COURSE OUTLINE

ENS330 K'gari-Fraser Island Field Studies

Course Coordinator: Gabriel Conroy (gconroy@usc.edu.au) **School:** School of Science, Technology and Engineering

2021 | Session 8

USC Sunshine Coast
USC Moreton Bay
USC Fraser Coast

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 the USC website 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	6hrs	Not applicable	3 times
Fieldwork	8hrs	Not applicable	6 times
Lecture	8hrs	Not applicable	Once Only

1.3. Course Topics

- Geomorphic processes
- Assessing ecosystem rehabilitation
- 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 On successful completion of this course, you should be able to...		GRADUATE QUALITIES 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 USC 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)

SCI202 would be a benefit to you for some of the data analysis in the course, but it is not required. 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	Refer to Format	To Supervisor
All	2	Report	Individual	50%	2000 words	Refer to Format	Online Assignment Submission with plagiarism check
All	3	Oral	Individual	30%	10 minutes	Refer to Format	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:	Submit: At the end of the field trip 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

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:	Submit: Friday in Week 6 of Session 8. 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

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-raser 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. Directed study hours may vary by location. 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 Blackboard 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. 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 Blackboard, are electronically checked through SafeAssign. This software allows for text comparisons to be made between your submitted assessment item and all other work that SafeAssign has access to.

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. 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.

10.5. 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.

10.6. 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.

10.7. 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
- Administration of Central Examinations
- Deferred Examinations
- Student Academic Misconduct
- Students with a Disability

Visit the USC website: http://www.usc.edu.au/explore/policies-and-procedures#academic-learning-and-teaching

10.8. General Enquiries

In person:

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

Tel: +61 7 5430 2890

Email: studentcentral@usc.edu.au