Module Descriptor Form

Civil and Environmental Engineering

EV939 - Environmental Impact Assessment

Module Code	EV939	**Module Title**	Environmental Impact Assessment				
Module Registrar	Cochrane, Mr Neil A						
Other Staff Involved							
Credit Weighting	10	**Semester**	1	**Elective**	Yes	**Academic Level**	5
Pre-requisites							
Required for							

Module Format and Delivery (hours):

Lectures	Tutorials	Assignments	Labs	Private Study	Total
20	0	40	0	40	100

Educational Aim

This module aims to:

Environmental impact assessment (EIA) relates to the process of identifying, evaluating, and mitigating the biophysical, social, economic, cultural and other relevant effects of development proposals prior to major decisions being taken and commitments made. This class provides an introduction to the methods used to predict environmental impacts, andevaluates how these may be used to integrate environmental factors into decisions.

The class draws principally on the UK planning context of environmental impact assessment of individual projects (project EIA), but also takes account of EIA experience in other countries and international organisations . Participants evaluate the quality of Environmental Statements and of the EIA process using the Institute of Environmental Assessment and Management (IEMA) methodology.

The class discusses how EIA can be used a pro-active design tool for projects and how it can contribute to the enhancement of environmental, social and health issues. The class has the contribution of key practitioners in the field and includes different case studies such as mining, roads, and on-shore and off-shore windfarms.

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Syllabus

This module will teach the following:

NOTE: this structure is subject to change due to the availability of guest speakers and other external factors.

• Week 1
Introduction to the course and to Environmental Impact Assessment (EIA). Outline the key stages of the process and a brief explanation of all
assignments.

• Week 2
Summary of the 'screening' process whereby planners and proponents determine whether an EIA is required or would be beneficial to the project. Data for EIA. Carrying out an EIA – key methods. Use of GIS for EIA. Uncertainty and subjectivity issues. Consultation and public participation in EIA. The importance of scale issues in EIA and the case for scale guidelines. Further information on the coursework.

• Week 3
A summary of how the EIA process can mitigate environmental impacts, followed by an introduction to how you will be asked to judge the quality and effectiveness of an EIA Report using best practices from industry.

• Week 4
Guest Lecture: regulatory requirements and planning processes associated with environmental impact assessments in the UK context.

• Week 5
Workshop: students will work in groups to decide if different social and environmental receptors which might be impacted by a proposed development are sufficiently 'significant' to be included in an EIA through a mock scoping exercise.
CW1 due (10%)

• Week 6
Group Meetings: students must book a time to meet with their lecturer to discuss progress on their project. Students will be graded individually on their contribution in this meeting as well as in their work in CW1

• Week 7
Guest Lecture: consultation is a key part of the EIA process. This week's class will focus on real-world practice from the perspective of statutory consultee from Historic Environment Scotland.

• Week 8
Guest Lecture: the final guest lecture offers a third perspective on EIA from the viewpoint of a consultant / developer in offshore renewables.

• Week 9
Students will look at how practitioners manage the assessment process given the uncertain conditions and shifting goals associated with long□term development decision.
CW2 due (50%)

• Week 10
Summary of allied assessment techniques including strategic environmental assessment, health impact assessment, social impact assessment, and other environmental regulations such as biodiversity net gain.

• Week 11
Reading week ahead of the end of class test in the December exam diet. No classes.

• Exam Diet
Individual multiple-choice test during the exam diet at a set time and place, conducted on university computers using the

exam safe browser. Students who require extra provision for examinations should talk to their advisor or studies and Disability and Wellbeing to facilitate this.
EX1 (40%)

Learning Outcomes

On Completion of the module, the student is expected to be able to:

LO: 1	Be able to be conversant with the regulatory requirements for statutory EIA throughout the world.
LO: 2	Be familiar with some of the methodologies commonly used in preparing EIA
LO: 3	Be competent in the evaluation of the quality of an Environmental Impact Statements and understand the requirements of the IEMA EIA Quality Mark
LO: 4	Be able to understand the relationship between EIA and development decisions and understand the ways in which EIA can contribute to sustainable development and project design, and its limitations in this regard

(UK SPEC suggests no more than 4 learning outcomes per module. Statements must be broad and be syllabus free and link in with the intended learning outcomes on the programme specifications.)

