott, J., & P. J. Carrington (Eds.), The

SAGE handbook of social network analysis (pp. 404-416). Thousand Oaks, CA: Sage. Link to Dropbox

Borgatti, S. P., Everett, M. G., & Johnson, J. C. (2013). Chapter 13: Analyzing Two-Mode Data. In S. P. Borgatti, M. G. Everett, Johnson, J. C. *Analyzing social networks* (pp. 231–248). London: Sage.

Weber, M. S., & Monge, P. (2011). The flow of digital news in a network of sources, authorities, and hubs. *Journal of Communication*, 61(6), 1062-1081. <u>Link to Article</u>

Pick 1 of the Following:

Margolin, D. B., Shen, C., Lee, S., Weber, M. S., Fulk, J., & Monge, P. (2015). Normative influences on network structure in the evolution of the children's rights NGO network, 1977-2004. *Communication Research*, 42(1), 30–59. <u>Link to Article</u>

Lei, G. (2012). The application of social network analysis in agenda setting research: A methodological exploration. *Journal Of Broadcasting & Electronic Media*, 56(4), 616–631. doi:10.1080/08838151.2012.732148

<u>Link to Article</u>

Kiousis, S., & Ragas, M. (2015). Implications of third-level agenda building for public relations and strategic communication. In L. Guo & M. McCombs (Eds.), *The power of information networks: new directions for agenda setting* (pp. 161–174). New York: Routledge. <u>Link to Book Chapter.</u>

Kreiss, D., & Saffer, A. J. (2017). Networks and innovation in the production of communication: Explaining innovations in US electoral campaigning from 2004 to 2012. *Journal of Communication*, *67*(4), 521–544. <u>Link to Journal</u>

Lab: UCINET, import 2-mode data, calculate measures of centrality for 2-mode data, transform to 1-mode. **Lab Supplement:**

Hanneman, R. A. and Riddle, M. (2005). <u>Chapter 17: Two-Mode Data</u> In Hanneman, R. A. and Riddle, M., *Introduction to social network methods*. Riverside, CA: University of California, Riverside. Retrieved from http://faculty.ucr.edu/~hanneman/

Assignments Due: Discussion Questions (due 24 hours in advance)

12 **Topic:** Network Visualization

[Light Reading Load]

-----11/10

Required Readings:

Krempel, L. (2011). Network Visualization. In J. Scott, J., & P. J. Carrington (Eds.), *The SAGE handbook of social network analysis* (pp. 558–577). Thousand Oaks, CA: Sage. <u>Link to Dropbox</u>

Borgatti, S. P., Everett, M. G., & Johnson, J. C. (2013). Chapter 7: Visualization. In S. P. Borgatti, M. G. Everett, Johnson, J. C. *Analyzing social networks* (pp. 100–124). London: Sage.

Lab: Visualizing Data in UCINET or NodeXL.

Lab Supplement:

Hanneman, R. A. and Riddle, M. (2005). <u>Chapter 4: Working with NetDraw to visualize graphs</u>. In Hanneman, R. A. and Riddle, M., *Introduction to social network methods*. Riverside, CA: University of California, Riverside. Retrieved from http://faculty.ucr.edu/~hanneman/

Assignments Due: Discussion Questions (due 24 hours in advance)

13	Topic: Individual Consultations
11/17	We will not meet this day. Instead, you will sign up for a consultation time with me (any day of the week) to perform your data analysis. Ideally, you will do the data analysis on your own but will use the consultation time to have me double check your steps. I'd be happy to help you interpret the results during this time too.
14	Assignments Due: ■ Results. You now need to write-up what you found. That is, you should address your research questions or answer your hypotheses. Please follow APA style for reporting results. ■ Manuscripts for ungraded feedback. HAPPY THANKSGIVING BREAK!
	HAIT I HANKSOIVING BREAK:
11/24	I will make myself available (via Skype) Monday or Tuesday to help with your data analysis.
15	Topic: Individual Consultations
12/1	We will not meet this day. Instead, you will sign up for a consultation time with me (any day of the week) to go over my feedback on your results write-up, interpreting additional results, or last minute manuscript questions. By this point your data should be analyzed so please avoid using this consultation time for data analysis.
16 12/8	Topic: Presentation of Research Papers/Proposals *Please note that because this is technically our final exam period, we may be required to meet at 8 a.m. Of course, I will use my network to avoid an 8 a.m. start time on the last day but we may be at the hands of the more well-connected*
	Required Readings: Kadushin, C. (2012). Coda: Ten master ideas of social networks. In C. Kadushin, <i>Understanding social networks:</i> Theories, concepts, and findings (pp. 201–212). New York: Oxford University Press. Link to Google Books Borgatti, S. P., Mehra, A., Brass, D. J., & Labianca, G. (2009). Network analysis in the social sciences. <i>Science</i> , 323(5916), 892–895. Link to Article at Duke
	 Assignments Due: Discussion Question (due 24 hours in advance) Please note: You should answer the question: What is the future of network research in the social sciences, particularly communication and media research. Final paper due at 5 p.m. but accepted early!
	*The schedule is subject to change. Generally, changes will be made as quickly as possible to give students plenty of time to adjust. All changes will be announced via email.