

Liverpool John Moores University

Title: MEDIA SERVERS AND NETWORK STREAMING
Status: Definitive
Code: **6043TECH** (105700)
Version Start Date: 01-08-2016

Owning School/Faculty: Electronics and Electrical Engineering
Teaching School/Faculty: Electronics and Electrical Engineering

| Team | Leader |
|---------------|--------|
| Paul Otterson | Y |

Academic Level: FHEQ6
Credit Value: 12
Total Delivered Hours: 38
Total Learning Hours: 120
Private Study: 82

Delivery Options

Course typically offered: Semester 1

| Component | Contact Hours |
|-----------|---------------|
| Lecture | 12 |
| Practical | 24 |

Grading Basis: 40 %

Assessment Details

| Category | Short Description | Description | Weighting (%) | Exam Duration |
|----------|-------------------|---|---------------|---------------|
| Essay | AS1 | Coursework – set up streaming broadcast and content | 50 | |
| Exam | AS2 | Examination | 50 | 2 |

Aims

To develop an understanding and ability to implement, operate and manage media streaming, media servers and associated network hardware and software.

Learning Outcomes

After completing the module the student should be able to:

- 1 Understand the theory and practical configuration of a media server on a network.
- 2 Develop, broadcast and troubleshoot, recorded and live streaming content over a network
- 3 Show both theoretical and practical implementation of media server operations and manage media server assets.
- 4 Integrate media and web-servers for notification, advertising and site pointing.

Learning Outcomes of Assessments

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

| | | | | |
|------|---|---|---|---|
| CW | 1 | 2 | 3 | 4 |
| EXAM | 1 | 3 | 4 | |

Outline Syllabus

Internet Audio and Video

Basics and concepts

Capturing, editing and rendering and optimizing

Encoding

Encoding basics and formats (Windows Media, Quicktime, RealSystem)

Techniques

Utilizing encoded files

Web Browser authoring, controlling and embedding

Server Operations

Server basics

Ports, TCP/IP, web-servers and DNS, media servers

Install and Run Media Server

Consideration of Platforms, Bandwidth and Firewalls and Deployment

Live Broadcast Streaming

Troubleshooting and Log files

Media Asset and Digital Rights Management

Learning Activities

Lectures and laboratory classes

Notes

This module builds on students' prior knowledge of creating multimedia AV presentations and provides both a theoretic and practical experience of configuring and running media streaming servers.