

## Liverpool John Moores University

Title: CORE DIGITAL TECHNOLOGIES  
Status: Definitive  
Code: **4501DIGMED** (108415)  
Version Start Date: 01-08-2011

Owning School/Faculty: Liverpool Screen School  
Teaching School/Faculty: Liverpool Community College

Team	Leader
Sarah Haynes	Y

**Academic Level:** FHEQ4      **Credit Value:** 24.00      **Total Delivered Hours:** 76.00  
**Total Learning Hours:** 240      **Private Study:** 164

### Delivery Options

Course typically offered: Semester 1

Component	Contact Hours
Lecture	8.000
Tutorial	8.000
Workshop	60.000

**Grading Basis:** 40 %

### Assessment Details

Category	Short Description	Description	Weighting (%)	Exam Duration
Report	AS1	A series of short exercises (digital and research-based) with supporting documentation, reports, sketchbooks	40.0	
Portfolio	AS2	Digital Project with Sketchbook and specifications	60.0	

### Aims

- 1. To provide a good overall understanding of the development technologies involved in digital media including the computer hardware, peripheral devices and system and communication software.*
- 2. To provide a good working knowledge and understanding of the software*

*development tools associated with digital media.*

*3. To allow students to explore the creative potential of the software development environments*

*4. To familiarise the students with the terminology associated with digital development and the variety of delivery systems and enable them to communicate effectively using this terminology.*

*5. To enable students to work with the development and delivery technologies in a confident and independent way and to be able to troubleshoot problems at a primary level.*

*6. To provide students with an appreciation of the potential and the limitations of the various delivery technologies.*

## **Learning Outcomes**

After completing the module the student should be able to:

- 1 Work confidently with computer hardware and peripheral devices, and understand how they work and communicate
- 2 Demonstrate a basic understanding of operating systems, networks and the internet
- 3 Work creatively with a range of software packages for the development of digital media resources
- 4 Exploit the potential of a variety of different digital media platforms, and understand their current limitations.

## **Learning Outcomes of Assessments**

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

A series of short exercises	1	2	3
Digital project	1	4	

## **Outline Syllabus**

*Through a series of practical workshops and short practical projects students will gain an understanding of:*

*The components of hardware*

*Data Storage*

*Principles of computer networking*

*An overview of Operating Systems*

*Software development tools*

*Basic digital delivery systems*

*Basics of entertainment platforms*

*A final project will bring together the development and delivery issues and provide students with a portfolio piece.*

## **Learning Activities**

Lectures, workshops and tutorials will be underpinned by short, practical exercises.

## References

<b>Course Material</b>	Book
<b>Author</b>	White, R. & Downs, T.
<b>Publishing Year</b>	2001
<b>Title</b>	How Computers Work
<b>Subtitle</b>	
<b>Edition</b>	
<b>Publisher</b>	Indianapolis, IN Que
<b>ISBN</b>	

<b>Course Material</b>	Book
<b>Author</b>	Gralla, P.
<b>Publishing Year</b>	2001
<b>Title</b>	How the Internet Works
<b>Subtitle</b>	
<b>Edition</b>	
<b>Publisher</b>	Indianapolis, IN Que
<b>ISBN</b>	

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## Notes

This module introduces students to a wide range of digital technologies and development software in a very practical, hands-on way. It begins with an exploration of the development tools themselves, the computer hardware components and peripheral devices.

Students will move from basic computer competency and ICT skills through to a broader understanding of the technologies involved in digital media production. They will be given an introduction to networking architectures and how they impact on productivity, and there will be a comparison between the different Operating Systems including Windows, and the Macintosh desktop.

They will also be introduced to the key software development programs to enable them to create their own digital resources for a range of different applications. These software toolsets will include bitmap graphic creation and manipulation, digital audio and video editing, vector graphics creation, a 2D animation environment and a typical web page development environment. They will learn about the creative potential of these software tools.

Data security, compression codecs and data transport rates are all topics that will be covered when delivery techniques such as broadband and narrowband are discussed.