

**COMM\_ST 295: Social Capital and Networks**  
Spring 2022  
Tue & Thu 2-3:20 pm CT  
Technological Institute LG52

Y. Jasmine Wu  
Pronouns: She/Her/Hers  
[jasminewu@u.northwestern.edu](mailto:jasminewu@u.northwestern.edu)  
Ph.D. Candidate in Media, Technology, and Society  
Frances Searle Building 1-459C  
Office Hours: 11-12 CT on Tuesdays  
Zoom Link: <https://northwestern.zoom.us/my/jasminewu>  
Website: [jasminewu.me](http://jasminewu.me)

### **Overview**

#### **Course Content**

The social changes brought on by networked communication technology have granted new powers that could disrupt the balance between individual needs and obligations to larger groups. This course addresses the individual-group tension through a lens of social capital - resources that are accessed through networks. The course will begin by discussing social capital that reflects individuals' networking patterns, trust, and reputation, and introducing individual-level network measures. Next, the course will examine the concepts related to team-level aspects of social capital, including transactive memory, bonding and bridging ties, and virtual team collaboration. Finally, the course will cover the societal consequences, such as collective dynamics, the wisdom of crowds, digital activism, and the implications on marketing.

#### **Learning Objectives**

The goal of the course is for students to practice and improve in the following areas:

- (1) The ability to evaluate individuals, teams, groups, or organizations using social networks concepts. To achieve this goal, students will practice applying network concepts and quantitative network reasoning to real-world situations.
- (2) The ability to evaluate knowledge claims made with social network analysis. To achieve this goal, a portion of the course will be devoted to the reasoning and justification employed in selected social science studies, news stories, and other materials.
- (3) The practice of respectful, high-level intellectual dialogue that both appreciates diverse perspectives and challenges one another to think rigorously. To achieve this goal, class participation will be encouraged and recognized.

#### **Grading**

A: 93-100%; A-: 90-92%; B+: 87-89%; B: 84-86%; B-: 80-83%; C: 70-79%; D: 60-69%; F: below 60%

***Attendance and class participation (18%):***

The format of the class relies heavily on classroom discussion and participation in in-class activities. Students will be asked to participate in two ways:

- 1) Posting to the discussion board the night before class. Discussion posts (~50-100 words) are expected to be made by **10 pm** (Monday or Wednesday).

Students will be expected to have completed all the required readings before class and comment on the readings, preparing to discuss the readings in class. You will post meaningful comments and questions on each class's required readings. The posts should provide a substantive reaction to the readings, and are not intended to summarize the readings. It is an opportunity for you to provide your reactions to the readings and how they might relate to your specific class-related interests. Feel free to agree, disagree, or raise questions about the readings. As a part of your two posts, you can provide meaningful, substantive comments on others' original posts. In your comments, you are encouraged to provide a new perspective not covered by previous comments. The reactions could include extensions of, challenges to, and/or disagreements with the ideas developed in the readings. You may also engage with issues brought up by your classmates.

- 2) Speaking up in class

Students may miss class, be late, or leave early for 4 in-person classes without penalty. For every class more than four that you miss or are late or leave early, you will lose half a point. Students experiencing serious challenges hindering their ability to participate in the class for extended periods of time are encouraged to contact me ASAP, and their concerns will be considered.

***Final paper (42%; draft 10.5% + final presentation 10.5% + final paper 21%)***

The final paper is 10-15 pages (double spaced, Times New Roman, 12pt.) to study a particular "social context" using social capital theory and social network methods.

- What is a "social context?"

A social context is any situation in which a group of "nodes" – people, organizations, or communities such as cities or countries -- interact either competitively or cooperatively. Students will choose a context that is particularly interesting to them during the first weeks of class. The context should be observable – meaning the student will be able to gather some information

about the nodes. Examples include:

- A group, organization, or team the student is currently involved in or might join
- A set of historical events where people, organizations or communities interact
- A novel or serial drama the student is familiar with (that has many recurring characters)
- A set of individuals with theoretical properties that the student would like to simulate
- Current events that involve many nodes where data is readily available.

Students are welcome to use contexts drawn from other classes. I will guide the choice of context to be sure that it is one that will be feasible.

- What is a “draft?”  
Students will turn in a “draft” of their final paper by midnight, May 10. The draft will consist of roughly 5-page (double spaced, Times New Roman, 12pt.) reflecting the work the student has done so far (more is acceptable but not required). The draft will be worth 25% of the final paper grade (=10.5% towards the course grade). The purpose of the draft is to encourage students to begin work on the paper early and to work on it continuously.
- What is a graded “presentation?”  
Students will give a 5-minute presentation about their final paper in class on May 31 and Jun 2. The purpose of the presentation is to encourage students to concisely communicate their paper ideas and elicit feedback or suggestions from peers.
- The final version of the paper will be due by midnight, June 10. Late papers will be substantially penalized.

