

ENS323 Agricultural and Forest Ecology

School: School of Science, Technology and Engineering

2023 | 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

One of the planet's most pressing problems is to ensure food security for around 9 billion people - 2 billion more than the world's current population - while dealing with climate change. There is increasing pressure on our natural resources for food and fuel, when there is an urgent need to manage resources sustainably. In this course, you will investigate the ecology of agricultural and forest systems. You explore different types of agricultural and forest ecosystems, their use for food and fuel and ways to increase their sustainability and minimise the effects on surrounding ecosystems.

1.2. How will this course be delivered?

ACTIVITY	HOURS	BEGINNING WEEK	FREQUENCY
BLENDED LEARNING			
Learning materials – Asynchronous Learning Material	2hrs	Week 1	13 times
Tutorial/Workshop 1 – On campus computer workshop	3hrs	Week 2	4 times
Laboratory 1 – On campus wet Lab	3hrs	Week 6	Once Only
Fieldwork – Fieldwork	5hrs	Week 6	2 times
Seminar – On campus seminar	1hr	Week 8	Once Only

1.3. Course Topics

This course will examine the following themes: food security, poverty and population growth, carbon sequestration and climate change, water use and salinity; genetics of agricultural and forest systems, animal-plant interactions, including the ecology of pests and beneficial animals; intensive and agroforestry systems.

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	Gather, analyse and synthesise information from the scientific literature and primary data sources	Creative and critical thinker Ethical
2	Construct and communicate a compelling argument for funding a research project	Ethical Engaged
3	Recognize and communicate professional strengths to demonstrate relevant skills and practice for research	Engaged
4	Recommend strategies likely to achieve sustainability in agricultural and forest ecology	Sustainability-focussed

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)

You will have prior knowledge and skills in scientific research design and statistical methods that can be used to summarise, analyse and interpret scientific data.

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

This course provides a practical in week 2 on cv and grant writing. Students receive formative feedback during this practical on aspects of scientific writing that are assessed in both task 1 and 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	Written Piece	Individual	30%	2000 words	Week 6	Online Assignment Submission with plagiarism check
All	2	Report	Individual	30%	2000 words	Week 12	Online Assignment Submission with plagiarism check
All	3	Examination - Centrally Scheduled	Individual	40%	2 hours	Exam Period	Exam Venue

All - Assessment Task 1: Grant proposal and CV

GOAL:	To demonstrate your ability to put together a well-argued application for project funding including the ethical considerations of the research						
PRODUCT:	Written Piece						
FORMAT:	You are required to submit a grant proposal and CV for the research project that you will complete during semester. The proposal should follow the format provided in the tutorial, e.g. aims and significance of research, literature review, methodology, budget and budget justification, and a timeline.						
CRITERIA:	No.						Learning Outcome assessed
	1	Constructing and Communicating a summary and background information/introduction					1
	2	Use of Research plan, Methods and Techniques					1
	3	Constructing a Budget and budget justification					2
	4	Identification of Ethics clearance					3
	5	Organizing a Project Timeline					4
	6	Application of scholarly writing (spelling, grammar, written expression, referencing style and accuracy)					3

All - Assessment Task 2: Scientific report

GOAL:	To collect and collate information in agricultural and forest ecology to a scientific context and make conclusions based on scientific approaches						
PRODUCT:	Report						
FORMAT:	You are required to submit a 2000 word scientific report (excluding references) on literature/data collected written in the form of a scientific report						

CRITERIA:	No.	Learning Outcome assessed	
	1	Comprehension of knowledge measured by the quality of your research in terms of accessing relevant journal articles and the thoroughness of the literature search	1
	2	Interpretation and analysis of the research articles/data including logical structure, critical explanation, analysis and synthesis	2 3 4
	3	Application of scholarly writing skills by presenting: Accuracy of reference list and citations, Referencing style, Spelling, punctuation and grammar, Written expression	3

All - Assessment Task 3: Written exam

GOAL:	To demonstrate your knowledge and understanding of agricultural and forest ecology		
PRODUCT:	Examination - Centrally Scheduled		
FORMAT:	The final exam will be scheduled in the central exam period. The exam will be two hours consisting of short answer and essay questions based on the learning material and laboratory/tutorial components		
CRITERIA:	No.		Learning Outcome assessed
	1	Communication and description of the ability to solve practical problems presented in the learning material and practical classes (Short answer questions)	2 3 4
	2	Communication and description of reasoned and logical arguments to analyse complex issues of sustainability in agricultural and forest ecology (Essay questions)	1 3 4

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

Laboratory coat, covered shoes, hat

9. How are risks managed in this course?

Risk assessments have been performed for all field activities and a low level of health and safety risk exists. Some risks concerns may include working in an unknown environment as well as slip and trip hazards. 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:

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