

ECON3006: Environmental Economics 2023



MISSION: Our mission is to advance responsible and impactful business knowledge. To achieve our mission, we develop life ready graduates and build global and local partnerships through ethical and innovative practices.

OVERVIEW

Course Description

This course introduces you to an economic and policy-oriented approach for exploring the environmental system and the role of government in using natural and environmental resources. The course is designed to provide a deeper understanding of the global perspectives on contemporary environmental and natural resource issues and appropriate economic concepts, models, and tools for analysing environmental and natural resource problems and exploring the strengths and weaknesses of alternative viewpoints to inform policy decision-making. Drawing on case studies, the course will delve into how underlying economic concepts and principles informed policy decision-making concerning environmental and natural resources. The course covers a broad range of issues pertaining to natural resource scarcity, market failure, the economics of pollution control locally, nationally, and internationally, efficient use of exhaustible and renewable resources, market-based instruments, environmental cost and benefit analysis, environmental evaluation, global environmental challenges, and the role of government in achieving sustainable economic growth and development.

Contact Hours

Workshop

Face to Face On Campus

2 hour(s) per Week for Full Term

Students are expected to complete 4 hours of guided learning via online preparation, lectures, interactive workshops, tutorials, discussion groups or self-directed learning and an additional 6 hours of independent study per week.

Unit Weighting

10

Assumed Knowledge Workload

Students are expected to have advanced to third-year courses.

Students are required to spend on average 120-140 hours of effort (contact and non-contact) including assessments per 10-unit course.

Please refer to the course CANVAS site for details of teaching staff for ALL course offerings. The primary contact for courses is the Course Coordinator, whose details are listed on the course CANVAS site.

Student Consultation

A minimum of one (1) hour of consultation per week. Please see course CANVAS site for details of time and location.

Course Learning Outcomes

On successful completion of this course, students will be able to:

1. Understand the contemporary environmental and natural resource debates.
2. Critically analyse public policy debates relating to air and water pollution, land and forests, fisheries, and recyclables as it pertains to sustainable development and environmental justice.
3. Understand the economic and policy-oriented approach to externalities, benefit-cost analysis, valuation methods and ecosystem goods and services.
4. Undertake a critical analysis of theoretical and empirical literature and comparative assessment of competing theoretical and policy issues using real-world data in a team environment.

COURSE OUTLINE

www.newcastle.edu.au

CRICOS Provider
00109J

ASSESSMENT DETAILS

This course has **3** assessments. Each assessment is described in more detail in the sections below:

	Assessment Name	Due Date	Involvement	Weighting	Learning Outcomes
1	Article Review and Video	Friday, Week 6 by 11:59 pm	Individual	20%	1, 2, 3, 4
2	Group Project Report and Presentation	Monday, Week 11 by 11:59 pm	Group	30%	1, 2, 3, 4
3	Final Examination	During formal examination period	Individual	50%	1, 2, 3, 4

Please note: students are advised that all assessments must be submitted in English. Assessment items not submitted in English will receive a mark of zero.

Results of individual assessment items and final results, including those provided via the Learning Management System (LMS) are 'unofficial results' until they are confirmed as finalised by the School Assessment Body and the Head of School or delegate. Finalised results are released directly to students on the Fully Graded Date of the relevant Semester/Trimester.

Time referenced is time in Newcastle NSW

Late Submissions	The mark for an assessment item submitted after the designated time on the due date, without an approved extension of time, will be reduced by 10% of the possible maximum mark for that assessment item for each day or part day that the assessment item is late. Note: this applies equally to week and weekend days.
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Assessment 1 – Article Review and Video

Assessment Type

Article Review and Video

Purpose

The purpose of this assessment is to assess student's knowledge of core environmental and natural resource economics concepts and principles that have been covered in the course and a student's ability to apply these concepts and principles to critique a journal article. Students are to apply critical thinking skills and engage closely with course materials and course content in critiquing the article. Learning outcomes include a demonstration of critical thinking skills in analysing theoretical and applied perspectives to environmental and natural resource issues and offering economic perspectives to decision-making to address these issues. Students are required to demonstrate their critical written communication and analytical skills and oral communication skills.

Description

The list of journal articles posted on CANVAS will be drawn from leading journals covering the course topics on contemporary environmental and natural resources issues. The article review is to consist of three (3) sections:

- Summary of the article;
- Critique; and
- Conclusion and Policy Implications.

