UniSC

COURSE OUTLINE

DES232 Visualisation and Sonification

School: School of Business and Creative Industries

2025 | 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, unless your program has specified a mandatory onsite requirement.

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

In this course, you will develop new skills in visualisation and sonification. You will learn about the latest tools and technologies and will create original artefacts from immersive visualisation to surround sound and augmented reality. Your visualisation skills will be applied across screen media, live performance, game design or virtual reality in a collaborative project.

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	10 times
Seminar – Scheduled face to face seminar	2hrs	Throughout teaching period (refer to Format)	2 times
ONLINE			
Learning materials – Interactive online learning activities	1hr	Week 1	12 times
Tutorial/Workshop 1 – Asynchronous online workshops	2hrs	Week 1	10 times
Seminar – Scheduled online seminar (Recorded)	2hrs	Throughout teaching period (refer to Format)	2 times

1.3. Course Topics

Data visualisation

Data sonification

Animation techniques

Immersive visualisation

Augmented reality

Virtual reality

Sound design

Spatial Sound

Workflow

Postproduction

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 On successful completion of this course, you should be able to...		GRADUATE QUALITIES Completing these tasks successfully will contribute to you becoming...
1	Critically evaluate and use problem-solving strategies and creativity to address a design challenge	Creative and critical thinker
2	Interpret and reflect on design ethics and inclusive design practices to produce socially engaged, relevant and impactful design outcomes	Empowered Ethical
3	Apply a range of techniques to create compelling animated visualisations and sonifications	Creative and critical thinker Empowered
4	Research visualisation and sonification strategies and apply them to create audiovisualisations	Knowledgeable Engaged
5	Communicate your ideas, thoughts and development processes in an e-portfolio using visual and non-visual artefacts.	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)

> 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

By the week 4 workshop students will have made substantial progress on a technical task, and received constructive feedback via regular individual consultation during workshops.

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	Individual	20%	15 second audiovisual piece	Week 4	Online Submission
All	2	Artefact - Creative, and Written Piece	Individual	40%	1-2 minutes, short reflection, supporting documentation.	Week 11	Online Submission
All	3	Portfolio	Individual	40%	4 creative artefacts and documentation.	Exam Period	Online Submission

All - Assessment Task 1: Fundamentals of Time-based Media

GOAL:	To demonstrate your knowledge of the fundamental principles of audiovisual works that change through time
PRODUCT:	Artefact - Creative
FORMAT:	A short rendered audiovisual work. Please see Assessment 1 folder in Canvas for the full task brief.

CRITERIA:	No.		Learning Outcome assessed
	1	Technical Achievement	③
	2	Creativity of Work	①
	3	Conceptual Basis	② ④
	4	Quality of Documentation	⑤
GENERIC SKILLS:	Applying technologies		

All - Assessment Task 2: Visualisation/Sonification Project

GOAL:	You will create an original visualisation/sonification project suitable for public exhibition or performance.
PRODUCT:	Artefact - Creative, and Written Piece
FORMAT:	Rendered video and audio suitable for large screens, spatial sound systems, immersive environments (Cave2) or interactive VR/AR. The format of your visualisation/sonification project will be negotiated with your tutor during the workshops. Please see Assessment 3 folder in Canvas for full task brief

CRITERIA:	No.		Learning Outcome assessed
	1	Application of problem solving strategies and creativity	1
	2	Application of design ethics and inclusive design	2
	3	Technical Achievement	3
	4	Research and application of visualisation and sonification strategies in an exhibition or performance	4
	5	Quality of documentation	5
GENERIC SKILLS:	Problem solving, Organisation, Applying technologies		

All - Assessment Task 3: Visualisation/Sonification Portfolio

GOAL:	You will investigate visualisation and sonification strategies and respond to a series of tasks to create a visualisation/sonification portfolio.
PRODUCT:	Portfolio
FORMAT:	Digital porfolio with text, images, and audiovisual materials that demonstrates investigation of visualisation and sonification strategies, and process. Please see Assessment 3 folder in Canvas for full task brief.

CRITERIA:	No.		Learning Outcome assessed
	1	Technical Achievement	3
	2	Creativity of Responses	1
	3	Application of a range of strategies	4
	4	Communication of ideas	5
	5	Reflection on design ethics	2
GENERIC SKILLS:	Communication, Problem solving, Applying technologies, Information literacy		

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?

Risk assessments have been performed for all field activities and low to moderate levels of health and safety risk exists. Moderate risks may include working in an Australian bush setting, working with people, working outside normal office hours for example. 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:
(a) The final mark is in the percentage range 47% to 49.4%; and
(b) The course is graded using the Standard Grading scale

10.3. Assessment: Submission penalties

Late submissions may be penalised up to and including the following maximum percentage of the assessment task's identified value, with weekdays and weekends included in the calculation of days late:
(a) One day: deduct 5%;
(b) Two days: deduct 10%;
(c) Three days: deduct 20%;
(d) Four days: deduct 40%;
(e) Five days: deduct 60%;
(f) Six days: deduct 80%;
(g) Seven days: A result of zero is awarded for the assessment task.

The following penalties will apply for a late submission for an online examination:
Less than 15 minutes: No penalty
From 15 minutes to 30 minutes: 20% penalty
More than 30 minutes: 100% penalty

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 or using the SafeZone app. For general enquires contact the SafeUniSC team by phone 07 5456 3864 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 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