

## Liverpool John Moores University

Title: 3D MODELLING  
Status: Definitive  
Code: **5506DIGMED** (108422)  
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:** FHEQ5  
**Credit Value:** 12.00  
**Total Delivered Hours:** 36.00  
**Total Learning Hours:** 120  
**Private Study:** 84

### Delivery Options

Course typically offered: Semester 2

Component	Contact Hours
Lecture	8.000
Tutorial	4.000
Workshop	24.000

**Grading Basis:** 40 %

### Assessment Details

Category	Short Description	Description	Weighting (%)	Exam Duration
Report	AS1	Coursework Short practical exercises building towards a final portfolio project.	100.0	

### Aims

- 1. To provide students with the opportunity to develop specialist skills within 3D development environments.*
- 2. To encourage the exploration of the 3D environment through the creation and manipulation of elements within this space.*
- 3. To enable students to develop their skills within a range of different applications of*

*virtual reality such as games, architectural composites, educational simulations, historical recreations, presentations, advertising and special effects.*

## **Learning Outcomes**

After completing the module the student should be able to:

- 1 Demonstrate a comprehensive understanding of 3D space.
- 2 Exploit the potential of a virtual environment to create and control objects within this world.
- 3 Conceive and realise empathetic and believable characters and create suitable ambient spaces for them to inhabit.
- 4 Apply the creative skills necessary to compile and realise a project from storyboard to working prototype.

## **Learning Outcomes of Assessments**

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

Short practical exercises	1	2	3	4
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## **Outline Syllabus**

*Overview of the pervasiveness of virtual reality in modern popular culture.*

*3D practical techniques including:*

*Modelling  
Texturing  
Lighting  
Camera Work  
Rendering options  
Characterisation  
Sound*

## **Learning Activities**

Lectures, tutorials, technical workshops

## **References**

<b>Course Material</b>	Book
<b>Author</b>	Brinkman, R
<b>Publishing Year</b>	1999
<b>Title</b>	The Art and Science of Digital Compositing"

<b>Subtitle</b>	
<b>Edition</b>	
<b>Publisher</b>	Morgan Kaufmann
<b>ISBN</b>	

<b>Course Material</b>	Book
<b>Author</b>	Stead, P
<b>Publishing Year</b>	2003
<b>Title</b>	"Animation Real-time Game Characters
<b>Subtitle</b>	
<b>Edition</b>	
<b>Publisher</b>	Charles River Media
<b>ISBN</b>	

## Notes

Students on this module will use an industry standard modelling package like Cinema 4D to look at the creation of environments, characters and objects, and the way in which these relate to each other and come together to create a coherent, believable whole. Once students have the building blocks, they will look at bringing them to life, and examine the increasingly blurred lines that separate what we know and accept to what we can create.

Students will be encouraged to look at breaking away from the stereotypes that abound within the 3D entertainment world that feed into adolescent fantasies and look at more effective and entertaining alternatives. The core skills for this exploration include modelling, texturing, lighting, characterisation, sound, storyboarding, camera skills, compositing, and exporting to use in a variety of situations.

In a series of exercises, they will practice their animation skills, environment construction and the creation of composites of 3D and real world content.

In some exercises, students will explore the way in which we can add to what we see as the 'real' world, and create environments that either mimic, or create anew, our vision of reality. The exercises will contribute to a final assessment in response to a brief.