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# **Enquire Teaching Timetable**

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# **Course Outcome**

## ECON 4130 - Economic Analysis for Social Networks

Learning Outcome

- 1. Acquainted with basic terminologies in social and economic network analysis.
- 2. Able to perform econometric regressions on network data and provide economic interpretations.
- 3. Understand the common machine learning techniques used in analyzing data from social media.
- 4. Able to use software R and Python to collect data and conduct network analysis.

#### Course Syllabus

- 1. Network data and descriptive statistics
- 2. Using network statistics in regressions
- 3. Network structure and diffusion
- 4. Social interactions and peer effects in networks
- 5. Network formation
- 6. Obtaining data from social media
- 7. Machine learning techniques
- a. Analyzing consumer preference
- b. Representing graphical data
- c. Analyzing text data

Ass	essment Type	
	Assessment Type	<b>Current Percent</b>
1	Homework or assignment	40
2	Project	60

## Feedback for Evaluation

- Course and teaching evaluation at end of course
- Informal feedback channels throughout the course (face-to-face, email, course website)
- Feedbacks from students in annual departmental retreat
- Feedbacks from Program Review and Visiting Committee

#### Required Readings

course materials to be designed and compiled by the teachers concerned.

#### Recommended Readings

Kolaczyk, E. D. (2009) Statistical Analysis of Network Data: Method and Models, Springer Kolaczyk, E. D. and Csardi, G. (2014) Statistical Analysis of Network Data with R, Springer

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Newman, M. (2010) Networks: An Introduction, Oxford University Press Hastie, Trevor, Robert Tibshirani and Jerome Friedman (2016) The Elements of Statistical Learning, Springer