SYLLABUS

Name of course	**ENVIRONMENTAL IMPACT ASSESSMENT**		
Code of course			
University			
Faculty			
GENERAL INFORMATION			
Degree level	Master		
Year of study		**Semester**	2
Subject of study	The focus is primarily on understanding the concepts, principles, and practices related to environmental impact assessment.		
Language required for the course	English		
List of degree programs	The course offers knowledge and builds competence needed to conduct an environmental impact assessment.		
ACTIVITIES			
Number of credits			
Lectures, hours		**Seminars, hours**	
Per week		**Per course**	

COURSE DESCRIPTION

The key concept discussed in the course is EIA (environmental impact assessment), including the fundamental logics and principles that help students understand the importance and relevance of EIA for environmental management. In this course, students will learn the step-by-step process used to assess the impacts of projected developmental proposals started from recognizing the problem, screening, scoping, performing the assessment, reviewing the assessment, making the decision, and following up. This process might also include report preparation and presentation. In this course, various elements of EIA will be discussed ranging from social impacts, risk analysis, sustainability assessment, climate change, disaster risk management, health impact, and indigenous impacts. In addition, students will be exposed to various case studies related to EIA across the world to get a sense of real practices of EIA.

AIM OF COURSE

✓ to improve understanding of the concepts related to EIA.
✓ to promote competence and skill necessary to conduct EIA and to develop an EIA report in practice.
✓ to understand the role of EIA in environmental management.
✓ to understand various elements of EIA such as social impacts, sustainability, climate change mitigation and adaptation, health impact, disaster risk management, regional assessment, indigenous impact assessment.

CONTENT

✓ Environmental management and sustainability
✓ The fundamentals of EIA
✓ The process of EIA (screening, scoping, and consideration of alternatives)
✓ Elements of EIA (social impact, risk analysis, climate change, health impact, regional assessment, gender analysis, indigenous impact assessment.
✓ Developing and evaluating EIA report
✓ Case studies related to EIA

EVALUATIONS

1	Assignments • Group • Individual	50 %

	• Quiz	
2	Mid-term and Final exam	50 %

ASSESSMENT CRITERIA

A prerequisite for this course completion is participating in all class activities (i.e. 75% rate of attendance in the classroom, participation in group presentation and discussion, attending the guest speaker session, and completed the environmental impact assessment simulation)

PRE-REQUIREMENTS FOR STUDENTS

To study the course, students must have a foundational knowledge base:
- ✓ basic understanding of key environmental concepts such as ecosystems, natural resource management, climate change, biodiversity, and the environmental impacts of human activities.
- ✓ awareness of environmental policies, regulations, and frameworks will help students understand the legal and regulatory context within which sustainable leadership operates.
- ✓ basic understanding on research method specifically related to assessment, measurement, and evaluation technique.
- ✓ basic understanding on the sustainability concepts related to the environment, social, and health.

LEARNING OUTCOMES

Competencies

Students will acquire key competencies needed to conduct a comprehensive EIA using the most appropriate method to propose recommendations related to the projects.

Skills:

Students will be able to:

- ✓ assessing the conditions where EIA is necessary.
- ✓ perform the step-by-step process of EIA.
- ✓ assess risk and mitigation measure.
- ✓ select the most appropriate technique and method of EIA.
- ✓ develop EIA report.
- ✓ provide recommendations on a proposed project.

LEARNING STRATEGIES

- ✓ Lectures with interactive presentations
- ✓ Group Presentation and Discussion
- ✓ Guest Speakers
- ✓ Conducting a real case-based environmental impact assessment simulation

RECOMMENDED SOURCES

Compulsory literature:

1. **Rathi, A. K. A. (2021).** *Handbook of environmental impact assessment: Concepts and practice*. **Cambridge Scholars Publishing.**

Suggested reading:

1. *Hanna, K. (Ed.). (2022). Routledge handbook of environmental impact assessment. Routledge.*
2. *Mair, J., Chien, P. M., Kelly, S. J., & Derrington, S. (2023). Social impacts of mega-events: A systematic narrative review and research agenda. Journal of Sustainable Tourism, 31(2), 538-560.*
3. *Glasson J, Therivel R. 2019. Introduction to Environmental Impact Assessment. 5th ed. London: Routledge.*

Selected internet sources:

1. *G., Rolfe, J., Lockie, S., and Timmer, V. (2007), "Assessing social and economic impacts associated with 1. G., Rolfe, J., Lockie, S., and Timmer, V. (2007), "Assessing social and economic impacts associated with changes*

in the coal mining industry in the Bowen Basin, Queensland, Australia", Management of Environmental Quality, Vol. 18 No. 2, pp. 211-228. https://doi.org/10.1108/14777830710725867

2. *Jain, R. (2015). Environmental impact of mining and mineral processing: management, monitoring, and audit strategies. Butterworth-Heinemann.*

3. *Sengupta, M. (2021). Environmental impacts of mining: monitoring, restoration, and control. CRC Press.*

4. *Byron, H. J., Treweek, J. R., Sheate, W. R., & Thompson, S. (2000). Road developments in the UK: an analysis of ecological assessment in environmental impact statements produced between 1993 and 1997. Journal of Environmental Planning and Management, 43(1), 71-97.*

5. *Geneletti, D. (2019), Multicriteria Analysis for Environmental Decision-Making, London: Anthem Press*

6. *Glucker, A.N., P.P.J. Driessen, A. Kolhoff and H.A.C. Runhaar (2013), Public participation in environmental impact assessment: why, who, and how? Environmental Impact Assessment Review, 43: 104–111. https://doi.org/10.1016/j.eiar.2013.06.003*

7. *REMA (2009). Sector guidelines for environmental impact assessment (EIA) for roads development projects in Rwanda, Rwanda Environment Management Authority.*

8. *IRENA (2020) Wind Energy. A Gender Perspective.*

9. *UNEP (2020). Guidelines for Assimilating Gender in Integrated Environment Assessments (IEA). https://wedocs.unep.org/20.500.11822/22346*

10. *Kolhoff, A.J. (1996) Integrating gender assessment study into environmental impact assessment, Project Appraisal, 11:4, 261266, DOI: 10.1080/02688867.1996.9727553*

11. *Glazener, A., Sanchez, K., Ramani, T., Zietsman, J., Nieuwenhuijsen, M. J., Mindell, J. S., ... & Khreis, H. (2021). Fourteen pathways between urban transportation and health: A conceptual model and literature review. Journal of transport & health, 21, 101070.*

12. *Arnold, L. and Hanna, K. (2017). Best Practices in Environmental Assessment: Case studies and application to mining. Canadian International Resources and Development Institute (CIRDI) Report 2017-00*

13. *Harris, S., Martin, M., & Diener, D. (2021). Circularity for circularity's sake? Scoping review of assessment methods for environmental performance in the circular economy. Sustainable Production and Consumption, 26, 172-186.*

GROUP OF COURSE DEVELOPERS

Course Leader:

Board:

Date of approval the course