***Homework assignments (40%):***

There will be 5 short homework assignments where students will write approximately 1 page (double spaced). Assignments will involve discussion or analysis of some aspect of the social context from which the student’s final paper is drawn. Thus, students’ research and thinking to execute the homework will support and inform their final paper.

***Optional extra credit (up to 3%):***

*Present “scenarios” from the news or other venues in class:* Students are encouraged to find real-world scenarios where they think networks or social capital are important and present these to the class. Presentations will include providing the class with a link to any article or material before the class and leading some of the discussion in class. Students can earn 1% extra credit for presenting a scenario.

**Late Policy**

Deadlines are considered to be the last opportunity to submit work, not the first. Work not submitted by the stated deadline will receive an initial 10% deduction. An additional 5% deduction will be assessed for every full calendar day that it is late thereafter. If you need more time to complete an assignment because of a foreseeable conflict, talk to me about it well in advance (at least 48 hours). I will generally grant timely extension requests on reasonable grounds.

**Statement of Inclusivity**

This course strives to be an inclusive learning community, respecting those of differing backgrounds and beliefs. As a community, we aim to be respectful to all students in this class, regardless of race, ethnicity, socioeconomic status, religion, gender identity, or sexual orientation.

### **COVID-19 Classroom Expectations Statement**

Students, faculty, and staff must comply with University expectations regarding appropriate classroom behavior, including those outlined below and in the COVID-19 Code of Conduct. With respect to classroom procedures, this includes:

- Policies regarding masking and social distancing evolve as the public health situation changes. Students are responsible for understanding and complying with current masking, testing, Symptom Tracking, and social distancing requirements.
- In some classes, masking and/or social distancing may be required as a result of an Americans with Disabilities Act (ADA) accommodation for the instructor or a student in the class even when not generally required on campus. In such cases, the instructor will notify the class.
- No food is allowed inside classrooms. Drinks are permitted, but please keep your face covering on and use a straw.
- Faculty may assign seats in some classes to help facilitate contact tracing in the event that a student tests positive for COVID-19. Students must sit in their assigned seats.

If a student fails to comply with the COVID-19 Code of Conduct or other University expectations related to COVID-19, the instructor may ask the student to leave the class. The instructor is asked to report the incident to the Office of Community Standards for additional follow-up.

### **COVID-19 Testing Compliance Statement**

To protect the health of our community, Northwestern University requires unvaccinated students who are in on-campus programs to be tested for COVID-19 twice per week.

Students who fail to comply with current or future COVID-19 testing protocols will be referred to the Office of Community standards to face disciplinary action, including escalation up to restriction from campus and suspension.

### **Expectations to Class Modality**

Class sessions for this course will occur in person. Individual students will not be granted permission to attend remotely except as the result of an Americans with Disabilities Act (ADA) accommodation as determined by AccessibleNU.

Maintaining the health of the community remains our priority. If you are experiencing any symptoms of COVID do not attend class and update your Symptom Tracker application right away to connect with Northwestern's Case Management Team for guidance on the next steps. Also, contact the instructor as soon as possible to arrange to complete the coursework.

Students who experience a personal emergency should contact the instructor as soon as possible to arrange to complete coursework. Should public health recommendations prevent in-person classes from being held on a given day, the instructor or the university will notify students.

### **Support for Wellness and Mental Health**

Northwestern University is committed to supporting the wellness of our students. Student Affairs has multiple resources to support student wellness and mental health. If you are feeling distressed or overwhelmed, please reach out for help. Students can access confidential resources through the Counseling and Psychological Services (CAPS), Religious and Spiritual Life (RSL) and the Center for Awareness, Response and Education (CARE). Additional information on all of the resources mentioned above can be found here:

- <https://www.northwestern.edu/counseling/>
- <https://www.northwestern.edu/religious-life/>
- <https://www.northwestern.edu/care/>

### **Accessibility Statement**

Northwestern University is committed to providing the most accessible learning environment as possible for students with disabilities. Should you anticipate or experience disability-related barriers in the academic setting, please contact AccessibleNU to move forward with the university's established accommodation process (e: [accessiblenu@northwestern.edu](mailto:accessiblenu@northwestern.edu); p: 847-467-5530). If you already have established accommodations with AccessibleNU, please let me know as soon as possible, preferably within the first two weeks of the term, so we can work together to implement your disability accommodations. Disability information, including academic accommodations, is confidential under the Family Educational Rights and Privacy Act.

