Module Details

Module Title: Facial Modelling/Animation
Module Code: GAV5005-B
Academic Year: 2019-20
Credit Rating: 20
School: Department of Media Design and Technology
Subject Area: Games, Animation and Visual Effects
FHEQ Level: FHEQ Level 5
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>Laboratory</td>
<td>12</td>
</tr>
<tr>
<td>Directed Study</td>
<td>176</td>
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Availability

<table>
<thead>
<tr>
<th>Occurrence</th>
<th>Location / Period</th>
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<tbody>
<tr>
<td>BDA</td>
<td>University of Bradford / Semester 2 (Feb - May)</td>
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Module Aims

This module aims to develop your research skills, with regard to developing a character for facial expressions and or dialog, to develop your facial modelling skills for character expressions and or dialog, to prepare your for industry, by developing a 'restricted' true to industry brief, and to develop an understanding of modelling, texturing, rigging and animation for facial animation, dialog and expressions.

Outline Syllabus

1. Introduction to brief and marking criteria, (documentation) view student work
2. Edge loops and muscle structure, 30 min test, polygon modelling, break down (your) drawing, modelling Tutorial (polygons), review films
3. Modelling tutorial, (refining the model, modelling and rigging the eyes) (personal tutorial for storyboard and calendar) review films
4. Texturing tutorial, (texturing face, normal's, uv's, mapping, uv texture editor, lighting, cameras, Depth of field) review films
5. Modelling tutorial, (rigging jaw with bones, skinning, blend shapes, component editor, teeth) review films
6. Rigging tutorial, (rigging tong, jaw control)
7. Morphing tutorial, (additive shapes, different face shapes for dialogue, phonemes, expression morph targets)
8. Modelling and sound tutorial, (blink, modelling tips, sound Break down soundtrack for dialogue, dope sheet.)
9. Animation tutorial, (tips, animation, graph editor)
10. Render and composite tutorial (render settings and After Effects, composite)
11. Feedback , personal tutorials and support
12. Feedback , personal tutorials and support

Learning Outcomes

1. work to a 'restricted' brief that mirrors true industry practice; critically evaluate a piece of animation for the purpose of improving the conceptual and artistic development of an effective piece of character animation for dialogue.
2. develop a fully functioning character with facial expressions and or dialog (using appropriate modelling, texturing); develop a practical and critical awareness of the production processes in the development of an effective dialogue animation; integrate complicated production pipelines in the completion of the project.
3. deploy enhanced technical analysis and problem solving skills.

Learning, Teaching and Assessment Strategy

Module delivered through a combination of practical labs, didactic presentations, group work, and directed reading. The reading will provide the theoretical background, the didactic presentations will model best practice and the lab sessions will reaffirm the practical skills.

As part of the critical evaluation and social development the student has to document the production process in the form of a Blog. This initiates personal development in the form of, personal critical evaluation skills, time management, personal / peer feedback and engagement, social peer assent. The blog's fundamental purpose is to develop personal and group formative and summative assent in the evaluation of the production.

Supplementary Assessment is to repair deficiencies in original submission.

Mode of Assessment

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<tr>
<th>Type</th>
<th>Method</th>
<th>Description</th>
<th>Length</th>
<th>Weighting</th>
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<tbody>
<tr>
<td>Summative</td>
<td>Dissertation or Project Report</td>
<td>Documentation</td>
<td>-2000 words</td>
<td>30%</td>
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<tr>
<td>Summative</td>
<td>Coursework</td>
<td>Produce an animation and the computer model with textures</td>
<td>10-20 second animation</td>
<td>70%</td>
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**Reading List**

To access the reading list for this module, please visit [https://bradford.rl.talis.com/index.html](https://bradford.rl.talis.com/index.html).

*Please note:*

*This module descriptor has been published in advance of the academic year to which it applies. Every effort has been made to ensure that the information is accurate at the time of publication, but minor changes may occur given the interval between publishing and commencement of teaching. Upon commencement of the module, students will receive a handbook with further detail about the module and any changes will be discussed and/or communicated at this point.*