

ENS330 K'gari-Fraser Island Field Studies

School: School of Science, Technology and Engineering

2023 | Session 8

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

This is your opportunity to explore and develop your scientific knowledge on K'gari-Fraser Island, the world's largest sand island & an iconic national park. The island is a globally significant example of geological processes and biological evolution and is World Heritage listed. The island has the most complete age sequence of any dune system in the world and many unique ecosystems that thrive upon these sands. In this course you will examine soil, water, plant, and animal systems and processes on & around Fraser Island. Extra costs for the field trip (for example cost of meals) will be at your expense.

1.2. How will this course be delivered?

| ACTIVITY | HOURS | BEGINNING WEEK | FREQUENCY |
|---|-------|----------------|-----------|
| BLENDED LEARNING | | | |
| Tutorial/Workshop 1 – All day on campus workshop | 8hrs | Week 1 | Once Only |
| Tutorial/Workshop 2 – On campus workshop | 6hrs | Week 1 | 3 times |
| Fieldwork – Fieldwork | 8hrs | Week 1 | 6 times |

1.3. Course Topics

- Geomorphic processes
- Assessing ecosystem rehabilitation post-sandmining
- Links between geomorphology, soil forming processes and above-ground biota
- Aquatic ecology
- Water quality assessment
- Protected area management
- Fire ecology

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 | GRADUATE QUALITIES |
|--|--|
| On successful completion of this course, you should be able to... | Completing these tasks successfully will contribute to you becoming... |
| 1 Describe and explain the unique natural features and ecological processes of K'gari-Fraser Island. | Knowledgeable |
| 2 Implement a fieldwork program and demonstrate safe fieldwork skills including collection and analysis of field samples | Empowered Engaged |
| 3 Communicate scientific findings in a formal report format | Knowledgeable Engaged |

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

SCI110

5.2. Co-requisites

Not applicable

5.3. Anti-requisites

Not applicable

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

This is a capstone ecological field studies course. You will benefit from having completed at least 3 semesters of a related program (Environmental Management, Environmental Science, Animal Ecology, Bachelor of Science or enrolled in the Biological Sciences Major or Extended Major) prior to enrolment in this course. Students from other programs should consult with the Course Coordinator to assess enrolment eligibility

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

In week 2 of this course, we will work together in a workshop environment to collaboratively review the class data and report outline for Task 2.

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 | Practical / Laboratory Skills, and Written Piece | Individual | 20% | 1500 word equivalent | Week 2 | To Supervisor |
| All | 2 | Report | Individual | 50% | 2500 words | Week 6 | Online Assignment Submission with plagiarism check |
| All | 3 | Oral | Individual | 30% | 10 minutes | Week 8 | In Class |

All - Assessment Task 1: Fieldwork Skills

| | | | | | | |
|------------------|--|---|--|--|--|----------------------------------|
| GOAL: | With initiative and judgement in planning, you will demonstrate critical fieldwork skills including: field safety, organisation, observation, interpretation and data recording. These skills and qualities of thinking are important elements in professional scientific practice | | | | | |
| PRODUCT: | Practical / Laboratory Skills, and Written Piece | | | | | |
| FORMAT: | <p>Submit: At the end of the field trip</p> <p>Completed field notebook, and an electronic copy of your data for the class to undertake data analysis You will receive a field-safety induction, collect data and submit a handwritten copy of your field notes in a format advised by the Course Coordinator, along with an electronic copy of your data for class analysis in a format advised by the Course Coordinator</p> | | | | | |
| CRITERIA: | No. | | | | | Learning Outcome assessed |
| | 1 | Completed field notebook (accuracy and comprehensiveness) | | | | 1 2 |
| | 2 | Collection of samples | | | | 2 |
| | 3 | Field safety and professional conduct | | | | 2 |

All - Assessment Task 2: K'gari-Fraser Island Project Report

| | | | | | | |
|------------------|---|--|--|--|--|----------------------------------|
| GOAL: | This task allows you to develop and communicate your data-collection skills and analysis of field-based observations using rigorous scientific approaches. | | | | | |
| PRODUCT: | Report | | | | | |
| FORMAT: | <p>Submit: Friday in Week 6 of Session 8.</p> <p>You are required to submit a 2000 word scientific report on your data collected during the field trips written in the form of a scientific paper</p> | | | | | |
| CRITERIA: | No. | | | | | Learning Outcome assessed |
| | 1 | Description and explanation of site/data | | | | 1 3 |
| | 2 | Field work design – methods of collection | | | | 2 3 |
| | 3 | Analysis of data, including statistical analysis | | | | 3 |
| | 4 | Presentation of data | | | | 3 |
| | 5 | Interpretation of data | | | | 3 |

All - Assessment Task 3: Communicating the Unique Ecology of K'gari-Fraser Island

| | | | |
|------------------|--|---|----------------------------------|
| GOAL: | This is a key assessment that allows you to demonstrate your knowledge and understanding of K'gari-Fraser Island environments. Much of this knowledge will be gained and developed through your site visit; therefore, it will be imperative that you take good notes, and photos and make careful observations. | | |
| PRODUCT: | Oral | | |
| FORMAT: | Submit: In scheduled class time after the field trip (Week 7 of Session 8). You will be required to present a 10 minute PowerPoint presentation on the unique features of K'gari-Fraser Island environments compared to other environments | | |
| CRITERIA: | No. | | Learning Outcome assessed |
| | 1 | Demonstration of your accurate knowledge and understanding of the unique features, structures and ecosystem processes on K'gari-Fraser Island | 1 |
| | 2 | Integration and synthesis of ideas to form independent insights into the ecology of K'gari-Fraser Island | 1 |
| | 3 | Quality of power point to support your representation of K'gari-Fraser Island's ecology | 1 |

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

You will be required to travel to K'gari-Fraser Island for one week for field studies. Transport will be provided from the Sippy Downs Campus only. You may be required to pay a fee for accommodation, transport and food. You will be required to wear covered footwear, hat, long-sleeved shirt and long trousers for field safety.

You will need to complete a fieldwork induction and adhere to field safety protocols at all times. In particular, you will need to wear protective clothing to prevent risks of sun exposure dehydration, insect bites and snake bite be aware of the risks associated with dingoes at all times. Student will need to take care to stay in groups and be aware of the risks associated with the natural environment such as bushfires and getting lost. Students need to be aware of 4WD safety when on the beach.

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

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 will be penalised at the following maximum rate:

- 2% (of the assessment task's identified value) per day from the date identified as the due date for the assessment task.
- A result of zero is awarded for an assessment task submitted after 10 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 and supply the required documentation 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