### **Sexual Misconduct and Reporting**

Northwestern University is committed to fostering an environment where students are safe and free from sexual misconduct. [Confidential resources](#) are available to those who have experienced sexual misconduct. Faculty and instructors are not confidential resources and are required to report incidents of sexual misconduct, whether discussed in your assignments or in person, to the Title IX Coordinator, who can provide information about resources and options. I encourage students who have experienced sexual misconduct to talk with someone to get support. For more information, including how to request interim protective measures and academic accommodations or file a complaint, see the [Get Help page](#).

### **Discrimination and Sexual Harassment**

Northwestern University's Policies on Discrimination, Harassment, and Sexual Harassment apply to all members of the University community, including students, staff, and faculty. Any student, staff, or faculty member who believes that he or she has been discriminated against or harassed on the basis of his or her race, color, religion, national origin, sex, sexual orientation, gender identity, gender expression,

parental status, marital status, age, disability, citizenship, veteran status, genetic information or any other classification protected by law, should contact the Office of Equal Opportunity and Access at (847) 491-7458 or the Sexual Harassment Prevention Office at (847) 467-6571. Additional information about the University's discrimination and harassment policies, including the campus resources available to assist individuals with discrimination or harassment concerns, is available online on the [Human Resources Equal Opportunity and Access website](#).

### Academic Integrity Statement

Students in this course are required to comply with the policies found in the booklet, "Academic Integrity at Northwestern University: A Basic Guide". All papers submitted for credit in this course must be submitted electronically unless otherwise instructed by the professor. Your written work may be tested for plagiarized content. For details regarding academic integrity at Northwestern or to download the guide, visit: <https://www.northwestern.edu/provost/policies/academic-integrity/index.html>

### Class Schedule

Week	Date '22	Day of Week	Topic	Objectives	Reading	Notes	Assignment Given	Assignment Due
1	Mar 31	Thu	Social capital overview	<ol style="list-style-type: none"> <li>1. Class introduction</li> <li>2. Understand two features of social networks: nodes &amp; ties</li> <li>3. Understand why we should care about social capital</li> </ol>	Gladwell (1999) Optional: Coleman (1988)			
2	Apr 5	Tue	Individual social capital - Access to Information	<ol style="list-style-type: none"> <li>1. Understand the definition of structural holes</li> <li>2. Understand the role of social capital in generating new ideas</li> </ol>	Burt Chap 2	Class activity: Map the network of your contacts		
	Apr 7	Thu	Individual social capital - Trust & Reputation	<ol style="list-style-type: none"> <li>1. Understand how social capital affects trust and reputation</li> <li>2. Gephi tutorial: Learn how to import and manage social network data.</li> </ol>	Burt Chap 3		1. Propose candidate topics	
3	Apr 12	Tue	Individual social capital - Identity Network	<ol style="list-style-type: none"> <li>1. Understand how social connections shape individual identities</li> <li>2. Understand different network centralities:</li> </ol>	Uzzi & Dunlap (2005) M & C Chap 2 Part 1	Class activity: Vax		1

			measures (pt 1)	degree, weighted degree, eigenvector, betweenness, closeness 3. Gephi tutorial: network data visualization, metrics computation				
	Apr 14	Thu	Network measures (pt 2)	1. Understand network density, centralization, open/closed networks, clustering coefficient	M & C Chap 2 Part 2	Class activity: 6DoS	2. Identify ego	
4	Apr 19	Tue	Team social capital - Bonding & Bridging ties	1. Understand team boundaries in organizations 2. Understand the characteristics of bonding ties and bridging ties	Pentland (2012)	Class activity: Relational Analytics Dashboard		2
	Apr 21	Thu	Team social capital - Diversity (Diego Guest Lecture)	1. Understand the definition of surface-level and deep-level diversity 2. Understand the outcomes of team diversity	Reagans & Zuckerman (2001)		3. Analyze ego network	
5	Apr 26	Tue	Team social capital - Transactive memory system	1. Understand transactive memory system through the lens of social networks	M & C Chap 6 TMS	Jackie Cameo Appearance		3
	Apr 28	Thu (Zoom)	Team social capital - Virtual teams	1. Understand the role of organizational communication technologies in virtual team collaboration 2. Identify the opportunities and challenges of virtual teams	Yuan & Gay (2006)		4. Reflect on teams	
6	May 3	Tue	Catch-up day		Optional: Carter et al. (2015)			4
	May 5	Thu	Team social capital - Multi-team system	1. Understand the complexity of team structures in modern organizations	Gardner & Peterson (2019) Mortensen & Gardner (2017)	Class activity: Word completion task; May 6 Last day to drop	Final paper draft	

