

ENS300 Environmental Economics

School: School of Science, Technology and Engineering

2024 | Semester 1

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 course provides an overview of the principles of environmental economics and their application in policies, planning, and resource management. It integrates environmental management and economic theory within a framework of sustainable development. You'll learn fundamental economic concepts and then apply them in environmental valuation, cost-benefit, and climate mitigation contexts. Who knew that market failure could be so much fun? Carbon tax or emissions trading? You'll know.

1.2. How will this course be delivered?

ACTIVITY	HOURS	BEGINNING WEEK	FREQUENCY
BLENDED LEARNING			
Seminar – One hour face to face seminar occurs three times per semester (Weeks 4, 8, and 13)	1hr	Week 4	3 times
Tutorial/Workshop 1 – Face-to-face tutorial with interaction	2hrs	Week 1	13 times
Learning materials – Instructional videos and curated learning resources for student review prior to class	1hr	Week 1	13 times

1.3. Course Topics

Environmental economics fundamentals

- National income and environmental accounting; Utility and consumer demand; Production, supply, and costs; Market dynamics supply and demand interactions; Externalities and market failure.
- Applications: manufacturing, agriculture, transportation, recycling, electricity production and use.

Environmental valuation

- Direct-use, indirect-use, and non-use values; Valuation methods (market based, contingent valuation, travel cost, hedonic pricing, restoration and replacement cost, benefit transfer).
- Applications: property values, tourism and recreation, ecosystem services, conservation

Cost benefit analysis

- Identifying alternatives and determining timeframes, monetising costs and benefits, applying discount rates, computing net present values, benefit-cost ratios, payback periods and internal rates of return, and performing sensitivity analysis.
- Applications: infrastructure, environmental offsets, renewable energy

Climate change mitigation

- Carbon abatement cost curves, emission taxes, cap and trade schemes, subsidies, carbon offsets and carbon neutrality, carbon market dynamics.
- Applications: industry, carbon market

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 Demonstrate knowledge of environmental economics by appraising situational information, recalling concepts, applying methods, identifying limitations, and formulating solutions to specified problems.	Knowledgeable Creative and critical thinker
2 Compile data and interpret and synthesise relevant literature through a process of scholarly research to support and inform your analysis and conclusions.	Empowered Engaged Sustainability-focussed
3 Communicate complex information in a written format by combining figures, tables, explanation, and formatting to produce a professional product.	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

ENS700

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

This course applies skills and knowledge you have acquired during your first and second years in new contexts relating to the economic dimensions of sustainability, environmental science, environmental management, urban design and town planning, engineering and business. While it does not assume prior knowledge of economics, and therefore does not have any prerequisites, the course contains graduate level assessment and is normally taken in the third year of study. You will be expected to have the ability to search databases, conduct research independently, communicate effectively, work collaboratively, manage your time effectively and contribute to finding solutions to pressing environment and development issues.

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

Feedback will be provided to help you progress from your current practice to more effectively achieve the learning goals of the course. The format of feedback may include: verbal comments to individuals or to the class about academic progress relevant to the assessment; discussion of exemplars; ongoing dialogue with learners to help develop the process of self-regulation and reflection; comments on presentations; and/or written feedback on drafts or outlines of a task.

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	Portfolio	Individual	25%	1200 words	Week 5	In Class
All	2	Case Study	Individual	35%	1500 words	Week 9	Online Submission
All	3	Report	Individual	40%	2000 words	Exam Period	Online Submission

All - Assessment Task 1: Environmental economics fundamentals portfolio

GOAL:	This task will develop your knowledge of fundamental environmental economics concepts and their application to issues such as manufacturing, agriculture, transportation, recycling, and electricity production and use.		
PRODUCT:	Portfolio		
FORMAT:	Portfolio of worksheet responses to short analysis tasks applying environmental economic concepts as explained in the lectures and practiced in the workshops		
CRITERIA:	No.		Learning Outcome assessed
	1	Analysis, problem solving, and the application of economic concepts and methods	1
	2	Incorporation and quality of graphs, tables, charts and figures	3
	3	Formatting, written expression (spelling, syntax, grammar, diction), and structure (logical sequence, use of sections and headings, progression of analysis)	3

All - Assessment Task 2: Environmental valuation case study

GOAL:	This task will develop your knowledge of environmental valuation methods through the application of specific valuation methods to a case study location
PRODUCT:	Case Study
FORMAT:	A technical report containing figures, tables, and analysis

CRITERIA:	No.	Learning Outcome assessed	
	1	Analysis, problem solving, and the application of economic concepts and methods	1
	2	Incorporation and quality of graphs, tables, charts and figures	3
	3	Incorporation and quality of data and references	2
	4	Formatting, written expression (spelling, syntax, grammar, diction), and structure (logical sequence, use of sections and headings, progression of analysis)	3

All - Assessment Task 3: Cost benefit and carbon neutral report

GOAL:	This task will develop your knowledge of carbon abatement cost curves and institution-level responses to climate mitigation policies (such as carbon taxes and emissions trading) through the application of key concepts and methods including cost benefit analysis and carbon neutral certification.		
PRODUCT:	Report		
FORMAT:	A technical report containing figures, tables, and analysis		
CRITERIA:	No.		Learning Outcome assessed
	1	Analysis, problem solving, and the application of economic concepts and methods	1
	2	Incorporation and quality of graphs, tables, charts and figures	3
	3	Incorporation and quality of data and references	2
	4	Formatting, written expression (spelling, syntax, grammar, diction), and structure (logical sequence, use of sections and headings, progression of analysis)	3

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?

Health and safety risks for this course have been assessed as low. 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 will be penalised at the following maximum rate:

- 2.5% 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 15 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