1. **Title of the module**

EL317/DIGM3170 Technical Rigging

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

Computing, Engineering and Mathematical Sciences

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

Level 4

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)**

Spring

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

None.

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

BSc Digital Design

BSc Digital Design with a Year in Industry

BSc Digital Design with a Year Abroad

1. **The intended subject specific learning outcomes.  
   On successfully completing the module students will be able to:**
2. Understand the tools and pipeline involved in technical rigging and to use such a structure in their own individual work.
3. Appreciate the main constraining conditions that affect computer-based rigging and animation in an industrial pipeline situation
4. Understand the technical, aesthetic and industrial parameters guiding professional 3D rigging and animation.
5. Present work effectively in a show reel form.
6. **The intended generic learning outcomes.  
   On successfully completing the module students will be able to:**
7. Use Information and Communication Technologies
8. Present and communicate their creative and technical work in a timely manner
9. Work in flexible, creative and independent ways and apply critical thinking, reasoning and reflection.
10. **A synopsis of the curriculum**

This module introduces the stages of the workflow of 3D rigging and animation to familiarise students with what is involved in production. Weekly module workshops introduce an array of industry-standard applications and the techniques necessary for production, resulting in a practical understanding of the entire process. Indicative topics include; inverse kinematics, forward kinematics, joints system, Maya Embedded Language (MEL), scripting for rigging, skinning, mechanical rigging, humanoid mechanical rigging, character rigging, facial rigging, animal rigging, modelling for rigged bodies.

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

• Williams, R. E. (2009). The Animator’s Survival Kit: Manual of Methods, Principles, and Formulas for Computer, Stop-motion, Games and Classical Animators. London: Faber and Faber.

• Derakhshani, Dariush. 2015. Introducing Autodesk Maya 2016. Indianapolis, IN: John Wiley & Sons.

• Palamar, Todd. 2015. Mastering Autodesk Maya 2016. Hoboken: John Wiley & Sons

• Fridsma, Lisa and Brie Gyncild. 2020. Adobe After Effects CC classroom in a book. San Jose, California, USA: Adobe Systems Incorporated.

• Christiansen, Mark. 2014. Adobe After Effects CC: visual effects & compositing studio techniques. Peachpit.

1. **Learning and teaching methods**

Total contact hours: 30

Total private study hours:120

Total module study hours: 150

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

Technical Rigging Reel (3-4 weeks development work) – 30%

Rigging Project (7-8 weeks development work) – 70%

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 | 8.4 | 9.1 | 9.2 | 9.3 |
| **Learning/teaching method** |  |  |  |  |  |  |  |
| **Private Study** | **x** | **x** | **x** | **x** | **x** | **x** | **x** |
| Tutorial Lectures | **x** |  | **x** |  |  |  |  |
| Workshops | **x** | **x** | **x** | **x** | **x** | **x** | **x** |
| **Assessment method** |  |  |  |  |  |  |  |
| *Technical Rigging Reel* | **x** | **x** | **x** | **x** | **x** | **x** | **x** |
| *Rigging Project* | **x** | **x** | **x** | **x** | **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

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

Canterbury

1. **Internationalisation**

This module follows the latest practices and techniques adopted by the global rigging and animation industry using industry-standard software.

**DIVISIONAL OFFICE 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) |
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