COURSE OUTLINE

SGD300 Experimental Games Programming

School: School of Business and Creative Industries

2026 | Semester 1

UniSC Sunshine Coast	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, unless your program has specified a mandatory onsite requirement.

Please go to unisc.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 advanced skills and expertise of games programming acquired in SGD40. This course examines the theoretical concepts of gameplay programming through the lens of experimental practice. In response to a theme, you will work individually to develop unique ways of interacting with gamespaces by rapidly prototyping a series of game ideas. Through focused experimentation, you will employ creative programming solutions that provide unique gameplay experiences in a variety of contexts and genres. Researching and applying theoretical design concepts in your approach, you will reflect on and critique your design solutions.

1.2. How will this course be delivered?

ACTIVITY	HOURS	BEGINNING WEEK	FREQUENCY
BLENDED LEARNING			
Lecture – 1 hour online lecture content for 12 weeks (or equivalent).	1hr	Week 1	12 times
Laboratory 1 – On campus laboratory for 12 weeks (or equivalent).	2hrs	Week 2	12 times
ONLINE			
Online – 3 hours online content for 12 weeks (or equivalent).	3hrs	Week 1	12 times

1.3. Course Topics

The experimental mindset

Creativity and gameplay programming

Experimental practice and agile production

Strategies for rapid prototyping

Problem-solving through experimentation

Exploring gameplay mechanics and spaces

Advanced gameplay systems and logic

2. What level is this course?

300 Level (Graduate)

Demonstrating coherence and breadth or depth of knowledge and skills. Independent application of knowledge and skills in unfamiliar contexts. Meeting professional requirements and AQF descriptors for the degree. May require pre-requisites where discipline specific introductory or developing knowledge or skills is necessary. Normally undertaken in the third or fourth full-time study year of an undergraduate program.

3. What is the unit value of this course?

12 units

4. How does this course contribute to my learning?

COURSE LEARNING OUTCOMES On successful completion of this course, you should be able to...		GRADUATE QUALITIES Completing these tasks successfully will contribute to you becoming...
1	Design, research, and develop game components for distribution.	Engaged
2	Apply technical skills and frameworks to contribute to the development of games.	Creative and critical thinker
3	Communicate and implement knowledge of a programming speciality and justify its value and contribution to the game development process.	Knowledgeable
4	Reflect, evaluate, and justify your ability to close knowledge, skill and technology gaps in a self-directed manner.	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

SGD240

5.2. Co-requisites

Not applicable

5.3. Anti-requisites

Not applicable

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

Nil

5.5. Microcredential Information

Not applicable

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

The course material is structured in a way that students are progressively working towards their assessment pieces as part of a programming team. The collaborative nature of this process will ensure consistent facilitation and feedback through the learning process.

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	Oral and Written Piece	Individual	30%	5 Work Summary Presentations + Code Documentation	Week 9	In Class
All	2	Artefact - Technical and Scientific, and Written Piece	Individual	40%	Code Contributions + Critical Self Reflection (2500 word equivalent)	Week 11	Online Assignment Submission with plagiarism check
All	3	Artefact - Technical and Scientific, and Written Piece	Individual	30%	Published Portfolio Piece	Week 13	Online Submission

All - Assessment Task 1: Work Summary Presentations and Code Documentation

GOAL:	The goal of this task is to learn and rehearse professional communication skills in a games programming setting through weekly SCRUM meetings undertaken by the team
PRODUCT:	Oral and Written Piece
AUTHORSHIP STATEMENT:	
FORMAT:	Rehearse professional games programming communication skills in weekly work summary presentations, where you will communicate with the rest of the team about what, why and how you solved in your programming challenges during the last week. You will be marked on your ability to communicate comprehensively and succinctly. You will also be marked on the quality of your code documentation and your professional programming practices such as task tracking and source control usage. Formative feedback provided weeks 1-4 after each presentation. Feedback provided weeks 5-9 after each presentation.
CRITERIA:	**No.** — **Learning Outcome assessed** 1 — Comprehensive yet succinct verbal communication of work completed. 2 — Communication of difficulties encountered and subsequent solutions. 3 — Comprehensive yet succinct written communication in programming specifications. 4 — Assessment criteria are mapped to the course learning outcomes. — 1 2 3 4
GENERIC SKILLS:	

All - Assessment Task 2: Code Contributions and Critical Self Reflection

GOAL:	The goal of this task is to rehearse professional games programming practices by developing game components as part of game development team.
PRODUCT:	Artefact - Technical and Scientific, and Written Piece
AUTHORSHIP STATEMENT:	
FORMAT:	Working consistently throughout the semester, you should be assigning yourself to and delivering on games programming tasks as outlined in the team backlog. It is expected that you commit to and deliver on a certain number of game components through the semester. Consistently perform critical reflection on your teamwork and programming skills in a written format such as blog, markdown or website. (2500 words). Formative feedback given weekly during weeks 1-9.
CRITERIA:	**No.** — **Learning Outcome assessed** 1 — Game programming skills including naming conventions, syntax, semantics and commenting. 2 — Deliver at least 3 hours of work each week. 3 — Deliver on all tasks undertaken or seek help to rectify issues. 4 — Critical reflection on positives and negatives of your teamwork skills.
GENERIC SKILLS:	

All - Assessment Task 3: Published Portfolio Piece

GOAL:	The goal of this task is to have a working portfolio piece ready for when you finish in the program.
PRODUCT:	Artefact - Technical and Scientific, and Written Piece
AUTHORSHIP STATEMENT:	
FORMAT:	Complete a game prototype which includes all your contributed game components. Credits to all other contributors must be included. Game prototype must be published to a public location. Associated text with the published prototype must include credits and a description of your contribution to the project.
CRITERIA:	**No.** — **Learning Outcome assessed** 1 — The application of technical frameworks to communicate a Technical Specification. 2 — The utilisation of specialist knowledge to create a combined-speciality project. 3 — Communication in associated text is effective and comprehensive.
GENERIC SKILLS:	

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

Nil

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

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

To request an extension you must contact your course coordinator to negotiate an outcome. Late submission of assessment tasks may be penalised at the following maximum rate: - 5% (of the assessment task's identified value) for the first day (e.g. a task worth 10 marks would attract a 0.5 mark penalty) - 10% (of the assessment task's identified value) for the second day (e.g. a task worth 10 marks would attract a 1 mark penalty) - 20% (of the assessment task's identified value) for the third day (e.g. a task worth 10 marks would attract a 2 mark penalty) - 40% (of the assessment task's identified value) for the fourth day (e.g. a task worth 10 marks would attract a 4 mark penalty) - 60% (of the assessment task's identified value) for the fifth day (e.g. a task worth 10 marks would attract a 6 mark penalty) - 80% (of the assessment task's identified value) for the sixth day (e.g. a task worth 10 marks would attract a 8 mark penalty) - 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. At the course coordinator's discretion and in consultation with the student, assessment tasks submitted after the fourth day may be marked but will receive a maximum mark of 50% of the assessment task's value. Minimal feedback will be given

10.4. 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

10.5. 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.

10.6. 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

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