

## ECON6810

### Special Topics in Economics I: Economics of Social Networks

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**This syllabus is tentative. The course materials can be updated based on students' preferences. Please send me an email if you have any questions or concerns about this course.**

#### Course Description

This course explores network theory and its applications in economics. I will first introduce formal definitions and basic theorems of networks (i.e., graph theory) and cover topics related to Economics. For example, I will cover random graph models, diffusion and learning on networks, strategic network formation, and games on networks.

The latter half of the course will be students' presentations. You can choose your own favorite paper (with my consent) or choose a paper from the reading list.

I am a theorist, and this course mainly focuses on theoretical aspects of social networks. However, you can present an empirical paper if it has some theoretical framework. Below two are good examples:

[Can Network Theory-based Targeting Increase Technology Adoption?](#) (Lori Beaman, Ariel BenYishay, Jeremy Magruder, and Mushfiq Mobarak) (2021). *American Economic Review*, vol 111 (6), pp. 1918-1943, June 2021.

[Using Gossips to Spread Information: Theory and Evidence from Two Randomized Controlled Trials](#) (Abhijit Banerjee, Arun G. Chandrasekhar, Esther Duflo, and Matthew O. Jackson), *Review of Economic Studies*, February 2019

#### Learning Outcomes

After completing this course, the students are expected to:

1. Acquire advanced knowledge in network theory;
2. Understand how to incorporate social networks into economic models;
3. Obtain preparations for conducting independent research related to social networks.

## Recommended Textbooks

There is no required textbook for this course. The lecture is mainly based on the following books and the papers on the reading list.

1. M.O. Jackson, *Social and Economic Networks*, Princeton University Press, 2010.
2. M.O. Jackson, *The Human Network: How Your Social Position Determines Your Power, Beliefs, and Behaviors*, Vintage, 2019.

## Assessment Scheme

The course grade will be determined by assignments (50%) and in-class presentation (50%). The assignment of grades will be based on the following descriptors.

Grade	Descriptor
A / A-	Outstanding/Generally outstanding performance on all learning outcomes.
B+ / B / B-	Substantial performance on all learning outcomes, OR high performance on some learning outcomes which compensates for less satisfactory performance on others, resulting in overall substantial performance.
C+ / C / C-	Satisfactory performance on the majority of learning outcomes, possibly with a few weaknesses.
D+ / D	Barely satisfactory performance on a number of learning outcomes
F	Unsatisfactory performance on a number of learning outcomes, OR failure to meet specified assessment requirements.

## Academic Honesty

Attention is drawn to University policy and regulations on honesty in academic work, and to the disciplinary guidelines and procedures applicable to breaches of such policy and regulations. Details may be found at <http://www.cuhk.edu.hk/policy/academichonesty/>