

SGD211 Game Art: Characters & Vehicles

School: School of Business and Creative Industries

2024 Semester 2

UniSC Sunshine Coast
UniSC Moreton Bay

**BLENDED
LEARNING**

Most of your course is on campus but you may be able to do some components of this course online.

Online

ONLINE

You can do this course without coming onto campus.

Please go to usc.edu.au for up to date information on the teaching sessions and campuses where this course is usually offered.

1. What is this course about?

1.1. Description

This course extends on the fundamental skills and knowledge of 2D and 3D computer graphics acquired in SGD101. This course focusses on techniques and concepts associated with the design and creation of both organic and hard surface 3D models within a professional game development context. You will identify, communicate and apply essential theoretical and practice-based approaches in the design and production of both 3D characters and vehicles.

1.2. How will this course be delivered?

ACTIVITY	HOURS	BEGINNING WEEK	FREQUENCY
BLENDED LEARNING			
Learning materials – Interactive online learning activities.	1hr	Week 1	12 times
Tutorial/Workshop 1 – Scheduled face to face workshops.	2hrs	Week 1	12 times
ONLINE			
Learning materials – Interactive online learning activities.	1hr	Week 1	12 times
Tutorial/Workshop 1 – Scheduled online workshops (Recorded).	2hrs	Week 1	12 times

1.3. Course Topics

- 3D model structure
- Sub Division modelling
- Scripting in 3DS Max
- Rendering and presentation
- 3D design layout and composition
- Digital Sculpting Techniques
- Mesh Retopology and UV Unwrapping
- Lights and Rendering
- Working with Arnold

2. What level is this course?

200 Level (Developing)

Building on and expanding the scope of introductory knowledge and skills, developing breadth or depth and applying knowledge and skills in a new context. May require pre-requisites where discipline specific introductory knowledge or skills is necessary. Normally, undertaken in the second or third full-time year of an undergraduate programs.

3. What is the unit value of this course?

12 units

4. How does this course contribute to my learning?

COURSE LEARNING OUTCOMES	GRADUATE QUALITIES
On successful completion of this course, you should be able to...	Completing these tasks successfully will contribute to you becoming...
1 Discuss the technical, creative and aesthetic decision making processes associated with the design process.	Creative and critical thinker
2 Develop an understanding of how an audience would perceive the assets in a real-time application.	Empowered Ethical
3 Acquire advanced optimization skills in a 2D or 3D art, that will avoid wasting resources, or affect the performance of a real-time application.	Knowledgeable Sustainability-focussed
4 Discover innovative ways in which design tools may be applied to produce creative solutions to a diverse range of design challenges.	Knowledgeable Empowered

5. Am I eligible to enrol in this course?

Refer to the [UniSC Glossary of terms](#) for definitions of “pre-requisites, co-requisites and anti-requisites”.

5.1. Pre-requisites

Not applicable

5.2. Co-requisites

Not applicable

5.3. Anti-requisites

Not applicable

5.4. Specific assumed prior knowledge and skills (where applicable)

It is assumed that a student will know how to Polygon Model in Maya or 3D Studio Max. It is assumed that students will have an understanding of Photoshop.

6. How am I going to be assessed?

6.1. Grading Scale

Standard Grading (GRD)

High Distinction (HD), Distinction (DN), Credit (CR), Pass (PS), Fail (FL).

6.2. Details of early feedback on progress

Commencing in Week 1, feedback is given weekly to each student when they show their progress of their assessments to the Tutor.

6.3. Assessment tasks

DELIVERY MODE	TASK NO.	ASSESSMENT PRODUCT	INDIVIDUAL OR GROUP	WEIGHTING %	WHAT IS THE DURATION / LENGTH?	WHEN SHOULD I SUBMIT?	WHERE SHOULD I SUBMIT IT?
All	1	Artefact - Creative, and Written Piece	Individual	30%	1000 words	Week 6	Online Submission
All	2	Artefact - Creative, and Written Piece	Individual	30%	1000 words	Week 10	Online Submission
All	3	Artefact - Creative, and Written Piece	Individual	40%	1000 words	Week 13	Online Submission

All - Assessment Task 1: Optimized Game-ready Vehicle, and reflective Report

GOAL:	Use hard surface modelling techniques to create a game ready vehicle.		
PRODUCT:	Artefact - Creative, and Written Piece		
FORMAT:	<p>This task has three parts:</p> <p>Professional/Industry format. You will design and create a vehicle suitable for use in a real-time game engine. You will design the vehicle to specifications set via the Assessment Criteria Sheet. Presentation: You will render and present your work to specifications set via the Assessment Criteria Sheet.</p> <p>Academic format. Reflection – this will be a reflective report and will enable you to discuss your design and thinking processes. A report template will be provided.</p>		
CRITERIA:	No.		Learning Outcome assessed
	1	Show creative thinking via concepts, planning and descriptions of your work.	1
	2	The selection of subject matter for this Assessment must adhere to the style set forth in Assessment 1.	1 4
	3	All assets are to be created to an equal level of quality.	1 3
	4	Demonstrate an understanding of optimization techniques and produce assets to as close as possible to an Industry standard.	2 4
	5	Must adhere to the Technical Limits set via the Assessment Criteria Sheet.	1 3

