

## **MODULE SPECIFICATION PROFORMA**

| Module Title:   | 3D Sculpting  |                  |  | Level: |    | 5   |     | edit<br>lue: | 20 |     |
|---|---|------------------|--|--------|----|-----|-----|--------------|----|-----|
| Module code:  | ARD522 Is this a new Yes module? Code of module being replaced: |                  |  | -      |    |     |     |              |    |     |
| Cost<br>Centre(s):  | GADC  | JACS3 code: W280 |  |        |    |     |     |              |    |     |
| With effect from: September 17  |   |                  |  |        |    |     |     |              |    |     |
| School:   | I: Creative Arts Module Leader: Stev                            |                  |  | e Jarv | is |     |     |              |    |     |
| Scheduled learn   | ing and teaching  | hours            |  |        |    |     |     |              | 50 | hrs |
| Guided independent study 150 hrs  |   |                  |  |        |    | hrs |     |              |    |     |
| Placement   | Placement 0 hrs   |                  |  |        |    |     | hrs |              |    |     |
| Module duratio  | Module duration (total hours) 200 hrs                           |                  |  |        |    |     |     | hrs          |    |     |
| Programme(s) in which to be offered Core Option   |   |                  |  |        |    |     |     | on           |    |     |
| BA (Hons) Game Art  |   |                  |  |        | ✓  |     |     |              |    |     |
| MDes Game Art   |   |                  |  |        | ✓  |     |     |              |    |     |
| Pre-requisites  |   |                  |  |        |    |     |     |              |    |     |
| N/A   |   |                  |  |        |    |     |     |              |    |     |
| Office use only Initial approval: December 16  APSC approval of modification: Enter date of approval  Have any derogations received SQC approval?  If new module, remove previous module spec from directory?  Yes □ No ✓  Yes □ No ✓ |   |                  |  |        |    |     |     |              |    |     |

### **Module Aims**

- To extend practice in a variety of 3D Sculpting techniques culminating in design and production.
- To extend technical design skills and practice in relation to the subject matter being explored.
- Demonstrate an understanding of 3D Sculpting work trough's and purpose in relation to the creation of game assets.
- Develop an understanding of the limitations of real-time hardware and professional workflows for games development.

### **Intended Learning Outcomes**

At the end of this module, students will be able to:

- 1. Demonstrate extended practice in the effective manipulation of 3D Sculptures using industry standard techniques.
- 2. Demonstrate extended technical skills and design techniques using appropriate software in solving communication problems.
- 3. Apply critical reasoning to the selection and use of different 3D Sculpting workflows and reflect on current industry practice.
- 4. Demonstrate extended technical skills and design techniques using appropriate software in solving communication problems.

# Key skills for employability

| KS1  | Written, oral and media communication skills                             |
|------|--|
| KS2  | Leadership, team working and networking skills                           |
| KS3  | Opportunity, creativity and problem solving skills                       |
| KS4  | Information technology skills and digital literacy                       |
| KS5  | Information management skills  |
| KS6  | Research skills  |
| KS7  | Intercultural and sustainability skills                                  |
| KS8  | Career management skills   |
| KS9  | Learning to learn (managing personal and professional development, self- |
|      | management)  |
| KS10 | Numeracy   |

| At the end of this module, students will be able to |   |   | Key Skills |     |  |
|---|---|---|------------|-----|--|
| 1   |   |   | KS1        | KS3 |  |
|   | 1 | Demonstrate extended practice in the effective manipulation of 3D Sculpting using industry standard techniques.           | KS4        | KS6 |  |
|   |   |   | KS9        |     |  |
|   | 2 | Demonstrate extended technical skills and design techniques using appropriate software in solving communication problems. | KS3        | KS4 |  |

| 3 | Apply critical reasoning to the selection and use of different 3D Sculpting workflows and reflect on current industry practice. | KS2 | KS6 |
|---|---|-----|-----|
| 4 | Demonstrate extended technical skills and design techniques using appropriate software in solving communication                 | KS1 | KS4 |
|   | problems.   | KS5 | KS9 |

### Transferable skills and other attributes

Skills and attributes which may be developed, but are not necessarily assessed as part of the module include:

