

Liverpool John Moores University

Title: INFORMATION AND SOCIAL NETWORKS
Status: Definitive
Code: **7066COMP** (120324)
Version Start Date: 01-08-2019
Owning School/Faculty: Computer Science
Teaching School/Faculty: Computer Science

Team	Leader
Somasundaram Ravindran	Y

Academic Level: FHEQ7
Credit Value: 20
Total Delivered Hours: 38
Total Learning Hours: 200
Private Study: 162

Delivery Options

Course typically offered: Semester 2

Component	Contact Hours
Lecture	12
Tutorial	24

Grading Basis: 40 %

Assessment Details

Category	Short Description	Description	Weighting (%)	Exam Duration
Report	AS1	An extended critical survey of one of the course topics.	50	
Exam	AS2	Examination.	50	2

Aims

*To study how the social, technological, and natural worlds are connected.
To understand how elementary graph-theoretic concepts may help understanding the structure and certain properties of networks.
To understand the software development possibilities offered by the emergence of information and social networks environments.*

Learning Outcomes

After completing the module the student should be able to:

- 1 Identify the main issues, techniques, and tools needed for the development of applications in the area of Information and social networks.
- 2 Use mathematical techniques to model and analyse structural and dynamical properties of networks.
- 3 Identify patterns of internal structure on the networks and their effects on the population.

Learning Outcomes of Assessments

The assessment item list is assessed via the learning outcomes listed:

Critical survey	1	
Examination	2	3

Outline Syllabus

Fundamental ideas from social network analysis and framing a number of graph-theoretic

concepts in these terms.

Web graph, link analysis for Web search.

Empirical studies of on-line social networks.

Technical issues in social networking such as large scale network modelling and the information propagation.

Learning Activities

Lectures followed by tutor led tutorial sessions.

Notes

This course covers different scientific perspectives in its approach to understanding networks and behaviour.