All - Assessment Task 2: Optimized Game-ready Character and reflective Report

GOAL:	Produce a Character ready for export into a real-time engine.
PRODUCT:	Artefact - Creative, and Written Piece
FORMAT:	<p>This task has two parts:</p> <p>Professional/Industry format.</p> <p>Using organic modelling techniques, you will create a game-ready character for use in a real-time game engine, to limits set via the Assessment Criteria Sheet. A Character Concept Sheet showing Front and Side Views must be created before production of the Character. Character must be to scale. Demonstrate optimization skills in game art, that will avoid wasting resources, or affect the performance of a real-time application.</p> <p>Academic format.</p> <p>Reflection – this will be a reflective report and will enable you to discuss your design and thinking processes. A report template will be supplied.</p>

CRITERIA:	No.	Learning Outcome assessed
	1 Show creative thinking via concepts, planning and descriptions of your work.	1
	2 All assets are to be created to an equal level of quality.	1
	3 Demonstrate an understanding of optimization techniques and produce assets to as close as possible to an Industry standard.	2 3
	4 Must adhere to the Technical Limits set via the Assessment Criteria Sheet.	2 3

All - Assessment Task 3: Presentation, Rigs and Animation, and reflection Report

GOAL:	Produce Game-ready Assets ready for export into a real-time engine.												
PRODUCT:	Artefact - Creative, and Written Piece												
FORMAT:	<p>Professional/Industry format. You will create all Assets associated with prior work created, to limits set via the Assessment Criteria Sheet. A concept sheet showing intention in implementation and presentation of work before the production of each Asset. You will create additional elements and refine work for display. Rigging implementation must be considered, if it needs to be (examples: weapons that have sub-parts that move, reload etc).</p> <p>Academic format. Reflection – this will be a reflective report and will enable you to discuss your design and thinking processes. A report template will be provided.</p>												
CRITERIA:	<table border="1"> <thead> <tr> <th>No.</th> <th>Learning Outcome assessed</th> </tr> </thead> <tbody> <tr> <td>1 Show creative thinking via concepts, planning and descriptions of your work.</td> <td>1 3</td> </tr> <tr> <td>2 The selection of subject matter for this Assessment must adhere to the style set forth in Assessments 1 and 2.</td> <td>1 4</td> </tr> <tr> <td>3 All assets are to be created to an equal level of quality.</td> <td>2</td> </tr> <tr> <td>4 Demonstrate an understanding of optimization techniques and produce assets to as close as possible to an Industry standard.</td> <td>3 4</td> </tr> <tr> <td>5 Must adhere to the Technical Limits set via the Assessment Criteria Sheet.</td> <td>4</td> </tr> </tbody> </table>	No.	Learning Outcome assessed	1 Show creative thinking via concepts, planning and descriptions of your work.	1 3	2 The selection of subject matter for this Assessment must adhere to the style set forth in Assessments 1 and 2.	1 4	3 All assets are to be created to an equal level of quality.	2	4 Demonstrate an understanding of optimization techniques and produce assets to as close as possible to an Industry standard.	3 4	5 Must adhere to the Technical Limits set via the Assessment Criteria Sheet.	4
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7. Directed study hours

A 12-unit course will have total of 150 learning hours which will include directed study hours (including online if required), self-directed learning and completion of assessable tasks. Student workload is calculated at 12.5 learning hours per one unit.

8. What resources do I need to undertake this course?

Please note: Course information, including specific information of recommended readings, learning activities, resources, weekly readings, etc. are available on the course Canvas site– Please log in as soon as possible.

8.1. Prescribed text(s) or course reader

There are no required/recommended resources for this course.

8.2. Specific requirements

Not applicable

9. How are risks managed in this course?

Health and safety risks for this course have been assessed as low. It is your responsibility to review course material, search online, discuss with lecturers and peers and understand the health and safety risks associated with your specific course of study and to familiarise yourself with the University's general health and safety principles by reviewing the [online induction training for students](#), and following the instructions of the University staff.

10. What administrative information is relevant to this course?

10.1. Assessment: Academic Integrity

Academic integrity is the ethical standard of university participation. It ensures that students graduate as a result of proving they are competent in their discipline. This is integral in maintaining the value of academic qualifications. Each industry has expectations and standards of the skills and knowledge within that discipline and these are reflected in assessment.

