School of Environmental and Life Sciences

ENVS6545: Impact Assessment and Climate Change Policy

Online

Trimester 3 - 2023

COURSE OUTLINE

OVERVIEW

Course Description

Climate change is a leading environmental and public policy issue in Australia and globally. This course will explain the use of environmental impact assessment methodology in assisting policymakers, business, and the community to better understand the likely consequences of climate change at various spatial and temporal levels. This course will provide an overview of the physical science of climate change, the vulnerability of socio-economic and natural systems to climate change, strategies for adapting to climate change, and climate change mitigation. Project-based and strategic assessment approaches will be used and students will analyse key policy debates on climate change within Australia and internationally.

Assumed Knowledge

Completion of an appropriate undergraduate degree.

Contact Hours

Online
Lecture
Online
2 hour(s) per Week for Full Term

Online Activity
Online
3 hour(s) per Week for Full Term
Tutorial Participation

Self-Directed Learning
Online
8 hour(s) per Week for Full Term

Tutorial
Online
4 hour(s) per Week for 1 Weeks

Unit Weighting

10

Workload

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

CONTACTS

Course Coordinator

Online
Mr Michael Osborne
Michael.Osborne@newcastle.edu.au
Consultation: By appointment

Teaching Staff

Other teaching staff will be advised on the course Canvas site.

School Office

School of Environmental and Life Sciences
Room C228 Chemistry Building
Callaghan
Science-SELS@newcastle.edu.au
+61 2 4921 5080
9am-5pm (Mon-Fri)

SYLLABUS

Course Content

Topics will generally include:

- Introduction to climate change
- History of environmental impact assessment (EIA) and contemporary challenges
- Impact assessment methodologies and theory
- Impact assessment and climate change
- International climate change policy
- Climate change policy in Australia

Course Learning Outcomes

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

1. Analyse the consequences of climate change within an environmental impact assessment methodology.
2. Evaluate methods for reducing greenhouse gas emissions and removing greenhouse gases from the atmosphere.
3. Analyse future climate adaptation and mitigation option pathways based on the physical science of climate change and impact assessment techniques.
4. Critique policy positions using the vulnerabilities, capacities, and limits of natural and human systems to adapt to climate change.
5. Formulate the principles of best practice climate change policy by evaluating policy responses in Australia and around the world.

Course Materials

Other Resources:

- Various online readings and audio-visual materials, as outlined in the Course Readings.

Recommended Text:

- Elliot M, 2014, *EnvironmentalImpactAssessmentin Australia, Theory and Practice,* Sixth Edition, The Federation Press, Annandale, Australia.

Required Text:

- Dessler, A., & Parson, E. (2019). *The Science and Politics of Global Climate Change: A Guide to the Debate* (3rd ed.). Cambridge: Cambridge University Press. doi:10.1017/9781316832158

SCHEDULE

Week	Week Begins	Topic	Learning Activity	Assessment Due
1	21 Aug	Introduction to Climate Change Policy and the role of the IPCC	Discussion on the role of the IPCC and the concept of "scientific consensus"	
2	28 Aug	The Science of Climate Change – Part 1	Exploration of the Physical Science Basis of Climate Change	
3	4 Sep	The Science of Climate Change – Part 2	Exploration of the Impacts, Adaptation and Vulnerability in a changing climate	Critique: Sunday 10 Sep 2023, 11:59pm (AEST)
4	11 Sep	The Science of Climate Change – Part 3	Exploration of the Mitigation of Climate Change	
5	18 Sep	The Politics of Climate Change, the Media and popular construction of Climate Change	Discussion about the contestation of science in the media and popular climate change perceptions.	
6	25 Sep	Environmental Impact Assessment: Theory and Methodology – Part 1	Exploration of the history, trends and underlying assumptions of EIA	
7	2 Oct	Environmental Impact Assessment: Theory and Methodology – Part 2	Exploration of the involvement of the public in EIA processes	
8	9 Oct	Environmental Impact Assessment: Theory and Methodology – Part 3	Exploration of the key EIA techniques, pitfalls and the concept of "significance"	Proposal for Major Report: Sunday 15 Oct 2023, 11:59pm (AEDST)
9	16 Oct	Strategic and Policy Level Impact Assessment	Discussion on strategic environmental assessment, indicators and techniques	Peer Review of 2 x Proposals: Sunday 22 Oct 2023, 11:59pm (AEDST)
10	23 Oct	Impact assessment and Climate Change policy: international and national Climate Change policy	Exploration of strategic environmental assessment approaches to climate policy	
11	30 Oct	Australian Climate Change policy: national, state and local Initiatives	Exploration of strategic environmental assessment approaches to climate policy in Australia	
12	6 Nov	Climate Change, Environmental Justice and Impact Assessment	Exploration of the concept of "climate justice" in impact assessment and climate policy	Major Research Report: Sunday 12 Nov 2023, 11:59pm (AEDST)
Examination Period				

