1. **Title of the module**

DIGM6390 (EL639) Video Games Development

1. **Division or partner institution which will be responsible for management of the module**

Division of Computing, Engineering, Mathematical Sciences (CEMS)

1. **The level of the module (Level 4, Level 5, Leel 6 or Level 7)**

Level 6

1. **The number of credits and the ECTS value which the module represents**

15 credits (7.5 ECTS)

1. **Which term(s) the module is to be taught in (or other teaching pattern)**

Autumn term (12 weeks)

1. **Prerequisite and co-requisite modules**

CO320 Introduction to Object-Oriented Programming

1. **The course(s) of study to which the module contributes**

BSc Computer Science (all variants), BSc Computing, BSc Aritficial Intelligence, BSc Business Information Technology, BSc Software Engineering and year in industry variants

1. **The intended subject specific learning outcomes.  
   On successfully completing the module students will be able to:**

*On successfully completing the level 6 module students will also be able to:*

8.1 Demonstrate a thorough understanding of game design theory and creative practice in the field of computer game development

8.2 Understand and apply principles of computer game design workflow to the production of a game

8.3 Critically analyse technical and usability issues associated with games design and development.

1. **The intended generic learning outcomes.  
   On successfully completing the module students will be able to:**

*On successfully completing the level 6 module students will be able to:*

9.1 Use Information and Communication Technologies

9.2 Present and communicate their creative and technical work in a timely manner

9.3 Work in flexible, creative and independent ways and to think critically

9.4 Learn effectively for the purpose of continuing professional development

1. **A synopsis of the curriculum**

This module introduces you to the principles and practice of video game design and development. Indicative topics include: game physics, AI, level design, player behaviour and cognition, game rules and mechanics, user interfaces, novel sensor devices, as well as programming concepts for gaming. Theory is followed by practical workshops in game development, culminating in a substantial project.

1. **Reading list (Indicative list, current at time of publication. Reading lists will be published annually)**

Lintrami, T (2017) Unity 2017 Game Development Essentials - Third Edition, Packt Publishing

Thorn A (2017) Mastering Unity 2017 Game Development with C# - Second Edition: Create professional games with solid gameplay features and professional-grade workflow, Packt Publishing

Salen K. and Zimmerman E. (2003) Rules of Play: Game Design Fundamentals. MIT Press

Crawford, C (1984) The Art of Computer Game Design

1. **Learning and teaching methods**

Total contact hours: 30  
Private study hours:120

Total hours: 150

1. **Assessment methods**
   1. Main assessment methods

Workshop exercises (20%)

Video game design and development (60%) - 80 hours workload

Video presentation (20%) – a short video on game design reflection

13.2 Reassessment methods

100% Coursework.

1. ***Map of module learning outcomes (sections 8 & 9) to learning and teaching methods (section12) and methods of assessment (section 13)***

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Module learning outcome** | *8.1* | *8.2* | *8.3* | *9.1* | *9.2* | *9.3* | *9.4* |
| **Learning/ teaching method** |  |  |  |  |  |  |  |
| Lectures | **X** | **X** | **X** |  |  |  | **X** |
| *Project supervision* |  | **X** | **X** |  | **X** | **X** | **X** |
| *Workshop* |  | **X** | **X** | **X** |  |  | **X** |
| *Presentation* |  |  | **X** | **X** | **X** | **X** | **X** |
| *Private Study* | **x** | **x** | **x** | **x** | **x** | **x** | **x** |
| **Assessment method** |  |  |  |  |  |  |  |
| *Workshop* | **X** | **X** | **X** | **X** |  | **X** |  |
| *Game Prototype* | **X** | **X** | **X** | **X** | **X** | **X** |  |
| *Video Presentation* |  |  | **X** | **X** |  |  | **X** |

1. **Inclusive module design**

The Division recognises and has embedded the expectations of current equality legislation, by ensuring that the module is as accessible as possible by design. Additional alternative arrangements for students with Inclusive Learning Plans (ILPs)/declared disabilities will be made on an individual basis, in consultation with the relevant policies and support services.

The inclusive practices in the guidance (see Annex B Appendix A) have been considered in order to support all students in the following areas:

a) Accessible resources and curriculum

b) Learning, teaching and assessment methods

*Refer to Annex B Appendix A for guidance on this section*

1. **Campus(es) or centre(s) where module will be delivered**

Canterbury

1. **Internationalisation**

The game industry has had a global impact culturally and economically. Topics in the module are comparable internationally.

**DIVISIONAL USE ONLY**

**Revision record – all revisions must be recorded in the grid and full details of the change retained in the appropriate committee records.**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Date approved | Major/minor revision | Start date of delivery of revised version | Section revised | Impacts PLOs (Q6&7 cover sheet) |
| 03/12/2020 | Minor | September 2021 | 6,7 | No |
|  |  |  |  |  |