Liverpool John Moores University

Title:	MULTIMEDIA STORAGE AND RETRIEVAL
Status:	Definitive
Code:	**7082COMP** (120640)
Version Start Date:	01-08-2018

Owning School/Faculty: Computer Science
Teaching School/Faculty: Computer Science

Team	Leader
Rubem Pereira	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
Practical	12
Seminar	6
Tutorial	6

Grading Basis: 40 %

Assessment Details

Category	Short Description	Description	Weighting (%)	Exam Duration
Report	AS1	Group Assessment: A theoretical/practical piece of work, based on the development of a networked multimedia information system and supporting technologies.	40	
Exam	AS2	Examination	60	2

Aims

To develop advanced skills in multimedia data handling mechanisms.

To critically analyse compression techniques and standards, particularly in relation to still and moving images as well as digitised sound.
To relate advanced architectural, operating systems and networking developments to multimedia data, particularly how the timing requirements and data volumes associated with multimedia data storage, retrieval and communication dictate hardware, software and networking developments.

Learning Outcomes

After completing the module the student should be able to:

1   Identify the requirements of advanced hardware and software systems for multimedia support, including compression and storage technology.
2   Analyse and evaluate the role of networked multimedia systems and critically appraise the techniques involved in their design, development and maintenance.
3   Execute a requirements analysis of, design and evaluate, distributed multimedia solutions, recognising the impact of compression and storage techniques on the development of distributed multimedia systems and applications.

Learning Outcomes of Assessments

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

Networked multimedia   1

Examination   2   3

Outline Syllabus

Compression techniques and related standards, e.g. JPEG, MPEG 2, 4 and 7. Included in the MPEG study will be the study of Psychoacoustics, perceptual encoding and related MP3 standard.
Quality of Service for Multimedia data: Requirements, end-systems and networking support: Scheduling, Buffering, Caching.
Multimedia Storage techniques, distributed filing systems. Storage systems optimisation for Multimedia Data.
Case Study: Video on Demand, IPTV, and related topics.

Learning Activities

Lectures, Tutorials, Labs and Seminars.

Notes

In this module advanced technologies, such as compression and storage techniques, are presented as supporting features of integrated global multimedia networked systems, from World Wide Web and Video Conferencing to Interactive

TV. Group Coursework: Students will be differentiated through peer review for marking purposes.