In addition to the article review, students are required to create a 5-minute video where they discuss the article review and reflect on the key issues related to their article review. The purpose of this task is to evaluate the student's individual oral communication skills. The article review and video should be submitted simultaneously through Turnitin on CANVAS. The rubrics for the Article Review and Video will be posted on CANVAS.

Weighting Length

20% [Article Review and Video]
Article review: 1000 words \pm 10%
Video: 5 minutes

Due Date

Friday, Week 6 by 11:59 pm

Submission Method

Online via Turnitin on CANVAS.

Assessment Criteria

Refer to Rubrics on CANVAS.

Return Method

Online via CANVAS

Feedback Provided

Online via CANVAS. Article Review and Video will be graded, and marks will be posted on CANVAS. Students can request additional information if required.

Assessment 2 - Group Project Report and Presentation

Assessment Type

Group Project Report and Presentation

Purpose

The purpose of this group project is to assess students' understanding of the core principles and concepts of environmental and natural resource economics and the ability to apply them in context. Students are required to draw from their knowledge gained in the course and program of study and bring them together with an environmental and natural economics focus. The group is to demonstrate their ability to apply critical thinking skills in analysing theoretical and applied perspectives relating to environmental issues, and how this informs decision-making in policy circles. This helps to assess the group's comprehension of the course learning outcomes.

Description

Group work facilitates peer learning and encourages students to develop collaborative skills. Studying collaboratively has been shown to enhance student learning directly and your career progression by equipping you with:

- Individual skills (providing an opportunity for students to clarify and refine their understanding of concepts via discussion and rehearsal with peers).
- Teamwork skills (skills in working within team dynamics and leadership skills).
- Analytical and cognitive skills (analysing task requirements, questioning, critically interpreting materials and evaluating the work of others).
- Collaborative skills (conflict management and resolution, accepting intellectual criticism, flexibility and negotiation and compromise); and
- Organisational and time management skills.

Students will work in a team of no more than six (6), depending on the size of the class. Each group will be assigned a country case study. The group project report and presentation are designed to assess the group's ability to work collaboratively to plan and execute a substantial research project based on a wide selection of evidence accessed from electronic print media and databases. The group project report is expected to entail a critical discussion of a range of contemporary issues facing the country as it pertains to environmental and natural resource issues. The Course Coordinator will assign each student to a group by the end of Week 2. Each group is to identify at least four United Nations Sustainable Development Goals that would underpin their report and address these cogently.

Each group is to devote a section (500 words $\pm 10\%$) of the group report to outlining clearly plastic circularity in the assigned country. In this section, describe succinctly the challenges of plastics faced by the country and the actions taken by the government and communities to address these problems.

The group project and presentation are expected to articulate more clearly the challenges and opportunities and offer solid policy recommendations for bringing about change.

Students are expected to draw on lecture materials covered, textbook, articles reviewed and other readings to write up the group project report. The report should attempt to provide solid examples of country-driven strategies and best practices and policies and identify challenges and opportunities. Further, the report is to draw conclusions that emerge and the policy recommendations for achieving sustainable development and use of environmental and natural resources.

Each Group Project Report is expected to cite at least twelve articles, preferably published between 2015-2023 and related to the contemporary issues covered in the course and aligned to the SDGs. You may refer to articles cited at the end of the chapters of the textbook.

Each student shall be assigned to a group at the end of Week 2 of the semester. Each group is to nominate a facilitator who will communicate with the Course Coordinator on matters relating to the Group Project. Students who are part of a Group Project can contact the Course Coordinator for personal reasons or should an issue arise, that cannot be resolved within the group setting. Each group member is required to contribute to the group project's writing and presentation.

Timeframe:

Week 2: Each student is assigned to a group.
 Week 3: Draft a preliminary framework for the report, schedule weekly meetings, assign tasks to each group member and set milestones.
 Week 5: Groups to meet with Course Coordinator.
 Week 9: Groups to meet with Course Coordinator.
 Week 11: Due Date for submission of **ALL** Group Projects & Group Presentations and Group Presentation I
 Week 12: Group Presentation II
 Week 13: Group Presentation III

Group Presentation:

- The group presentation will be delivered in a designated workshop in Weeks 11-13.
- 12-minute visual and oral presentation which highlights the context and key findings of the group project report. Each group is to nominate at least three members who will make the presentation on behalf of the group. The number of presenters and duration of the presentation is subject to revision based on the size of the class.
- 3-5-minute question time will follow the presentation to answer questions posed by the audience. The questions posed are to be answered by members of the group that are not presenting.
- All group members must attend the presentation.
- You may include PowerPoint or other software to design the presentation.
- Students who are not part of the presentation will be required to submit a feedback sheet on their experience of each group presentation. Details about the feedback template will be provided during class.

