

Liverpool John Moores University

Title: SERIOUS GAMES AND GAMIFICATION
Status: Definitive
Code: **7081COMP** (120639)
Version Start Date: 01-08-2018

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

Team	Leader
Stephen Tang	Y

Academic Level: FHEQ7 **Credit Value:** 20 **Total Delivered Hours:** 36
Total Learning Hours: 200 **Private Study:** 164

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
Report	AS1	Design and critical analysis of serious game application	100	

Aims

To provide the underpinning knowledge, concepts and principles of gamification.
To provide an opportunity to apply the principles and techniques of gamification to design a game-based solution to a specific domain.
To be aware of the game technologies available for creation of a serious game application.

Learning Outcomes

After completing the module the student should be able to:

- 1 Discuss the game-related concepts, application of gamification and the issues surrounding gamification.
- 2 Apply the appropriate gamification techniques to a specific domain.
- 3 Design a serious game for a specific domain using appropriate game technology and digital content creation tools.
- 4 Critically evaluate the design of a serious game and gamification application to a specific domain.

Learning Outcomes of Assessments

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

Design and critical analysis	1	2	3	4
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Outline Syllabus

Gamification

- Gamification and Games*
- Gamification Versus Serious Games*
- Elements of Games Design*
- Psychology and Motivation Theories*
- Application of Gamification in Real World*
- Challenges and Implications*

Serious Games

- Serious Games in Real World*
- Serious Games and Taxonomy of Serious Games*
- Games Ontology*
- Games Technology and Digital Content Creation*
- Gamification and Serious Games Design: Techniques and Pitfalls*
- Serious Games Prototyping*

Learning Activities

The lectures will cover the theory and concepts on serious games and gamification. The practical sessions will involve tutor-led practical design and development activities that leads to the implementation of a serious game prototype.

Notes

The first half of the module focuses on the mechanism of gamification, its application and the issues surrounding the topic. The second half focuses on the process of designing serious games and introduces the relevant toolsets to the students.