

# Economics and the Environment 2281ENV - Tri 2 2021 - Nathan Campus - Blended

## 1. General Course Information

### 1.1 Course Details

<b>Course code</b>	2281ENV
<b>Course title</b>	Economics and the Environment
<b>Academic organisation</b>	ESC School of Environment and Science
<b>Trimester</b>	Trimester 2 2021
<b>Mode</b>	Blended
<b>Level</b>	Undergraduate
<b>Location</b>	Nathan, On Campus
<b>Credit point value</b>	10

### Course Description:

This course focuses upon the relationship between the natural environment and economic systems. It includes both the analysis and understanding of human economy impacts upon the natural systems that support it, as well as, approaches for the sustainable management of natural resources. The role of economics in the various decision-making approaches relevant to environmental resources is outlined. The content covers the major concepts and specific methods for the economic assessment of costs and benefits of ecosystems and other natural resources. The course also highlights concepts and theory for the economic analysis and policy for the sustainable management of both renewable and non-renewable resources. It covers and compares the contributions of both mainstream economic extensions as well as broader sustainability sciences such as ecological economics. Prerequisite: Completion of 80CP. Incompatible: 2281ENV Economics and Natural Resources, 2281AES Economics and Natural Resources.

### Assumed Background:

Ideally, students undertaking this course would have either :

(1) an introductory understanding of economics and several courses in other environmental studies,

**OR**  
(2) reasonable competence in economics (at least one undergraduate course elsewhere) and a strong interest in environmental issues and sustainability.

If this is not the case, then enrolling students should consult the course convenor in Week 1 (at the first lecture is fine) to discuss some catch-up readings.

These courses provide an excellent background to the content and objectives of 2281ENV.

1043SCG Introduction to Environmental Sustainability

1444ENV Global Environmental Challenges

### 1.2 Course Introduction

Modern perspectives in economics recognise that economies are embedded within, and fundamentally dependent upon, nature.

This course is focused upon how economic theories, approaches and tools can contribute to societies' management of natural resources and sustainability. A key emphasis is the understanding of the conditions underlying the interaction between social and economic systems, and natural environment resources. This is critical for identifying and creating the social and economic strategies to maintain functions to humans such as life support, waste assimilation, resource inputs and amenity services. In addition to mainstream economics extensions, we consider the relatively new trans-disciplinary field of ecological economics. The underlying theme is how various approaches, tools and policies can contribute to the effective and sustainable management of natural resources for healthy economies and community wellbeing overall.

### Previous Student Feedback

Previous student feedback indicated that students considered the course very effective in teaching them what they expected to learn. they typically rated the course content as highly relevant. Students also felt that the assessment items were effective in assisting learning and that the assessment guidelines were clear.

### 1.3 Course Staff

#### Primary Convenor **APro Anik Bhaduri**

<b>Phone</b>	+61478864433
<b>Email</b>	<a href="mailto:a.bhaduri@water-future.org">a.bhaduri@water-future.org</a>
<b>Homepage</b>	<a href="https://experts.griffith.edu.au/7078-anik-bhaduri">https://experts.griffith.edu.au/7078-anik-bhaduri</a>
<b>Campus</b>	Nathan Campus
<b>Building</b>	Sir Samuel Griffith Building (N78)
<b>Room</b>	4/F, Rm 4.27
<b>Consultation</b>	Regular Consultation hours will be held online twice a week: Please email for an appointment outside regular consultation hours.

#### Lecturer **Dr Chris Brown**

<b>Email</b>	<a href="mailto:chris.brown@griffith.edu.au">chris.brown@griffith.edu.au</a>
<b>Campus</b>	Nathan Campus
<b>Building</b>	Sir Samuel Griffith Building (N78)
<b>Room</b>	4.14
<b>Consultation</b>	Regular Consultation hours will be held once a week: Please email for an appointment outside regular consultation hours.

### 1.4 Timetable

Timetables are available on [the Programs and Courses website](#).

NB: Details contained in this Section of the course profile and Section 4.1 Learning Activities are to be read in conjunction with the official class timetable. The published class timetable which is the authoritative source for timetabling information for all campuses can be located by clicking on the above link.

#### Additional Timetable Information

This course can be taken completely online in Trimester 2, 2020.

Ensure you check the Learning @ Griffith course site for specific details of how your classes will be offered.

### 1.5 Lecture Capture

It is standard practice at Griffith University that lectures timetabled in lecture capture-enabled venues are recorded and made available to students on the relevant course site, in accordance with the University's [Lecture Capture Policy](#).

The lecture series delivered as part of this course will be recorded and accessible via the Learning@Griffith course site.

### 1.6 Technical Specifications

This is a blended course. The minimum IT requirements for studying online are the following

- access video and audio recordings
- access digital learning resources
- complete online assessment
- participate in classroom discussion and collaboration via online communication and collaboration tools.

## 2. Aims, Outcomes & Graduate Attributes

### 2.1 Course Aims

*Economics and Natural Resources* examines mainstream economic and new approaches to the effective management of natural resources. This is essential knowledge for graduates wishing to work or participate in any field of natural resource

management, environmental science and broader policy areas.

