

## Liverpool John Moores University

Title: COMPUTER GAME DESIGN  
Status: Definitive  
Code: **7024COMP** (103283)  
Version Start Date: 01-08-2011

Owning School/Faculty: Computing and Mathematical Sciences  
Teaching School/Faculty: Computing and Mathematical Sciences

Team	Leader
Martin Hanneghan	Y

**Academic Level:** FHEQ7  
**Credit Value:** 15.00  
**Total Delivered Hours:** 30.00  
**Total Learning Hours:** 150  
**Private Study:** 120

### Delivery Options

Course typically offered: Semester 1

Component	Contact Hours
Lecture	15.000
Seminar	15.000

**Grading Basis:** 40 %

### Assessment Details

Category	Short Description	Description	Weighting (%)	Exam Duration
Presentation	AS1	Each group will prepare an initial game design concept and present or 'pitch' their ideas to the whole class. This element is peer assessed.	20.0	
Report	AS2	Each group will then go on to produce a detailed design specification document. Each member of the team will peer assess the workload of the other team members and receive an overall weighted score for the combined piece of work.	80.0	

### Aims

- *To demonstrate a thorough understanding of the theory and practice of game design.*
- *To appraise current approaches applicable to computer game design.*
- *To develop critical language and thought with regard to computer game design.*

## **Learning Outcomes**

After completing the module the student should be able to:

- 1 Demonstrate the key processes involved in computer game design.
- 2 Identify and apply the principles of game theory.
- 3 Recognise and apply the principles of gameplay and balance.
- 4 Create a detailed game design document.
- 5 Provide critique and appraisal for game designs at the initial and final stages of development.

## **Learning Outcomes of Assessments**

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

Design concept	1	5			
Design specification	1	2	3	4	5

## **Outline Syllabus**

- *Game design documents: the initial concept, the treatment and detailed design document.*
- *Computer game genres*
- *Game theory and balance*
- *Principles of game design: level design, character design*
- *Game elements: mechanics, artwork, sound, control schemes, AI*
- *Critical evaluation of gameplay mistakes*

## **Learning Activities**

Lectures on key topics will be given and followed by group-led discussions and seminars aimed at specific problem solving activities that will develop skills necessary for this module. Playing computer games to dissect level constructs and game mechanics is encouraged.

## **References**

<b>Course Material</b>	Book
<b>Author</b>	Adams, E. & Rollings, A.
<b>Publishing Year</b>	2007
<b>Title</b>	1.
<b>Subtitle</b>	
<b>Edition</b>	
<b>Publisher</b>	
<b>ISBN</b>	0-13-168747-6

<b>Course Material</b>	Book
<b>Author</b>	Rollings, A. & Adams, E.
<b>Publishing Year</b>	2003
<b>Title</b>	undefined
<b>Subtitle</b>	
<b>Edition</b>	
<b>Publisher</b>	New Riders
<b>ISBN</b>	1-5927-3001-9

<b>Course Material</b>	Book
<b>Author</b>	Rollings, A. & Adams, E.
<b>Publishing Year</b>	2002
<b>Title</b>	Patterns in Game Design
<b>Subtitle</b>	
<b>Edition</b>	
<b>Publisher</b>	Coriolis Group
<b>ISBN</b>	1576108732

<b>Course Material</b>	Book
<b>Author</b>	Rouse III, R.
<b>Publishing Year</b>	2001
<b>Title</b>	Game Design: Theory & Practice
<b>Subtitle</b>	
<b>Edition</b>	
<b>Publisher</b>	Wordware Publishing Inc
<b>ISBN</b>	1556227353

<b>Course Material</b>	Book
<b>Author</b>	Laramee, F.D.
<b>Publishing Year</b>	2002
<b>Title</b>	Game Design Perspectives
<b>Subtitle</b>	
<b>Edition</b>	
<b>Publisher</b>	Charles River Media
<b>ISBN</b>	1584500905

<b>Course Material</b>	Book
<b>Author</b>	Rolling, A. & Morris, D.

<b>Publishing Year</b>	1999
<b>Title</b>	Game Architecture and Design
<b>Subtitle</b>	
<b>Edition</b>	
<b>Publisher</b>	Coriolis Group
<b>ISBN</b>	1576104257

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## Notes

This module provides practical experience of the game design process from initial concept through to the detailed design document stage. This design document can then be taken to the next stage in the games development pipeline: implementation (although this particular activity is outside the scope of this module).