Assessment of Learning Outcomes - Criteria

Learning Outcome: **1**

	Criteria
1	How students show a critical understanding of the regulatory requirements for statutory EIA throughout the world

Learning Outcome: **2**

	Criteria
1	How familiar students are with regards to methodologies commonly used in preparing EIA

Learning Outcome: **3**

	Criteria
1	How competent students are in the evaluation of the quality of an Environmental Impact Statements and how they understand the requirements of the IEMA EIA Quality Mark
2	How well written and structured the report is

Learning Outcome: **4**

	Criteria
1	How students show a critical understanding of the relationship between EIA and development decisions and understand the ways in which EIA can contribute to sustainable development and project design, and its limitations in this regard

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Assessment Method(s) Including Percentage Breakdown and Duration of Exams

To Pass the module, students need to gain a summative mark of: 50%

Description	Semester	Start Week	Duration	Weight	Submission Week	Linked Criteria
EV939-CW1: Project Proposal	1	1		10%	6	LO 1: C1 LO 2: C1
EV939-CW2: Evaluating EIA Quality	1	1		50%	9	LO 3: C1, C2
EV939-EX: Online Test. Closed Book	1		1.00	40%	E	LO 1: C1 LO 2: C1 LO 4: C1

Principles of Assessment Feedback

The assessment of the module has been designed to encourage student engagement and understanding of this topic.
• The EIA process is based on professional judgement and accountability. Academic dishonestly including the use of artificial intelligence will be investigated swiftly and fairly in line with university policies.
• Summative marks are divided between a group coursework (written report) and an individual examination. An interim report is due before the group coursework – this grade will be returned individually. This is designed to make sure that students are on track with the main task and to identify those failing to engage.

NOTE: students who fail to engage with their group or whose group can demonstrate that their contribution is deleterious to that of their peers will be removed from the group and asked to complete a solo assignment. There will be no extra time for this task and students cannot use work prepared by their former group in their individual submission.

• Assessments and methods are clearly explained to students at the start of the course.
• All assessments are marked in an appropriate, fair and transparent way with pre-specified marking criteria.
• Timely, constructive, and supportive feedback is given to students to help them understand the extent to which they have fulfilled the assessment criteria and support future development of their work.
• Additional feedback will be given to students throughout the year in on-demand office hours.
• The course is reviewed every year, based on feedback from students collected in the form of a mid-term and one end-term questionnaire. Any recommended changes are reviewed and implemented in the next academic year.

Additional Information

Resit Procedure

Students must gain a summative mark of 50% to pass the module. Attendance at the end of semester exam is a requirement of this module. Absence from the final exam will result in an ‘absent’ mark being returned. Students who fail the module at the first attempt will be re-examined during the next applicable examination diet. No marks from any previous attempts will be transferred to a new re-sit attempt.

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Recommended Reading

978-0429894626 – Glasson and Therivel 2019 Introduction to environmental impact assessment
978-1844073375 – Morrison-Saunders, A. and 2006 Assessing impact: handbook of EIA & SEA follow-up.

European Commission (1993-2024): Environmental Impact Assessment – Evaluating the effects of public and private projects on the environment

Key Papers
Beattie, R.B. (1995) 'Everything you already know about EIA (but don't often admit)'. Environmental Impact Assessment Review,
15 (2), pp. 109-114
Bice, S. and Fischer, T. B. (2020) 'Impact assessment for the 21st century – what future?', Impact Assessment and Project Appraisal, 38(2), pp. 89–93. doi: 10.1080/14615517.2020.1731202
Fischer, T. B. (2023) 'Simplification and potential replacement of EA in the UK – is it fit for purpose?', Impact Assessment and
Project Appraisal, 41(3), pp. 233–237. doi: 10.1080/14615517.2023.2166257
Foley, M.M. et al. (2017) 'The challenges and opportunities in cumulative effects assessment'. Environmental Impact Assessment
Review, 62 122-134
Folke, C. et al. (2002) 'Resilience and sustainable development: building adaptive capacity in a world of transformations'. Ambio,
31 (5), pp. 437-440
João, E., Vanclay, F. and den Broeder, L. (2011) 'Emphasising enhancement in all forms of impact assessment: introduction to a
special issue', Impact Assessment and Project Appraisal, 29(3), pp. 170–180. doi: 10.3152/146155111X12959673796326
Gibson, R. B. (2006) 'Sustainability assessment: basic components of a practical approach', Impact Assessment and Project Appraisal, 24(3), pp. 170–182. doi: 10.3152/147154606781765147
Nisbet, J. and João, E. (2022) 'A framework for evaluating enhancement quality as part of the EIA process'. Environmental Impact
Assessment Review, 96 106806

Please consult the following journals in this field:
• Environmental impact assessment review (EIA Review)
• Impact assessment and project appraisal (IAPA)
• Journal of environmental assessment policy and management (JEAPM)

Consult the reading list on MyPlace for updated content. Contact the faculty librarian for access to texts not currently stocked

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Module Timetable

Week	Semester 1	Semester 2
0		
1		
2		
3		
4		
5		
6	Submission 10%	
7		
8		
9	Submission 50%	
10		
11		
E	Examination 40%	

Date of Last Modification

28-08-2025