The course describes the assumptions and procedures involved in major economic-based schools of thought concerning natural resource management. It covers approaches and methods for the effective management of natural and environmental resources such as fisheries, minerals, forests, water, wetlands, biodiversity and recreational sites. It provides an introduction to quantitative methods relevant to this goal. The course is highly relevant to all environmental scientists and is integral to environmental management in general.

## 2.2 Learning Outcomes

After successfully completing this course you should be able to:

- 1 Identify and apply environmental and ecological economic approaches to the management of natural resources.
- 2 Describe environmental economic perspectives on the nature of environmental resources, and their relevance and benefit for humans and impact on sustainability.
- 3 Assess the source and impact of human activities on the natural environment.
- 4 Contribute to the preparation of environmental impact statements, benefit-cost analysis and other tools for environmental decision-making.
- 5 Gain an understanding and basic skills in selected economic valuation techniques for assessing the benefits and costs of natural resources and their services.
- 6 Analyse debates in the economy-environment literature, establish a position within debates and defend that position orally and in written papers.
- 7 Work successfully within an inter-disciplinary team context.
- 8 Research and write professional papers, utilising a clear inter-disciplinary perspective that can address all relevant dimensions of environmental issues
- 9 Complete reviews of research literature, scientific texts, and other government and non-government documents/reports., Construct/write essays on a selected topic relating to the economic analysis and solutions for sustainability. Use Internet and library resources effectively to undertake independent research.

## 2.3. Graduate Attributes

For further details on the Griffith Graduate please [click here](#)

Griffith University prepares influential graduates to be:

- [Knowledgeable and skilled, with critical judgement](#)
- [Effective communicators and collaborators](#)
- [Innovative, creative and entrepreneurial](#)
- [Socially responsible and engaged in their communities](#)
- [Culturally capable when working with First Australians](#)
- [Effective in culturally diverse and international environments](#)

**This table demonstrates where each of the Griffith Graduate Attributes is taught, practised and assessed in this course.**

For further details on the Griffith Graduate Attributes please refer to [The Griffith Graduate policy](#).

University wide attributes

Graduate Attribute	Taught	Practised	Assessed
Knowledgeable and skilled, with critical judgement	•		•
Effective communicators and collaborators		•	•
Innovative, creative and entrepreneurial		•	•
Socially responsible and engaged in their communities		•	

### Additional Course Information on Graduate Attributes

Not required.

## 3. Learning Resources

### 3.1 Required Resources

Details of your Required Learning Resources are available from the [Reading List](#).

### 3.2 Recommended Resources

Details of your Recommended Learning Resources are available from the [Reading List](#).

### 3.3 University Learning Resources

The University provides many facilities and support services to assist students in their studies. Links to information about University support resources that are available to students are included below for easy reference.

**Readings** - New online service enabling students to access Required and Recommended Learning resources. It connects to the library catalogue to assist with quickly locating material held in Griffith libraries and enables students to manage and prioritise their readings, add personal study notes and export citations.

**Learning@Griffith** - there is a dedicated website for this course via the Learning@Griffith at myGriffith.

**Academic Integrity Tutorial** - this tutorial helps students to understand what academic integrity is and why it matters. You will be able to identify types of academic misconduct, understand what skills you will need in order to maintain academic integrity, and learn about the processes of referencing styles.

**Student Support** - provides a range of services to support students throughout their studies including personal support such as Counselling and Health Services; Academic support; and Financial and Welfare support.

The **Careers and Employment Team** provides: Career Wellbeing, Career Planning and Decision Making, Finding Jobs, Skills Identification and Development, Graduate Employment Information, LinkedIn Profile Review, Interview Preparation, Online Psychometric and Aptitude Test Preparation, International Student Support, Disability Disclosure Strategies and Higher Degree Research (HDR) Career Consultations.

**Library and Learning Services**: Library and Learning Services provides a wide range of quality client-focused services and programs to students, researchers and staff of the University. Library and Learning Services works in collaboration with the academic community to achieve academic and research outcomes.

**Support for learning** - the University provides access to common use computing facilities for educational purposes.

**Code of Practice** - Griffith Information Technology Resources.

### 3.5 Other Learning Resources & Information

Readings for this course will be provided in full, or via links, in the course **Week-by-Week Content & Readings** section of the 2281ENV web pages on Learning@Griffith.

