MATH 7014 SOCIAL MEDIA INTELLIGENCE

Credit Points 10

Legacy Code 301116

Coordinator Laurence Park (https://directory.westernsydney.edu.au/search/name/Laurence Park/)

Description Social Media Intelligence presents the theory and practice of extracting and analysing information from social media networks. The aims are to identify properties of social networks, and to make predictions about future events. Topics included will cover areas such as Graph theory, Game theory and Network dynamics and we will identify how these can be used to model and extract information from Facebook and Twitter.

School Computer, Data & Math Sciences

Discipline Computer Science

Student Contribution Band HECS Band 2 10cp

Check your fees via the Fees (https://www.westernsydney.edu.au/currentstudents/current_students/fees/) page.

Level Postgraduate Coursework Level 7 subject

Assumed Knowledge

Basic algebra and computing skills.

Learning Outcomes

On successful completion of this subject, students should be able to:

1. Identify and describe properties of social media networks.
2. Compute graph statistics from given social media networks.
3. Analyse simple games and describe their connection to social media networks.
4. Compute and interpret centrality scores over social media networks.
5. Generate and identify small world networks.
6. Use a computer to assist in the analysis of large scale social networks.

Subject Content

1. Graph theory and social networks
2. Introduction to Game theory
3. Information networks and the Web
4. Network population models
5. Network structural models

Assessment

The following table summarises the standard assessment tasks for this subject. Please note this is a guide only. Assessment tasks are regularly updated, where there is a difference your Learning Guide takes precedence.

Type	Length	Percent	Threshold	Individual/ Group Task
Online quizzes	5 x 30 minutes	20	N	Individual
Project	2000 words	30	N	Individual
Exam	2 hours	50	N	Individual

Prescribed Texts

- Easley, D. (2010). Networks, crowds, and markets : reasoning about a highly connected world. New York: Cambridge University Press.