

**SOCI 3102 Social Networks and Social Capital**  
Department of Sociology  
The Chinese University of Hong Kong  
**CKB 109, Mon 9:30 - 11:15 a.m.**  
Spring 2026

**Contact Information**

**Professor: Siqi HAN, Ph.D.**

E-mail: [siqihan@cuhk.edu.hk](mailto:siqihan@cuhk.edu.hk)

Office hours: By appointment

Office: Sino Building Room 416

Teaching Assistants:

Mr. **Linfeng SHEN**, email: [linfengshen@link.cuhk.edu.hk](mailto:linfengshen@link.cuhk.edu.hk) ; office: RM 424

Ms. **Yue LI**, email: [liyuesoc@link.cuhk.edu.hk](mailto:liyuesoc@link.cuhk.edu.hk) ; office: RM 424

**Course Description**

Social network is one of the fastest growing sub-areas within the discipline of sociology. The science of social networks focuses on measuring, modeling, and understanding the different ways that people are connected to one another. This is one of the only sub-areas of sociology that has a body of theory accompanied by a distinct methodology. SNA (Social Network Analysis) is not just about analytic techniques. Many years of social network studies have extensively represented rich sociological theory traditions such as structuralism, interactionism, and relational perspectives. This course is designed to provide students with the opportunity to (1) Understand basic network concepts and theories, (2) Use social-scientific terminology to describe patterns of structure and change observed in networks, (3) Understand and be capable of using measures based on graph theory and matrix algebra to analyze and describe social networks, (4) Understand the way that social network concepts, theory, and measures can be applied to shed light on a wide variety of phenomena across different fields of study in the social sciences and beyond.

**Assessment and Grading**

The grade for the course will be calculated as a weighted average of the following components:

Participation in lectures and tutorials	30%
Two in-class quizzes	40%
Final essay	30%

- **Participation (30%)**

- To ensure your attendance in the lecture, there will be *random in-class polls* from UReply, displaying easy questions with respect to class materials, and checking your attendance.
  - There will be **5** times of polls that the instructor assigns randomly throughout the semester, each taking up **6%**. Missing each will cost you **6%**.
  - **Attendance may also be taken for tutorials.** This means if you need to miss a tutorial, you must email the TAs and provide good reasons why.
- **Tutorials** (attendance will be taken into consideration in the 30% participation score)
    - There will be **3 tutorials**, each is 1.5- to 2-hour long. The tutorials are the main channel for learning R coding.
      - Tutorial 1: install R, R studio, install certain network packages; review and application of basic network concepts – **week 4**
      - Tutorial 2: basic & data manipulation in R, building network graphs – **week 6**
      - Tutorial 3: more on network graphs and basic network statistics in R – **week 8**
- **In-class Quizzes (40%)**
    - In **week 5 and week 10**, there will be an **in-class, closed-book** quiz. The questions in these quizzes will all be multiple-choice questions covering the content that was discussed in lectures.
    - In each quiz, there will be 10 questions, and students will be given 45 minutes (half of the class time) to finish it.
    - If a question has more than one answer, it will be stated explicitly in the exam paper.
    - Each quiz will account for 20% of the final grade, totaling 40%.

### **Final Project (30%)**

- The final essay requires students to explicitly refer to course concepts and critically reflect on a problem related to social networks and social capital.
- The specific essay question will be distributed during the last lecture (4/13).
- It will be due 2 weeks after the last lecture, **on 4/27, 11:59 pm**.
- **Late submission** will result in the loss of one sub-grade per day (i.e. from B+ to B).
- Essay **formatting requirements** are placed at the end of this syllabus.
- Word limit: **600 words**, references not counted into it.
- **AI** assistance in generating ideas or writing the essay is **forbidden**. See policy below.

### **AI Policy**

This course adopts University Guideline “Use of AI Tools by Students in Learning Activities and Assessments”, Approach 2 – Use only with prior permission. **The specific requirements regarding AI usage will be specified in the final exam instructions.**

*Students are allowed to use AI tools in some scenarios or some learning activities and/or assessments but not in others. Teachers should clearly inform students which AI tools students are allowed to use, and when and how they can and cannot use these tools. Teachers should also make clear the rationale for allowing these tools in some situations but not allowing them in others, and how these tools ought to be cited or otherwise acknowledged. Such information should be spelt out clearly in the assessment guide.*

