

OES215 Marine Science Education Fieldwork

School: School of Education and Tertiary Access

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.

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 the knowledge and skills to facilitate meaningful experiences that can deepen people's connections with marine environments. The course content will enhance your expertise in several key areas: planning and conducting fieldwork, analysing, and evaluating data, and effectively conveying skills and scientific knowledge to others. Through the four days of immersive field trips, you will have the opportunity to explore marine plants, animals, and coastal processes on the Sunshine Coast. This course aims to equip you with the proficiency to safely manage, organise, and lead marine science fieldwork.

1.2. How will this course be delivered?

ACTIVITY	HOURS	BEGINNING WEEK	FREQUENCY
BLENDED LEARNING			
Learning materials – You are required to engage and interact with asynchronous materials and activities accessed through Canvas modules, course readings and required texts.	2hrs	Week 1	8 times
Tutorial/Workshop 1 – A blended learning approach is used to deliver the workshop component of the course. The workshop is synchronous, using technology-enabled learning and teaching experience that involves on-campus engagement and application of learning materials.	2hrs	Week 1	8 times

ACTIVITY	HOURS	BEGINNING WEEK	FREQUENCY
Fieldwork – You will engage in compulsory fieldwork trips throughout the semester. The exact timing of the field trips will be announced in week 1 of the course. The field trips can vary in length from single to multi-day activities	8hrs	Throughout teaching period (refer to Format)	4 times

1.3. Course Topics

1. Integrate hands-on experiential learning with theoretical knowledge to develop essential skills for leading and managing marine field trips safely and sustainably.
2. Explore science base nature journaling techniques as a versatile tool for scientific investigation across disciplines.
3. Examine coastal dynamics, impacts, and marine conservation strategies.
4. Discover the biodiversity of local ecosystems, honing marine species identification skills in Sunshine Coast and Moreton Bay regions.
5. Develop knowledge of field data collection and interpretation techniques for marine research.
6. Gain insights into coral reef systems and their responses to environmental changes.
7. Investigate marine species population dynamics and adaptation mechanisms.
8. Enhance scientific inquiry skills through sea kayaking and snorkelling, utilising these activities for field investigations.

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 MAPPING	PROFESSIONAL STANDARD MAPPING *
On successful completion of this course, you should be able to...	Completing these tasks successfully will contribute to you becoming...	ALTC Threshold Learning Outcomes
1 Describe the types and unique characteristics of marine biodiversity, including species, and ecosystem diversity, as well as the implications of connectivity to marine ecosystems.	Knowledgeable Creative and critical thinker Engaged	1, 2, 5
2 Apply quantitative field methods to collect data and interpret the biodiversity of marine ecosystems.	Knowledgeable Creative and critical thinker Collaboration Problem solving	1, 2, 5
3 Develop and apply knowledge to identify and classify marine organisms	Knowledgeable Creative and critical thinker Problem solving	1, 3, 5
4 Analyse and evaluate the impacts of anthropocentric factors on marine ecosystems, and demonstrate knowledge of management strategies for conservation and protection.	Knowledgeable Ethical Sustainability-focussed Problem solving	3, 4
5 Develop and apply group facilitation, experiential education, and instructional approaches when leading groups in outdoor environments.	Engaged Sustainability-focussed Communication Collaboration Organisation	1, 2, 5
6 Apply and use judgement in decision making, regarding group safety and facilitation to enhance learning through sustainable outdoor environment experiences.	Knowledgeable Creative and critical thinker Sustainability-focussed Communication	4, 5, 6
7 Communicate effectively and professionally	Empowered Communication	5, 7

* Competencies by Professional Body

CODE	COMPETENCY
ALTC THRESHOLD LEARNING OUTCOMES	
1	Outdoor educators create opportunities for experiential learning
2	Outdoor educators use pedagogies that align their program's purpose and practice
3	Outdoor educators are place-responsive, and see their work as a social, cultural and environmental endeavour
4	Outdoor educators advocate for social and environmental justice
5	Outdoor educators continue to develop their skills, knowledge and expertise
6	Outdoor educators understand safety and apply a strict aversion to fatalities
7	Outdoor educators routinely engage in reflective practice

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

Enrolled in Program ED312, ED112 or ED315

5.2. Co-requisites

Not applicable

5.3. Anti-requisites

Not applicable

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

This course involves overnight camping trips. You need to be aware of the physical components and location requirements of the course. If you have a disability, medical condition or any concerns that may affect your participation in the compulsory practical components of the course, you are invited to discuss your options with the course coordinator or a USC Disability Advisor.

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

Students will engage in self and peer-assessment processes in tutorials to gain feedback that will assist in preparation for the assessment tasks.

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	Plan	Group	30%	1500 - 2,000 words + visual material.	Week 6	Online Assignment Submission with plagiarism check
All	2	Report	Individual	30%	1500 - 2,000 words	Week 10	Online Assignment Submission with plagiarism check
All	3	Journal	Individual	40%	Maximum of 2000 words.	Refer to Format	To Supervisor

All - Assessment Task 1: Interpretive field trip plan for a marine environment

GOAL:	Create a plan to facilitate an interpretive field trip for a Senior Marine Science students.
PRODUCT:	Plan
FORMAT:	Working in a group of 2 or 3, your tasks are: a). Develop a field trip plan outlining the safety and logistical requirements for a practical investigation into a marine environment utilising either snorkelling or sea kayaking to access a specified location and conduct field investigations. b). Develop environmental activity for the chosen group incorporating scientific inquiry or interpretive elements.

