Liverpool John Moores University

Title:	Computer Networks
Status:	Definitive
Code:	**6104ENG** (116944)
Version Start Date:	01-08-2016
Owning School/Faculty:	Electronics and Electrical Engineering
Teaching School/Faculty:	Electronics and Electrical Engineering

Team	Leader
Ronan McMahon	Y

Academic Level:	FHEQ6	**Credit Value:**	20	**Total Delivered Hours:**	51
Total Learning Hours:	200	**Private Study:**	149		

Delivery Options
Course typically offered: Standard Year Long

Component	Contact Hours
Lecture	24
Practical	24

Grading Basis: 40 %

Assessment Details

Category	Short Description	Description	Weighting (%)	Exam Duration
Exam	Exam		70	3
Technology	Coursewk 1		15	
Technology	Coursewk 2		15	

Aims

To develop understanding of modern computer networks and the requirements which drive their development.

Learning Outcomes

After completing the module the student should be able to:

1 Evaluate properties of network structures, nodes and protocols
2 Identify and discuss key elements of Network Security and Management
3 Analyse and debate issues relating to user and network traffic scenarios
4 Simulate a variety of network scenarios and evaluate the outcomes

Learning Outcomes of Assessments

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

Exam	1	2	3
Coursework 1	1	3	4
Coursework 2	1	3	4

Outline Syllabus

IP Network Routing;
Network Applications – VoIP, streaming, etc., Quality of Service
MPLS and Diffserv
Network Access - GigaE, Wireless LAN, infiniband, fibrechannel
Network management and Network Security.
WiMAX and Mobile Networks
MANETs
Network design – node and link capacities; traffic types – users and applications
Traffic flows: circuits; packets; streams
Network requirements – resilience, expansion, security

Learning Activities

Lectures Seminars and Labs

Notes

To develop understanding of modern computer networks and the requirements which drive their development.