

MODULE SPECIFICATION PROFORMA

Module Title:	3D Modelling	Level:	5	Credit Value:	20
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Module code:	ARD521	Is this a new module?	Yes	Code of module being replaced:	
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Cost Centre(s):	GADC	JACS3 code:	W280
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With effect from:	September 17
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School:	Creative Arts	Module Leader:	Steve Jarvis
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Scheduled learning and teaching hours	50 hrs
Guided independent study	150 hrs
Placement	0 hrs
Module duration (total hours)	200 hrs

Programme(s) in which to be offered	Core	Option
BA (Hons) Game Art	✓	<input type="checkbox"/>
MDes: Game Art	✓	<input type="checkbox"/>

Pre-requisites
N/A

Office use only

Initial approval: December 16

APSC approval of modification: *Enter date of approval*

Version: [Click here to enter text.](#)

Have any derogations received SQC approval?

Yes No N/A ✓

If new module, remove previous module spec from directory?

Yes No ✓

Module Aims
<ul style="list-style-type: none"> • To extend practice in a variety of 3D Modelling 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 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:
<ol style="list-style-type: none"> 1. Demonstrate extended practice in the effective manipulation of 3D models 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 modelling 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	Demonstrate extended practice in the effective manipulation of 3D models using industry standard techniques.	KS1	KS3
		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 modelling workflows and reflect on current industry practice.	KS2	KS6

4	Demonstrate extended technical skills and design techniques using appropriate software in solving communication problems.	KS1	KS4
		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 prior to Christmas. 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 Modelling within the Game Art discipline.
- Conceptual design development.
- Communication of 3D Modelling, solutions to a given assignment.
- The appropriate use of media and techniques.
- Presentation and evaluation of final piece.

Assessment number	Learning Outcomes to be met	Type of assessment	Weighting (%)	Duration (if exam)	Word count (or equivalent if appropriate)
1	All (1-4)	Coursework	100	N/A	N/A

Learning and Teaching Strategies:

Key lectures will examine 3D Modelling within the Game industry. 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. 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 Modelling and extended techniques of production such as: topology, geometry, normal map baking, UV mapping and texturing.

**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*, MIT Press.
Derakhshani, D. (2013) *Introducing Autodesk Maya 2014*, John Wiley & Sons.

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

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>