## 4. Teaching & Learning Activities

### 4.1 Learning Activities

Week Commencing	Activity	Learning Outcomes
19 Jul 21	<b>WEEK 1 (Lecture):</b> Introduction to the course. MODULE 1 - Natural resources - an introduction MODULE 2 - Natural resources and the discipline of economics (Part A) Debate organisation.	1, 2, 3
19 Jul 21	<b>WEEK 1 (Workshop):</b> Debate organisation. A brief intro to the essay.	7, 8, 9
26 Jul 21	<b>WEEK 2 (Lecture):</b> MODULE 2 - Natural resources and the discipline of economics (Part B)	1, 2, 3
26 Jul 21	<b>WEEK 2 (Workshop):</b> Essay discussion and preparation exercise.	8, 9
2 Aug 21	<b>WEEK 3 (Lecture):</b> MODULE 3 - Ecological economics and biophysical perspectives on natural resources	1, 2, 3, 6
2 Aug 21	<b>WEEK 3 (Workshop):</b> Workshop exercise 1 - Ecological economics	1, 2, 3, 6
9 Aug 21	<b>MID-TRIMESTER BREAK (Other):</b>	

Week Commencing	Activity	Learning Outcomes
16 Aug 21	<b>WEEK 4 (Lecture):</b> MODULE 4 : Total economic value (TEV) and natural resources	1, 2, 3, 6
16 Aug 21	<b>WEEK 4 (Workshop):</b> Debate 1 : Ecological economics vs. environmental economics	1, 2, 3, 6
23 Aug 21	<b>WEEK 5 (Lecture):</b> MODULE 5. Market equilibrium and resource allocation (a) without externalities (b) including externalities	2, 3, 4, 5
23 Aug 21	<b>WEEK 5 (Workshop):</b> Debate 2: Total economic value (TEV) as basis for managing natural resources	1, 2, 3, 4, 5
30 Aug 21	<b>WEEK 6 (Lecture):</b> MODULE 6: Economic frameworks for environmental decision-making (Benefit-Cost Analysis, MCA)	1, 2, 3, 4, 5
30 Aug 21	<b>WEEK 6 (Workshop):</b> Workshop exercise 2: Environmental quality and social efficiency	4, 6, 7
6 Sep 21	<b>WEEK 7 (Lecture):</b> MODULE 7. Strategies/Policies for Sustainability - Market-Based Instruments (MBIs) focus	3, 4, 5
6 Sep 21	<b>WEEK 7 (Workshop):</b> Debate 3: Social benefit-cost analysis as a decision-making tool	4, 5, 6, 7, 9
13 Sep 21	<b>WEEK 8 (Lecture):</b> MODULE 8. Natural Resource Economics: Non-renewable resources	1, 2, 3, 5
13 Sep 21	<b>WEEK 8 (Workshop):</b> Workshop exercise 3: Non-renewable resources	1, 2, 3, 5
20 Sep 21	<b>WEEK 9 (Lecture):</b> MODULE 9. Natural Resource Economics: Renewable resources (fisheries)	1, 2, 3, 4, 5
20 Sep 21	<b>WEEK 9 (Workshop):</b> Debate 4: Non-renewable resources	1, 2, 3, 4, 5
27 Sep 21	<b>WEEK 10 (Lecture):</b> MODULE 10. Natural Resource Economics: Renewable resources (forests)	1, 2, 3, 4, 5
27 Sep 21	<b>WEEK 10 (Workshop):</b> Workshop exercise 4 : Economic valuation	1, 2, 3, 4, 5
4 Oct 21	<b>WEEK 11 (Lecture):</b> MODULE 11 : Non-market valuation of the environment (Revealed preference methods)	1, 2, 3, 4, 5
4 Oct 21	<b>WEEK 11 (Workshop):</b> Debate 5: Revealed vs. stated preference valuation techniques	6, 7, 9
11 Oct 21	<b>WEEK 12 (Lecture):</b> MODULE 11 (contd.): Non-market valuation of the environment (Stated preference methods) ----- Course overview	1, 2, 3, 4, 5
11 Oct 21	<b>WEEK 12: TBA (if required) (Workshop):</b>	

## 4.2 Other Teaching and Learning Activities Information

All content this trimester is planned for on-line delivery.

This course begins with an overview of natural resources and the role they play in mainstream and environmental economic approaches. The understanding of essential concepts and theory for economic analysis, policy and related allocation of renewable and non-renewable resources are core components of the course. Analyses of specific natural resources such as fossil-fuels, minerals, and fisheries are considered. Economic approaches for decision support regarding environmental resources are outlined. Market-based and non-market-based methods for valuing environmental resources are also introduced.

### Lectures

One 2-hour lecture per week (on Collaborate Ultra) provides most of the substantive course content. The lecture is

compulsory and comprehensive lecture notes will only be available for certain parts of the course.

**Workshops - Exercises, Debates, Assignment Assistance**

One 2-hour workshop per student per week. The workshops will comprise a mix of exercises, discussions and debate presentations by students. The workshops are designed to (1) develop expertise in a specific area of economic thought about environmental resources, (2) enhance critical thinking about the effectiveness of dominant views, and (3) familiarity and basic quantitative skills and understanding to supplement resource management decision-making and valuation sections of the course.

All students are required to participate in a debate in this section of the course. The debate will be run on-line using Collaborate Ultra.

Students' contributions to workshops will be monitored and considered in the assessment for this part of the course. New content will be presented in workshops. Failure to attend either lectures or workshops online will reduce your chances of obtaining a high grade on this course.

**Disclosure Statement**

If any student has a disability and/or health condition that may impact on their ability to successfully undertake required learning activities in this course, they are encouraged to complete the [Griffith University Disclosure Statement](#) and advise their Course Convenor.