Academic integrity means that you do not engage in any activity that is considered to be academic fraud; including plagiarism, collusion or outsourcing any part of any assessment item to any other person. You are expected to be honest and ethical by completing all work yourself and indicating in your work which ideas and information were developed by you and which were taken from others. You cannot provide your assessment work to others. You are also expected to provide evidence of wide and critical reading, usually by using appropriate academic references.

In order to minimise incidents of academic fraud, this course may require that some of its assessment tasks, when submitted to Canvas, are electronically checked through Turnitin. This software allows for text comparisons to be made between your submitted assessment item and all other work to which Turnitin has access.

10.2. Assessment: Additional Requirements

Eligibility for Supplementary Assessment

Your eligibility for supplementary assessment in a course is dependent of the following conditions applying:

The final mark is in the percentage range 47% to 49.4%

The course is graded using the Standard Grading scale

You have not failed an assessment task in the course due to academic misconduct

10.3. Assessment: Submission penalties

Late submission of assessment tasks may be penalised at the following maximum rate:

- 5% (of the assessment task's identified value) per day for the first two days from the date identified as the due date for the assessment task.

- 10% (of the assessment task's identified value) for the third day - 20% (of the assessment task's identified value) for the fourth day and subsequent days up to and including seven days from the date identified as the due date for the assessment task.

- A result of zero is awarded for an assessment task submitted after seven days from the date identified as the due date for the assessment task. Weekdays and weekends are included in the calculation of days late. To request an extension you must contact your course coordinator to negotiate an outcome.

10.4. SafeUniSC

UniSC is committed to a culture of respect and providing a safe and supportive environment for all members of our community. For immediate assistance on campus contact SafeUniSC by phone: [07 5430 1168](tel:0754301168) or using the [SafeZone](#) app. For general enquires contact the SafeUniSC team by phone [07 5456 3864](tel:0754563864) or email safe@usc.edu.au.

The SafeUniSC Specialist Service is a Student Wellbeing service that provides free and confidential support to students who may have experienced or observed behaviour that could cause fear, offence or trauma. To contact the service call [07 5430 1226](tel:0754301226) or email studentwellbeing@usc.edu.au.

10.5. Study help

For help with course-specific advice, for example what information to include in your assessment, you should first contact your tutor, then your course coordinator, if needed.

If you require additional assistance, the Learning Advisers are trained professionals who are ready to help you develop a wide range of academic skills. Visit the [Learning Advisers](#) web page for more information, or contact Student Central for further assistance: +61 7 5430 2890 or studentcentral@usc.edu.au.

10.6. Wellbeing Services

Student Wellbeing provide free and confidential counselling on a wide range of personal, academic, social and psychological matters, to foster positive mental health and wellbeing for your academic success.

To book a confidential appointment go to [Student Hub](#), email studentwellbeing@usc.edu.au or call 07 5430 1226.

10.7. AccessAbility Services

Ability Advisers ensure equal access to all aspects of university life. If your studies are affected by a disability, learning disorder mental health issue, injury or illness, or you are a primary carer for someone with a disability or who is considered frail and aged, [AccessAbility Services](#) can provide access to appropriate reasonable adjustments and practical advice about the support and facilities available to you throughout the University.

To book a confidential appointment go to [Student Hub](#), email AccessAbility@usc.edu.au or call 07 5430 2890.

10.8. Links to relevant University policy and procedures

For more information on Academic Learning & Teaching categories including:

- Assessment: Courses and Coursework Programs
- Review of Assessment and Final Grades
- Supplementary Assessment
- Central Examinations
- Deferred Examinations
- Student Conduct
- Students with a Disability

For more information, visit <https://www.usc.edu.au/explore/policies-and-procedures#academic-learning-and-teaching>

10.9. Student Charter

UniSC is committed to excellence in teaching, research and engagement in an environment that is inclusive, inspiring, safe and respectful. The [Student Charter](#) sets out what students can expect from the University, and what in turn is expected of students, to achieve these outcomes.

10.10. General Enquiries

In person:

- **UniSC Sunshine Coast** - Student Central, Ground Floor, Building C, 90 Sippy Downs Drive, Sippy Downs
- **UniSC Moreton Bay** - Service Centre, Ground Floor, Foundation Building, Gympie Road, Petrie
- **UniSC SouthBank** - Student Central, Building A4 (SW1), 52 Merivale Street, South Brisbane
- **UniSC Gympie** - Student Central, 71 Cartwright Road, Gympie
- **UniSC Fraser Coast** - Student Central, Student Central, Building A, 161 Old Maryborough Rd, Hervey Bay
- **UniSC Caboolture** - Student Central, Level 1 Building J, Cnr Manley and Tallon Street, Caboolture

Tel: +61 7 5430 2890

Email: studentcentral@usc.edu.au