## Grading

Grade Descriptors	
A	Demonstrates integrated mastery of social network theory and method: explains network concepts (e.g., ties, cohesion, brokerage, diffusion) and connects them convincingly to sociological traditions (structuralism, interactionism, relational perspectives). Selects, computes, and interprets appropriate network measures/models (grounded in graph theory and matrix algebra) with correct assumptions, clear justification, and accurate substantive interpretation of what patterns imply about social structure and change.
A-	Shows very strong command of core network concepts and the theory–method link, with only minor gaps in depth or integration. Correctly applies standard measures/models and interprets results well, though some justifications, assumptions, or edge-case considerations could be more explicit.
B	Understands and explains most core network concepts and can describe observed network structure/change using appropriate social-scientific language, but analysis may be uneven. Applies common measures (e.g., centrality, cohesion, clustering/community structure) competently in routine settings; interpretation is generally correct but may miss theoretical implications or limitations. Applications to substantive problems are coherent but tend to be limited.
C	Demonstrates basic understanding of network ideas but with recurring imprecision (e.g., confusing actor- vs. network-level claims, or describing networks without linking patterns to theory).
D	Shows fragmentary understanding of network concepts and limited ability to describe network structure/change in social-scientific terms.
F	Unsatisfactory performance on major learning outcomes, OR failure to meet specified assessment requirement.

## Academic Honesty

Please keep in mind [the university’s policy on academic honesty](#). Plagiarism will not be tolerated in the term paper and assignments. The ideas and language should be your own, and any outside sources must be clearly and properly cited. There are severe consequences if you commit any acts of academic dishonesty. In addition to the [department’s policy and](#)

[guidelines for citations](#), please refer to the [university-level disciplinary guidelines and procedures](#). The Faculty of Social Science has also compiled a [handout](#) to alert students of the importance of academic honesty and the consequences of violating the University's Rules. To this end, final essay should be submitted via [VeriGuide](#).

Please refer to ChatGPT policy of CUHK as well:

[https://www.aqs.cuhk.edu.hk/documents/A-guide-for-students\\_use-of-AI-tools.pdf](https://www.aqs.cuhk.edu.hk/documents/A-guide-for-students_use-of-AI-tools.pdf)

### Other Class Logistics

- Lecture slides will be uploaded to the course Blackboard **before class**.

### Schedule and Reading

1. intro
2. basic concepts I
3. basic concepts II
4. dyads and triads
5. centrality
6. weak ties and structural holes
7. social capital
8. segmentation and cohesion
9. small world
10. diffusion and influence
11. scientific networks
12. networks and history

### *Required Book*

Kadushin, Charles. 2012. *Understanding Social Networks: Theories, Concepts, and Findings*. Oxford University Press.

### *Recommended Books*

Wasserman, Stanley and Katherine Faust. 1994. *Social Network Analysis: Methods and Applications*. Cambridge University Press.

Light, Ryan and James Moody (eds.). 2021. *The Oxford Handbook of Social Networks*. Oxford University Press. – Available online in CUHK library.

Readings are subject to minor changes throughout the semester.

**\*Denotes required reading**

### Week 1 (1/5). Course Introduction

\*Kadushin Ch. 5, 12

### Week 2 & 3 (1/12, 1/19). Basic concepts I & II

\*Hanneman, Robert and Mark Riddle. 2005. Introduction to Social Network Methods. Chapters 3, 5. [http://faculty.ucr.edu/~hanneman/nettext/C3\\_Graphs.html](http://faculty.ucr.edu/~hanneman/nettext/C3_Graphs.html)  
[http://faculty.ucr.edu/~hanneman/nettext/C5\\_%20Matrices.html](http://faculty.ucr.edu/~hanneman/nettext/C5_%20Matrices.html)

### Week 4 (1/26). Dyads and Triads

\*Kadushin Ch. 2

\*Schaefer, David R., John M. Light, Richard A. Fabes, Laura D. Hanish, and Carol Lynn Martin. "Fundamental principles of network formation among preschool children." *Social Networks* 32, no. 1 (2010): 61-71.

Chase, Ivan D. "Social process and hierarchy formation in small groups: a comparative perspective." *American Sociological Review* (1980): 905-924.

-Tutorial 1-

### Week 5 (2/2). Centrality | **First In-class Quiz**

\*Kadushin Ch. 3

\*Faris, Robert, and Diane Felmlee. "Status struggles: Network centrality and gender segregation in same-and cross-gender aggression." *American Sociological Review* 76, no. 1 (2011): 48-73.

Borgatti, Stephen P. 2005. "Centrality and Network Flow." *Social Networks* 27 (1): 55–71.

Christakis, Nicholas A. and James H. Fowler. 2010. "Social Network Sensors for Early Detection of Contagious Outbreaks." *PLoS ONE* 5(9):e12948.

#### Week 6 (2/9). Weak Ties and Structural Holes

\*Kadushin Ch. 3

\*Granovetter, Mark S. 1973. "The Strength of Weak Ties." *American Journal of Sociology* 78(6):1360.

Bian, Yanjie. 1997. "Bringing Strong Ties Back in: Indirect Ties, Network Bridges, and Job Searches in China." *American Sociological Review* 62(3):366–85.

Small, Mario Luis. "Weak ties and the core discussion network: Why people regularly discuss important matters with unimportant alters." *Social Networks* 35, no. 3 (2013): 470-483.

#### -Tutorial 2 -

#### Week 7 (2/23). Social Capital

\*Kadushin Ch. 10.