Please note: Self and Peer Assessment: A single mark is given for the group assignment. This mark will then be moderated by "self and peer assessment" using the SPARKPlus software so that individual group members may receive different marks. Any moderated individual mark received by each group member is based on contribution to the assignment and, more importantly, the ability to work with others. Individually group members are required to submit a self and peer assessment through SPARK within 24 hours of the due date. Failure to complete SPARK will result in a mark of zero. The criteria for the self and peer assessment are found along with the instructions on how to use SPARK on CANVAS. Please note: **NO SPARK NO MARK.**

Further instructions about this assessment task will be discussed in class and available on CANVAS.

Weighting
Length
Due Date

30% [Group Project Report 20%, Presentation – 10%]
 4000 words \pm 10%.

Submission Method

Group Project Report is due by Monday, Week 11 by 11:59pm. More details are provided on CANVAS.

Assessment Criteria
Return Method
Feedback Provided

Online via Turnitin on CANVAS by Group Facilitator with name and student number of all group members.
 Refer to Rubrics on CANVAS.
 Online – via Turnitin
 Online via CANVAS.
 Group Project Report and Presentation will be graded and marks posted on CANVAS. Students can request additional information if required.

Assessment 3 - Final Examination

Assessment Type
Purpose

Formal Examination
 The purpose of the final exam is to assess students' knowledge and global perspective of both environmental and natural resource economics and how they interact and offer policy-oriented approaches for addressing these challenges to achieve sustainable economic development.

Description

The final exam will be based on topics covered in the course focusing on contemporary environmental and natural resource issues.
 This course has a **RESTRICTED OPEN BOOK** examination. A memory aid is permitted. The memory aid is a single double-sided A4 sheet of handwritten or typed notes for use during the examination. Note: memory aids must be left on the examination table and cannot be removed from the examination venue.

Weighting

50%

Length	120 minutes
Due Date	During examination period
Submission Method	Formal Exam
Assessment Criteria	Refer to Rubrics on CANVAS.
Return Method	Not Returned
Feedback Provided	Final exam scripts are not returned to students but will be made available for review by students, upon request, in a controlled and monitored setting. Students are required to make requests directly to the Course Coordinator. Completed examination scripts are kept by the Newcastle Business School for six (6) months only, from the relevant fully graded date. Requests made after the six (6) month period cannot be considered.

SYLLABUS

Course Content

Topics in the course include but are not limited to the following:

1. The Vision of the Future
2. Economic Approach: Property Rights, Externalities and Environmental Problems
3. Evaluating Trade-Offs & Valuing the Environment
4. Dynamic Efficiency and Sustainable Development
5. Depletable Resource Allocation
6. Energy
7. Water and Land
8. Forests and Fisheries
9. Ecosystem Goods and Services
10. Economics of Pollution Control
11. Climate Change
12. Toxic Substances & The Quest for Sustainable Development and Environmental Justice

Course Materials

Required Text:

Tietenberg, T.H. and Lewis, L. (2018) *Environmental and Natural Resource Economics: International Student Edition*, Routledge

ISBN: 9781138632301

Please refer to the course CANVAS site for details of additional recommended readings.