7	May 10	Tue	Collective social capital - Overview	1. Understand how collective behavior is affected by local network structures	M & C Chap 3	Tian Cameo Appearance		Final paper draft
	May 12	Thu	Collective social capital - Collective dynamics	1. Understand the potential unintended consequences of collective actions 2. Understand networks of online communities and civic engagement	Jackson et al. Chap 1 Optional: Bailon Chap 3	Brooke Cameo Appearance	5. Reflect on collective	
8	May 17	Tue	Collective social capital - Wisdom of Crowds	1. Understand Wisdom of Crowds 2. Understand how network structure affects crowdsourcing	Christakis & Fowler Chap 1	Class activity: WoS game		5
	May 19	Thu	Collective social capital - Common ground	1. Understand the relationship between network connectivity and social convention	Centola & Baronchelli (2015)	Class activity: Name game		
9	May 24	Tue	Collective social capital - Culture	1. Understand the similarity and difference of social capital across cultures	Corritore et al. (2020) Optional: Lu (2022)			
	May 26	Thu (Zoom)	Guest Lecture - Xu Yu		DeWees & Minson (2018) Becker & Smith (2019)			
10	May 31	Tue	Student presentations					
	Jun 2	Thu	Student presentations					
								Final paper due on <b>Jun 10</b>

## Reading list

- Burt, R. S. (2005). *Brokerage and closure: An introduction to social capital*. Oxford University Press, USA.
- Carter, D. R., DeChurch, L. A., Braun, M. T., & Contractor, N. S. (2015). Social network approaches to leadership: An integrative conceptual review. *Journal of Applied Psychology, 100*(3), 597.
- Centola, D., & Baronchelli, A. (2015). The spontaneous emergence of conventions: An experimental study of cultural evolution. *Proceedings of the National Academy of Sciences, 112*(7), 1989–1994. <http://doi.org/10.1073/pnas.1418838112>
- Christakis, Nicholas A.; Fowler, James H. (2009). *Connected: The Surprising Power of Our Social Networks and How They Shape Our Lives*. Little, Brown and Company.
- Coleman, J. S. (1988). Social capital in the creation of human capital. *American Journal of Sociology, 94*, S95–S120.
- Gardner, H. K., & Peterson, R. S. (2019). Backchannels in the boardroom. *Harvard Business Review, 97*(5), 106-113.
- Gladwell, M. (1999). Six Degrees of Lois Weisberg. *The New Yorker, 11*.
- Gittel, R., & Vidal, A. (1998). *Community organizing: Building social capital as a development strategy*. Sage.
- Goldberg, A., Srivastava, S. B., Manian, V. G., Monroe, W., & Potts, C. (2016). Fitting in or standing out? The tradeoffs of structural and cultural embeddedness. *American Sociological Review, 81*(6), 1190-1222.
- González-Bailón, S. (2017). *Decoding the social world: Data science and the unintended consequences of communication*. MIT Press.
- Jackson, S. J., Bailey, M., & Welles, B. F. (2020). *#HashtagActivism: Networks of race and gender justice*. MIT Press.
- Lu, J. G. (2021). A social network perspective on the bamboo ceiling: Ethnic homophily explains why East Asians but not South Asians are underrepresented in leadership in multiethnic environments. *Journal of personality and social psychology*.
- Marks, M. A., DeChurch, L. A., Mathieu, J. E., Panzer, F. J., & Alonso, A. (2005). Teamwork in multiteam systems. *Journal of Applied Psychology, 90*(5), 964.
- Monge, P., & Contractor, N. (2003). *Theories of Communication Networks*. New York: Oxford University Press.
- Mortensen, M., & Gardner, H. R. (2017). The overcommitted organization. *Harvard Business Review, 95*(5), 58-65.
- Reagans, R., & Zuckerman, E. W. (2001). Networks, diversity, and productivity: The social capital of corporate R&D teams. *Organization Science, 12*(4), 502-517.
- Uzzi, B. (1997). Social structure and competition in interfirm networks: The paradox of embeddedness. *Administrative Science Quarterly, 35*–67.
- Uzzi, B., & Dunlap, S. (2005). How to build your network. *Harvard business review, 83*(12), 53.
- Yuan, Y. C., & Gay, G. (2006). Homophily of network ties and bonding and bridging social capital in computer-mediated distributed teams. *Journal of computer-mediated communication, 11*(4), 1062-1084.