CRITERIA:	No.	Learning Outcome assessed
	1	Demonstration of environmental and ecological knowledge in an activity that applies scientific inquiry and incorporates interpretive elements relevant to the marine environment, ensuring alignment with the Marine Science 2025 Senior Syllabus. 1 3 5 7
	2	Effective communication to inform activity implementation, marine ecosystem threats, and conservation using supporting academic sources. 4 7
	3	Field trip plan for a coastal marine environment, demonstrating thorough consideration of safety, logistics, risk assessment, equipment, location specifics, weather conditions, and the planned route. 5 6
	4	Use of structured writing and templates, ensuring clarity, quality grammar, and accurate spelling throughout. 5 7

All - Assessment Task 2: Field Course Report

GOAL:	Demonstrate understanding and apply basic analytical skills in the field investigation of reef system diversity, assess the implications of connectivity to marine ecosystems, and evaluate key issues for their conservation and management.										
PRODUCT:	Report										
FORMAT:	Perform basic data analyses using the shared dataset from the reef system field investigation. Analyse the data to identify patterns and interpret coral and fish biodiversity, as well as coral health. Present the analyses in a scientific report format, following a standard paper structure provided. Ensure discussions are linked to marine park management and coral reef system impacts.										
CRITERIA:	<table border="1"> <thead> <tr> <th>No.</th> <th>Learning Outcome assessed</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>Analytical skills during field investigation that demonstrate an understanding of reef system diversity and its connection to marine ecosystems. 1 3</td> </tr> <tr> <td>2</td> <td>Data collection, interpretation, analyses, and communication of conclusions about patterns in coral and fish biodiversity, as well as coral health. 1 2 3 7</td> </tr> <tr> <td>3</td> <td>Evaluation of the broader implications of the field investigation findings by making connections to marine park management and coral reef system impacts. 1 4 7</td> </tr> <tr> <td>4</td> <td>Presentation of field investigation in a scientific report format, adhering to the standard structure provided and support by academic sources. 7</td> </tr> </tbody> </table>	No.	Learning Outcome assessed	1	Analytical skills during field investigation that demonstrate an understanding of reef system diversity and its connection to marine ecosystems. 1 3	2	Data collection, interpretation, analyses, and communication of conclusions about patterns in coral and fish biodiversity, as well as coral health. 1 2 3 7	3	Evaluation of the broader implications of the field investigation findings by making connections to marine park management and coral reef system impacts. 1 4 7	4	Presentation of field investigation in a scientific report format, adhering to the standard structure provided and support by academic sources. 7
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All - Assessment Task 3: Fieldwork journal: Investigations of marine ecosystem.

GOAL:	Apply your observational skills to illustrate and convey your understanding of marine and coastal environments experienced through field trips.
PRODUCT:	Journal
FORMAT:	In this task, your objective is to record your observations and apply your understanding of the marine and coastal environments encountered during field trips. Drawing should feature strongly in your documentation, alongside text, diagrams, and maps, to effectively communicate your observations. Additionally, you are expected to consider scientific inquiry questions prompted by field experiences during your trips and follow them up with further research, incorporating the findings into your journal. Midway through the semester, your progress will be evaluated through a peer assessment. Due to fieldwork, submission date to be communicated in Canvas.

CRITERIA:

No.		Learning Outcome assessed
1	Foundational knowledge and understanding for learning in outdoor environments	5 6
2	Description and analysis of outdoor fieldwork observations and experiences.	1 2 3
3	Application of academic literacy including English expression, APA 6th referencing conventions, grammar, and technical accuracy	7

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

This course incorporates snorkelling and sea kayaking. Participants must be reasonably fit and competent swimmers. Attendance at a snorkel workshop and assessment is mandatory before joining the coral diversity field trip. Suitable all-weather clothing is required for field trips.

OES215 is structured to provide a series of fieldwork experiences aimed at equipping students with the knowledge and practical skills necessary to meet industry safety standards. Both the University and our industry partners mandate participation in all fieldwork and directed study activities to ensure satisfactory proficiency in safety-related activities essential for safe fieldwork participation.

All fieldwork activities are managed through the Field Friendly system. Students will receive email invitations for specific field trips, accompanied by a request to complete an 'Online Induction for Fieldwork.' Completion of the Fieldwork Induction quiz with a score of 100% is mandatory before participation. Additionally, students must provide personal details and emergency contacts.

Trip information and risk management details will be provided within the Field Friendly system. Please note that field trip dates may change due to adverse weather conditions or unforeseen circumstances.

9. How are risks managed in this course?

Risk assessments have been conducted for the field activities being undertaken and a high level of risk has been identified. High level risk may include, boating, diving, and hot works such as welding, cutting and grinding. Where high risks exist you will be given training and advice about how to control the high level risk, however it is also 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

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