

TIGP SNHCC 2026 Fall Syllabus

Introduction to Social Networks (SN)

Place: Room 107, New Building, IIS, AS / Google Meet

Time: Thur 14:00-17:00 or Fri 09:00-12:00

Chair: Dr. Yi-Shin Chen

Outline: The objective of this course is to assist students to understand the major concepts involved in social network analysis. Through lectures and lab assignments, students can obtain the ability to conduct research studies related to social networks. The subjects in this course are divided into the following themes:

- Introduction to graph theory
- Graph analysis: community detection, and graph embedding
- Social network analysis: link prediction and privacy in social networks
- User profiling and recommendation systems in social networks
- Text mining and analysis in social networks

References:

- Social Network Data Analytics, Charu C. Aggarwal (Ed.), Springer 2011
- Data Mining: Concepts and Techniques, J. Han, M. Kamber, and J. Pei, 3rd edition, Morgan Kaufmann, 2011.
- Introduction to Data Mining, P.N. Tan, M. Steinbach, and V. Kumar, Addison Wesley, 2006.

TA: Office hours: by appointment

Grades: Exam 40%; Homework 40%; Paper Presentation 20%

For the most updated syllabus, please visit <https://tigpsnhcc.iis.sinica.edu.tw/course.html#s1>

Week	Date	Topics/Brief Description	Lecturers	Notes
1	2026/09/08	Class Introduction + Overview of DM	Yi-Shin Chen	Tuesday Afternoon
2	2026/09/15	Introduction to social network analytics and graph theory (I)	Mi-Yen Yeh	
3	2026/09/22	Introduction to social network analytics and graph theory (II)	Mi-Yen Yeh	
4	2026/09/29	Introduction to social network analytics and graph theory (III)	Mi-Yen Yeh	
5	2026/10/06	Lab1	Mi-Yen Yeh	
6	2026/10/13	Social Network Paper Presentation (I)	Yi-Shin Chen	
7	2026/10/20	Text Mining in Social Networks (I)	Yi-Shin Chen	
8	2026/10/27	No class		
9	2026/11/03	Text Mining in Social Networks (II)	Yi-Shin Chen	
10	2026/11/10	Social Network Paper Presentation (II)	Yi-Shin Chen	Friday Morning
	2026/11/11	Social Influence (I)	Ya-Wen Teng	
11	2026/11/28	Social Influence (II)	Ya-Wen Teng	
12	2026/12/25	Representation Learning on Social Networks (I)	Ya-Wen Teng	
13	2026/12/02	Representation Learning on Social Networks (II)	Ya-Wen Teng	
14	2026/12/09	Lab: Social Influence and Representation Learning	Ya-Wen Teng	
15	2026/12/16	Final Exam		