- Collaborative work, as a team member
- Planning
- Writing skills and the ability to critical analyse own work
- IT skills
- Communication skills
- Autonomy

## **Derogations**

None

#### Assessment:

Formative assessment will take place during group critiques with student participation and in individual tutorials that will take place at the end of the module. Students will be assessed on the presentation of concepts, design and production of final work. They will also be expected to develop a reflective journal that evidences their research, investigation of ideas and a critical evaluation of their work for this module. Assessment will also take into consideration their attendance, participation and performance during lectures, seminars, and workshops for the overall module. Individual assessments will take place at the end of the module with a major review of work at the end of the year.

In assessing the learning outcomes, a variety of factors will be taken into account, these include:

- Research and investigation of 3D Sculpting within the Game Art discipline.
- Conceptual design development.
- Communication of 3D Sculpting, solutions to a given assignment.
- The appropriate use of media and techniques.
- Presentation and evaluation of final piece.

| Asse | essment<br>ber | Learning<br>Outcomes<br>to be met | Type of assessment | Weighting<br>(%) | Duration<br>(if exam) | Word count<br>(or<br>equivalent if<br>appropriate) |
|------|----------------|-----------------------------------|--------------------|------------------|-----------------------|--|
|      | 1              | All (1-4)                         | Coursework         | 100              | N/A                   | N/A  |

#### **Learning and Teaching Strategies:**

Key lectures will examine 3D Sculpting within the Game industry and character development. Students will be introduced to new techniques and challenges using digital processes and may interpret their model solutions in a number of directions using a variety of techniques and methods. Emphasis will be placed on research and analysis from critical and contextual viewpoints.

Students will synthesise subject matter and determine the approach and structure of their concepts in answer to assignments. They will consider the relationship between target audience/viewer and what is being communicated. Practical studio work will involve both design and production through to finished presentation. Students will make formal presentations of their work to their tutors and peer group for critical analysis. Emphasis will focus on the effectiveness of creating final, game ready models.

Students will be encouraged to discuss the formulation of solutions in dialogue with peers and tutors. They will organise and manage their work, developing work schedules and documenting work on their reflective journals.

#### Syllabus outline:

This module broadly introduces students to new and more challenging areas of practice that will encourage the utilisation of advancements in new technology in the outcome of their work. Outcomes will be differentiated from assignments set within each students design results.

Ideas will be explored and developed creatively to produce designs that will demonstrate creative thinking as well as extending practice through using advanced software techniques in the production process.

Students will investigate current industry workflows and compare their own work, reflecting on the results.

#### **Indicative Content:**

Exploring 3D Sculpting and extended techniques of production such as: topology, geometry, normal map baking, UV mapping and texturing. Abstracting images, exploring meaning, message and narrative forms of communication, consideration of character and environment.

### Bibliography:

#### **Essential reading**

Keller, E. (2013), *Maya Visual Effects the Innovator's Guide*: Autodesk Official Press. Zimmerman, E. & Salen, K. (2003), *Rules of Play: Game Design Fundamentals*, The MIT Press.

Mike De la Flor (2010), Digital sculpting with Mudbox, Focal Press

### Other indicative reading

Williams, R. (2001), *The Animators Survival Toolkit*, Faber & Faber. London Ingrassia, M. (2009), *Maya for games modelling and texturing techniques with Maya and Mudbox*, Focal Press/Elsevier, Amsterdam; Boston.

Lanier, L. (2007), *Maya professional tips and techniques*, Wiley Pub., Indianapolis, Ind. Watkins, A. (2012), *Getting started in 3D with Maya create a project from start to finish*: model, texture, rig, animate, and render in Maya Focal Press, Waltham, MA Derakhshani, D. (2013), *Introducing Autodesk Maya 2014*, John Wiley & Sons.

#### **Periodicals and Websites**

Creative Review, Centaur Communications.

Computer Arts, Future Publishing

Develop, Intent Media

EDGE, Future Publishing

http://creativecrash.com

http://www.cgsociety.org

http://www.digitaltutors.com

http://www.simplymaya.com

http://www.autodesk.com/education/home