**Module Specification**

**Validation partnership: Algebra University College, Croatia**

This module specification sets out the key information for a module designed by Goldsmiths’ partner institution, Algebra University College, Croatia. The module forms

part of a degree programme which is validated by Goldsmiths.

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| --- | --- |
| Module Title: | Rational Game and Level Design |
| Module Code (Algebra): | 02-568 |
| CATS Credit Value: | 8 |
| ECTS Credit Value: | 4 |
| UG / PG: | PG |
| Year of study: | 1 |
| Name of Department at Algebra: | Department of Multimedia Computing |
| This is a compulsory module for the following programmes: | Graduate Professional Programme in Applied Computer Engineering: subspecialisation in Game Development |
| This is an optional module for the following programmes: | - |

# 1. Hours

|  |  |
| --- | --- |
| **Activity:** | **Total time spent (in hours) across the module:** |
| Lectures | **15** |
| Independent Study | **75** |
| Seminars or Tutorials | **30** |
| Other (Please Specify) |  |
| **TOTAL LEARNING HOURS** | **120** |

**2. Module Content**

Overview of the module content:

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| --- |
| This module introduces students to techniques and ways of thinking for creating macro (level-to-level) and micro (same level) structures of a computer game.  This module is core to Game Development subspecialisation and provides a foundation for shaping game structures on macro and micro levels. Skills learnt in this module will contribute significantly to students’ development as professionals in respecting fields.  Students will learn:   * About different game types and game mechanic types. * How to design a 3C structure (character, control and camera). * About macro vs micro aspects of the game. * How to balance level and overall game difficulty. * About moment to moment gameplay (game beats).   The module assessment is based on solving a series of smaller practical tasks and on individual student projects that produce a computer game with properly designed macro and micro structures. |

# 3. Learning Outcomes

**The specific learning outcomes for this module are as follows:**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Learning outcome no:** | **Description** | **Level** | **Points** | **ECTS/CATS** |
| LO1 Minimum | Evaluate the mechanics of standard types of computer games. | 7 | 9 | 0.5 ECTS  1 CATS |
| LO1 Desired | Evaluate the mechanics of non-standard types of computer games. | 5 |
|  | | | | |
| LO2 Minimum | Critically evaluate the 3C structure (character, control, camera) of an existing computer game and recommend a 3C structure for own computer game. | 7 | 14 | 0.8 ECTS  1.6 CATS |
| LO2 Desired | Critically evaluate the 3C structure (character, control, camera) of an existing computer game, recommend a 3C structure for own computer game and in at least one iteration improve the game based on feedback. | 6 |
|  | | | | |
| LO3 Minimum | Assess the digital sizes of an existing computer game and estimate the required digital sizes for own computer game. | 7 | 4 | 0.4 ECTS  0.8 CATS |
| LO3 Desired | Assess the digital sizes of an existing computer game, estimate the required digital sizes for own computer game and in at least one iteration improve the game based on feedback. | 4 |
|  | | | | |
| LO4 Minimum | Critically evaluate the macro structure of levels in an existing computer game and design a macro structure of levels for own computer game. | 7 | 8 | 0.5 ECTS  1 CATS |
| LO4 Desired | Critically evaluate the macro structure of levels in an existing computer game, design a macro structure of levels for own computer game and in at least one iteration improve the game based on feedback. | 4 |
|  | | | | |
| LO5 Minimum | Design micro level elements for own computer game. | 7 | 14 | 0.8 ECTS  1.6 CATS |
| LO5 Desired | Design micro level elements for own computer game and in at least one iteration improve the game based on feedback. | 6 |
|  | | | | |
| LO6 Minimum | Recommend balancing difficulty levels for own computer game. | 7 | 18 | 1 ECTS  2 CATS |
| LO6 Desired | Recommend balancing difficulty levels for own computer game and add at least one peripheral game mechanic. | 8 |

# 4. Assessment

# The following assessment methods will be used to assess the achievement of learning outcomes:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Assessment Name** | **Assessment Type** | **Assessment Requirements** | **Graded or Pass/Fail** | **Assessment to be passed to pass the module (Y/N)** |
| Individual Project | Project | Students individually work on the project during the second semester. Students are expected to produce a computer game with correctly designed macro and micro structures. Allocation of time per student is 40 hours. | Graded | N |
| Homework | Practical assessment | The homework aims to encourage students to work independently and to provide their work in a timely manner. In each homework, students will typically have a one or two practical problems. Students are asked to solve each problem and submit the work before the deadline in order to achieve points. | Graded | N |
| Schoolwork | Practical assessment | The schoolwork aims to encourage students to work continuously and be better prepared for the exam. In each schoolwork, students will typically have one or two smaller practical problems. The total duration of all schoolworks per student is 200 minutes. | Graded | N |

# The assessment for this module will comprise a series of tasks that specifically tests each of the minimum learning outcomes and more complex tasks that test the desired learning outcomes.

# In order to pass the module, students must achieve a minimum of 50% of the points available in each Learning Outcome (minimum and desired outcome points combined) and accumulate at least 50.01 points across the module.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | Individual Project | Homework | Schoolwork | **Total Points** |
| **Learning Outcome number: LO1** |  |  |  |  |
| *‘Minimum’ outcome points* | 4 | 1 | 4 | 9 |
| *‘Desired’ outcome points* | 2 | 1 | 2 | 5 |
| **Learning Outcome number: LO2** |  |  |  |  |
| *‘Minimum’ outcome points* | 5 |  | 9 | 14 |
| *‘Desired’ outcome points* | 3 |  | 3 | 6 |
| **Learning Outcome number:** **LO3** |  |  |  |  |
| *‘Minimum’ outcome points* | 2 |  | 2 | 4 |
| *‘Desired’ outcome points* | 2 |  | 2 | 4 |
| **Learning Outcome number:** **LO4** |  |  |  |  |
| *‘Minimum’ outcome points* | 4 |  | 4 | 8 |
| *‘Desired’ outcome points* | 2 |  | 2 | 4 |
| **Learning Outcome number:** **LO5** |  |  |  |  |
| *‘Minimum’ outcome points* | 9 |  | 5 | 14 |
| *‘Desired’ outcome points* | 3 |  | 3 | 6 |
| **Learning Outcome number:** **LO6** |  |  |  |  |
| *‘Minimum’ outcome points* | 14 | 2 | 2 | 18 |
| *‘Desired’ outcome points* | 4 | 2 | 2 | 8 |
|  |  |  |  | **100** |

# 5. Indicative Reading List

# The following is an indicative reading list for the module. This includes key texts and/or journals but is not an exhaustive list of materials:

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| Essential reading:   1. Rogers, S. (2014) *Level Up! The Guide to Great Video Game Design*. Hoboken: Wiley.   Recommended reading:   1. Koster, R. (2013) *A Theory of Fun for Game Design*. Sebastopol: O'Reilly Media. |