\*Lin, Nan. 1999. "Building a network theory of social capital." *Connections*. 22(1), 28- 51.

\*Coleman, James S. 1988. "Social Capital in the Creation of Human Capital." *American Journal of Sociology* 94(s1):S95–120.

Burt, Ronald S. and Katarzyna Burzynska. 2017. "Chinese Entrepreneurs, Social Networks, and Guanxi." *Management and Organization Review* 13(2):221–60.

#### Week 8 (3/9). Segmentation and Cohesion

\*Kadushin Ch 4

\*Moody, James and Douglas R. White. 2003. "Structural Cohesion and Embeddedness: A Hierarchical Concept of Social Groups." *American Sociological Review* 68(1):103–27.

Burdick-Will, Julia, Jeffrey A. Grigg, Kiara Millay Nerenberg, and Faith Connolly. "Socially-structured mobility networks and school segregation dynamics: The role of emergent consideration sets." *American Sociological Review* 85, no. 4 (2020): 675-708.

### -Tutorial 3-

#### Week 9 (3/16). Small World

\* Kadushin Ch. 8.

\*Uzzi, Brian, and Jarrett Spiro. "Collaboration and creativity: The small world problem." *American Journal of Sociology* 111, no. 2 (2005): 447-504.

Watts, Duncan J. "Networks, dynamics, and the small-world phenomenon." *American Journal of Sociology* 105, no. 2 (1999): 493-527.

#### Week 10 (3/23). Diffusion and Influence | **Second In-class Quiz**

\* Kadushin Ch. 9.

\*Kreager, Derek A. & Dana L. Haynie. 2011. "Dangerous Liaisons? Dating and Drinking Diffusion in Adolescent Peer Networks" *American Sociological Review* 76: 737-763

Hartvigsen, G., J. M. Dresch, A. L. Zielinski, A. J. Macula, and C. C. Leary. "Network structure, and vaccination strategy and effort interact to affect the dynamics of influenza epidemics." *Journal of theoretical biology* 246, no. 2 (2007): 205-213.

#### Week 11 (3/30). Networks and Science

\* Hofstra, Bas, Vivek V. Kulkarni, Sebastian Munoz-Najar Galvez, Bryan He, Dan Jurafsky, and Daniel A. McFarland. "The diversity–innovation paradox in science." *Proceedings of the National Academy of Sciences* 117, no. 17 (2020): 9284-9291.

\* Wu, Lingfei, Dashun Wang, and James A. Evans. "Large teams develop and small teams disrupt science and technology." *Nature* 566, no. 7744 (2019): 378-382.

Gerow, Aaron, Yuening Hu, Jordan Boyd-Graber, David M. Blei, and James A. Evans. "Measuring discursive influence across scholarship." *Proceedings of the national academy of sciences* 115, no. 13 (2018): 3308-3313.

#### Week 12 (4/13). Networks and History | **Final Essay Assigned**

\* P Bearman, R Faris, J Moody. "Blocking the future: New solutions for old problems in historical social science." *Social Science History* 23 (4), 501-533.

\* E Erikson, P Bearman. "Malfeasance and the foundations for global trade: The structure of English trade in the East Indies, 1601–1833." *American Journal of Sociology*. 2006. 112 (1), 195-230

## Formatting Requirements

1. Upload the soft copy of your assignments to **VeriGuide** on or before the due date. Choose the **specific assignment type (final)** at the VeriGuide system.
2. Save the file of your assignments in the *following format* so that we can easily identify you when we download the zip files from VeriGuide:

*surname + first name + assignment type* (e.g. Chan\_Taiman\_Final\_Essay.docx)

3. Late submission will result in the loss of one sub-grade per day (i.e. from B+ to B).
4. Remember to **sign** the soft copy of your VeriGuide receipt. Please save your signed VeriGuide receipt in the following format:

*surname + first name + assignment\_receipt* (e.g. Chan\_Taiman\_FinalEssay\_Receipt.pdf)

5. Please upload your signed VeriGuide receipt to the **Blackboard**. We have set up a folder known as "Collect Assignments VeriGuide Receipt" in the Blackboard to collect your signed receipt.
6. Please state clearly *the course code, course name, teacher's name, your full name (both Chinese and English), student ID, major subject, date and **word count*** on the first page of your assignments. Please add **page number** as well.
7. Please choose **12 font size** and **double space** in your assignments.
8. Be sure to **SAVE** all files of your assignments and keep backups for yourself.
9. You **MUST** acknowledge all printed/multi-media/online reference materials (books, newspapers, online news, Internet websites and all other reference and all other reference materials) in your answers. Both **in-text citation** and **bibliography/reference section** at the end of assignments are required. References do not count into the 600-word limit.

You might visit the followings links on how to make proper citation & reference:

<https://www.citationmachine.net/apa>

10. Remember to sign the VeriGuide receipt and upload it to the Blackboard. *Assignments without the receipt cannot be graded by teachers.*