ASSESSMENTS

This course has 4 assessments. Each assessment is described in more detail in the sections below.

	Assessment Name	Due Date	Involvement	Weighting	Learning Outcomes
1	Unit Exercises/Critiques	Sunday 10 Sep 2023, 11:59pm (AEST)	Individual	20%	1, 2, 3, 4
2	Group Tutorial Facilitation	Facilitation week allocated in class, contributions due each week (one before Wednesday 11:59pm).	Group	15%	1, 2, 3, 4, 5
3	Research Assignment	Proposal for Major Report: Sunday 15 Oct 2023, 11:59pm (AEDST) Peer Review 2 x Proposals: Sunday 22 Oct 2023 11:59pm (AEDST) Final report due: Sunday 12 Nov 2023, 11:59pm (AEDST)	Individual	50%	1, 2, 3, 4, 5
4	Weekly Quiz	Sunday 11:59pm (AEST/ AEDST Week 1 to Week 8)	Individual	15%	1, 2, 3, 4

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.

Assessment 1 - Unit Exercises/Critiques

Assessment Type Written Assignment
Description Critical evaluation of one of two given climate-related topics
Weighting 20%
Length 1000 words
Due Date Sunday 10 Sep 2023, 11:59pm (AEST)
Submission Method Online
Assessment Criteria Marking Rubric
Return Method Online
Feedback Provided Online - Target within two weeks of submission deadline.

Assessment 2 - Group Tutorial Facilitation

Assessment Type Tutorial / Laboratory Exercises
Description Facilitation of a topic in the allocated week and a minimum of two significant discussion contributions per week throughout the course
Weighting 15%
Due Date Facilitation week allocated in class, contributions due each week (one before Wednesday 11:59pm).
Submission Method Online
Assessment Criteria Marking Rubric for group facilitation and grade for course contributions
Return Method Online
Feedback Provided Online.

Assessment 3 - Research Assignment

Assessment Type	Written Assignment
Description	Research report preparation including submission of a 1000-word proposal, feedback on two other proposals (2 x 250-words), and submission of a 2500-word final report.
Weighting	50%
Due Date	Proposal for Major Report: Sunday 15 Oct 2023, 11:59pm (AEDST) Peer Review 2 x Proposals: Sunday 22 Oct 2023 11:59pm (AEDST) Final report due: Sunday 12 Nov 2023, 11:59pm (AEDST)
Submission Method	Online
Assessment Criteria	Marking Rubric for final report and peer review of other proposals
Return Method	Online
Feedback Provided	Online - Target within two weeks of submission deadline.

Assessment 4 - Weekly Quiz

Assessment Type	Quiz
Description	A short multiple-choice quiz in each of the first 8 weeks covering issues and material highlighted in lectures.
Weighting	15%
Due Date	Sunday 11:59pm (AEST/ AEDST Week 1 to Week 8)
Submission Method	Online
Assessment Criteria	Automatically graded
Return Method	Online
Feedback Provided	Online - At the end of each quiz.

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

Communication methods used in this course include:

- 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.

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 (Vivas)

As part of the evaluation process of any assessment item in this course an oral examination (viva) 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 Oral Examination (viva) Procedure. 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 Student Conduct Rule.

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

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:

1. the assessment item is a major assessment item; or
2. the assessment item is a minor assessment item and the Course Co-ordinator 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.

Before applying you must refer to the Adverse Circumstance Affecting Assessment Items Procedure available at:

https://policies.newcastle.edu.au/document/view-current.php?id=236

Important Policy Information

The Help button in the Canvas Navigation menu contains helpful information for using the Learning Management System. Students should familiarise themselves with the policies and procedures at

https://www.newcastle.edu.au/current-students/no-room-for/policies-and-procedures

that support a safe and respectful environment at the University.

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.