SCHEDULE

Week	Topic	Class Preparation	Workshop Activities*
1	Introduction & Visions of the Future & Economic Approach to Environmental and Natural Resources	Chs. 1 and 2	No activities
2	Evaluating Trade-offs and Valuing the Environment	Chs. 3 and 4	Discussion Questions
3	Dynamic Efficiency and Sustainable Development & Depletable Resource Allocation	Chs. 5 and 6	Discussion Questions
4	Energy and Recyclable Resources	Chs. 7 & 8	Discussion Questions
5	Water & Land	Chs. 9 & 10	Discussion Questions
6	Forests & Fisheries	Chs. 11 & 12	Discussion Questions Assessment 1 due: Friday, Week 6 by 11:59pm
7	Ecosystem of Goods and Services & Economics of Pollution	Chs. 13 & 14	Discussion Questions
8	Stationary-Source Local and Regional Air Pollution & Mobile-Source Air Pollution	Chs. 15 & 16	Discussion Questions
9	Water Pollution & Toxic Substance and Environmental Justice	Chs. 18 & 19	Discussion Questions
10	Climate Change	Ch. 17	Discussion Questions
11	Group Project Presentations	Chs. 1-21	Group Project Presentations I & Submission of Group Reports Assessment 2 due: Monday, Week 11 by 11:59pm
12	Group Project Presentations	Chs. 1-21	Group Project Presentations II
13	Group Project Presentations & Course Review	Chs. 1-21	Group Project Presentations III

If a lecture/class is scheduled on a public holiday, a make-up lecture may be announced by the course coordinator on the course CANVAS site.

CONTACTS

School Offices

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PSB Academy Enquiries

Log your question or request to the PSB Program Executives at the following website:
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ADDITIONAL INFORMATION

Grading Scheme

This course is graded as follows:

Range of Marks	Grade	Description
85-100	High Distinction (HD)	Outstanding standard indicating comprehensive knowledge and understanding of the relevant materials; demonstration of an outstanding level of academic achievement; mastery of skills*; and achievement of all assessment objectives.
75-84	Distinction (D)	Excellent standard indicating a very high level of knowledge and understanding of the relevant materials; demonstration of a very high level of academic ability; sound development of skills*; and achievement of all assessment objectives.
65-74	Credit (C)	Good standard indicating a high level of knowledge and understanding of the relevant materials; demonstration of a high level of academic achievement; reasonable development of skills*; and achievement of all learning outcomes.
50-64	Pass (P)	Satisfactory standard indicating an adequate knowledge and understanding of the relevant materials; demonstration of an adequate level of academic achievement; satisfactory development of skills*; and achievement of all learning outcomes.
0-49	Fail (FF)	Failure to satisfactorily achieve learning outcomes. If all compulsory course components are not completed the mark will be zero. A fail grade may also be awarded following disciplinary action.

*Skills are those identified for the purposes of assessment task(s).

Communication Methods	<p>Communication methods used in this course include:</p> <ul style="list-style-type: none"> - CANVAS Course Site: Students will receive communications via the posting of content or announcements on the CANVAS course site. - Email: Students will receive communications via their student email account. - Face to Face: Communication will be provided via face to face meetings or supervision.
Course Evaluation	Each year feedback is sought from students and other stakeholders about the courses offered in the University for the purposes of identifying areas of excellence and potential improvement.
Oral Interviews	As part of the evaluation process of any assessment item in this course an oral examination may be conducted. The purpose of the oral examination is to verify the authorship of the material submitted in response to the assessment task. The oral examination will be conducted in accordance with the principles set out in the <u>Oral Examination Guidelines</u> . In cases where the oral examination reveals the assessment item may not be the student's own work the case will be dealt with under the <u>Student Conduct Rule</u> .
Academic Misconduct	All students are required to meet the academic integrity standards of the University. These standards reinforce the importance of integrity and honesty in an academic environment. Academic Integrity policies apply to all students of the University in all modes of study and in all locations. For the Student Academic Integrity Policy, refer to https://policies.newcastle.edu.au/document/view-current.php?id=35 .
Adverse Circumstances	<p>The University acknowledges the right of students to seek consideration for the impact of allowable adverse circumstances that may affect their performance in assessment item(s). Applications for special consideration due to adverse circumstances will be made using the online Adverse Circumstances system where:</p> <ol style="list-style-type: none"> 1. the assessment item is a major assessment item; or 2. the assessment item is a minor assessment item and the Course Coordinator has specified in the Course Outline that students may apply the online Adverse Circumstances system; 3. you are requesting a change of placement; or 4. the course has a compulsory attendance requirement. <p>Before applying you must refer to the Adverse Circumstances Affecting Assessment Items Procedure available at: https://policies.newcastle.edu.au/document/view-current.php?id=236</p>
Important Policy Information	The 'HELP for Students' tab in UoNline contains important information that all students should be familiar with, including various systems, policies and procedures.

This course outline was approved by the Head of School. No alteration of this course outline is permitted without Head of School approval. If a change is approved, students will be notified and an amended course outline will be provided in the same manner as the original.

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