

ENVR S8009: Environmental Risk Assessment

Module Details	
Module Code:	ENVR S8009
Full Title:	Environmental Risk Assessment APPROVED
Valid From::	Semester 1 - 2018/19 (September 2018)
Language of Instruction:	
Duration:	1 Semester
Credits::	5
Module Owner::	Eleanor Jennings
Departments:	Unknown
Module Description:	This module will give students the ability to assess potential risks to the environment from anthropogenic stressors. Environmental impact assessment, environmental risk assessment, strategic environmental assessment, and environmental management systems will all be reviewed and analysed in close detail.

Module Learning Outcome	
On successful completion of this module the learner will be able to:	
#	Module Learning Outcome Description
MLO1	Describe and analyse the role of risk assessment as a tool for environmental planning.
MLO2	Evaluate the processes involved in Environmental Impact Assessment and Strategic Environmental Assessment.
MLO3	Analyse the linkage between Environmental Management, licencing and decision-making in business.
MLO4	Evaluate the legislation and international standards associated with Environmental Risk Assessment and Environmental Management Systems.
MLO5	Evaluate and characterise environmental risks to the human population, specifically in relation to assessment of scientific environmental data.
Pre-requisite learning	
Module Recommendations <i>This is prior learning (or a practical skill) that is strongly recommended before enrolment in this module. You may enrol in this module if you have not acquired the recommended learning but you will have considerable difficulty in passing (i.e. achieving the learning outcomes of) the module. While the prior learning is expressed as named DkIT module(s) it also allows for learning (in another module or modules) which is equivalent to the learning specified in the named module(s).</i>	
No recommendations listed	

Module Indicative Content
Environmental Impact Assessment (EIA) What is EIA? Purpose, aims and limitations of EIA; introduction and history; costs and benefits of EIA. EIA procedures: screening, scoping, production of Environmental Impact Statements; stakeholder involvement; post project analysis; EIA in Ireland and across Europe; legislation associated with EIA.
Strategic Environmental Assessment EU Directives and implementation in national legislation; assessment of objectives, targets and indicators in SEA; case studies on SEA.
Environmental Risk Assessment (EnRA) Hazard identification, problem formulation, analysis and risk characterisation.
Human Health Risk Assessment (HHRA) Probable effects on human health and welfare of chemical, biological and physical agents.
Ecological Risk Assessment (EcoRA) Probable effects on environmental conditions and natural resources of chemical, biological, physical agents.
Environmental Management System What is an Environmental Management System and what is its role in business? ISO standards and voluntary schemes.
Integrated Pollution Prevention and Control EU Directives; national standards, and procedures, including BAT (Best Available Technique), ELRA (Environmental Liability Risk Assessment) and CRAMP (closure planning).
Tutorials, including practical work To include field assessment methods relevant for EIA; human health risk assessment for drinking water, including communication to public; review and presentation on a past submitted EIS.

Module Assessment	
Assessment Breakdown	%
Course Work	20.00%
Practical	30.00%
Final Examination	50.00%
Module Special Regulation	

Assessments

Full Time On Campus			
Course Work			
Assessment Type	Project	% of Total Mark	20
Marks Out Of	0	Pass Mark	0
Timing	End-of-Semester	Learning Outcome	1,2
Duration in minutes	0		
Assessment Description The student will carry out an EIA scoping exercise for a hypothetical development on the college grounds, and produce a scoping report to meet required professional standard.			
No Project			
Practical			
Assessment Type	Practical/Skills Evaluation	% of Total Mark	30
Marks Out Of	0	Pass Mark	0
Timing	n/a	Learning Outcome	1,2,3,4,5
Duration in minutes	0		
Assessment Description Practical assessments			
Final Examination			
Assessment Type	Formal Exam	% of Total Mark	50
Marks Out Of	0	Pass Mark	0
Timing	End-of-Semester	Learning Outcome	1,2,3,4,5
Duration in minutes	0		
Assessment Description End-of-Semester Final Examination			

Module Workload

Workload: Full Time On Campus

<i>Workload Type</i>	<i>Contact Type</i>	<i>Workload Description</i>	<i>Frequency</i>	<i>Average Weekly Learner Workload</i>	<i>Hours</i>
Tutorial	Contact	No Description	Every Week	2.00	2
Lecture	Contact	No Description	Every Week	2.00	2
Independent Study	Non Contact	No Description	Every Week	4.00	4
Directed Reading	Non Contact	No Description	Every Week	1.00	1
				Total Weekly Learner Workload	9.00
				Total Weekly Contact Hours	4.00

This module has no Part Time On Campus workload.

Module Resources

Recommended Book Resources

EPA. (2003), ADVICE NOTES ON CURRENT PRACTICE (in the preparation of Environmental Impact Statements), EPA, Wexford.
EPA. (2002), Guidelines on the information to be contained in Environmental Impact Statements, EPA, Wexford.
EPA. (2012), Review of Effectiveness of SEA in Ireland, EPA, Wexford.
John Glasson, Riki Therivel, Andrew Chadwick. (2012), Introduction to Environmental Impact Assessment, 4th. Taylor and Francis, London, [ISBN: 0415664705].

Supplementary Book Resources

Gilpin, A.. Environmental Impact Assessment: Cutting Edge For The 21st Century, Cambridge University Press, 2000.
DoEHLG. (2009), Guidance on Appropriate Assessment for Planning Authorities.

This module does not have any article/paper resources

Other Resources

Report, Environmental Protection Agency. (2011), Environmental Liability Regulations Guidance Document, Wexford, Ireland, EPA,
http://www.epa.ie/pubs/advice/general/Liability_Regulations%20Final%20August%202011.pdf
Report, WHO. (2010), WHO Human Health Risk Assessment Toolkit: Chemical Hazards,
http://www.who.int/ipcs/methods/harmonization/areas/ra_toolkit/en/
Report, Department of Agriculture, Food and Marine. (2012), Environmental Impact Assessment (Agriculture) Regulations 2011 Guide for Farmers,
<https://www.agriculture.gov.ie/media/migration/ruralenvironment/environment/environmentalimpactassessment/EIAGuideforFarmers200212.pdf>