Module Descriptor

Game Design, Programming and Development

Module Code: GAV5002-B
Academic Year: 2018-19
Credit Rating: 20
School: Department of Media Design and Technology
Subject Area: Games, Animation and Visual Effects
FHEQ Level: FHEQ Level 5
Module Leader: Dr Tao Wan

Additional Tutors:

Pre-requisites:
Co-requisites:

Contact Hours

<table>
<thead>
<tr>
<th>Type</th>
<th>Hours</th>
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<tbody>
<tr>
<td>Lectures</td>
<td>12</td>
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<tr>
<td>Tutorials</td>
<td>24</td>
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<tr>
<td>Laboratory</td>
<td>12</td>
</tr>
<tr>
<td>Directed Study</td>
<td>152</td>
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Availability Periods

<table>
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<tr>
<th>Occurrence</th>
<th>Location/Period</th>
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<tbody>
<tr>
<td>BDA</td>
<td>University of Bradford / Semester 1 (Sep - Jan)</td>
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Module Aims

To introduce the technology of computer game construction and programming. To help you develop your game programming skills through the implementation of your own game ideas. To instil a balanced and holistic approach to produce design specific to your chosen project. To develop further design methods and techniques and a rigorous application of the design process and facilitate autonomous learning in your chosen subject area.
Outline Syllabus
This module covers:
1. The design process - scoping the brief; arts work; project management; self motivation; project evaluation; time management; design strategies; technical challenges.
2. Introduction of windows-based computer games structure and programming, such as XNA; basic concepts and principles of games programming; introduction to an industry-standard interface programming language; game algorithms, image manipulation in the games environment, interaction, artificial intelligence, game physics.

Module Learning Outcomes
On successful completion of this module, students will be able to...
1. analyse the basic concepts and principles behind computer games development in a programming context; have a clear overview of the process of design and development of computer games.
2. realise your own game ideas through the development of a computer programme.
3. work effectively in a team environment.

Learning, Teaching and Assessment Strategy
Knowledge is imparted via lectures, applied through seminars and tutorials and project design, programming and development work. Assessment is via an individual game project to allow students to demonstrate practical skills. Knowledge and understanding are assessed via the written components (report). The assessments will be individual based coursework assignments; the supplementary assessment will also take the form of individual assignments.

Mode of Assessment

<table>
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<tr>
<th>Type</th>
<th>Method</th>
<th>Description</th>
<th>Length</th>
<th>Weighting</th>
<th>Final Assess'</th>
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<tr>
<td>Summative</td>
<td>Coursework</td>
<td>Game product</td>
<td>0 hours</td>
<td>65%</td>
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<td>Summative</td>
<td>Coursework</td>
<td>Game Design and Development report (2000 Words)</td>
<td>0 hours</td>
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Legacy Code (if applicable)
EM-0234D

Reading List
To view Reading List, please go to rebus:list.