



Course Syllabus

Course Code	Course Title	ECTS Credits
MBAN-764	Environmental Impact Assessment in the HCB Industry	6
Prerequisites	Department	Semester
None	School of Business	Fall, Spring
Type of Course	Field	Language of Instruction
Concentration	Energy, Oil & Natural Gas	English
Level of Course	Lecturer(s)	Year of Study
2 nd Cycle	STAFF	1 st or 2 nd
Mode of Delivery	Work Placement	Prerequisites
Face to Face	N/A	None

Course Objectives:

The main objectives of the course are to:

- Comprehensively analyse the nature and scope of the Environmental Impact Assessment (EIA) and Strategic Environmental Impact Assessment (SEIA) Studies
- Enable the students to undertake baseline surveys, use prediction methods, significance criteria, apply mitigation measures and implement monitoring regimes
- Critically assess the basic concepts, approaches and technical components of an EIA and a SEIA study
- Evaluate the significance of EIA and SEIA studies for the hydrocarbon industry with a particular emphasis on offshore oil & gas activities
- Measure the effectiveness of existing environmental risk assessment process in the oil and gas industry by drawing on a multitude of case studies and comparing various regulatory regimes with an emphasis on the EU and the USA
- Reflect on the societal and environmental impacts of the global hydrocarbon industry

Learning Outcomes:

During and upon completion of this module, students are expected to be able to:

- Comment on the origins, scope, dimensions and process of EIA and SEIA studies by highlighting the differences and similarities of various regulatory frameworks in the EU and

beyond by week 3

- Construct, design and develop a baseline EIA study while evaluating its significance for all different stages of oil and gas development with an emphasis on offshore upstream and midstream operations by week 5
- Highlight the importance of EIA and SEIA studies for the strategic planning process of both the Reserves Holder (State) and the Contract Holder (Oil Companies) in hydrocarbon exploration and exploitation by week 9
- Debate on the efficacy of existing best practices in conducting and assessing EIA and SEIA by recalling and assessing various case studies from the industry's practice

“Details on the contribution of the course’s learning outcomes towards the learning goals / competencies and learning objectives of the programme are included in the curriculum map of each programme”.

Course Content:

The Course outline is developed over 12 weeks by focusing each week on the following topics:

1. Origins and development of EIA and SEA studies
2. The regulatory and legislative framework for EIA and SEA studies in the EU
3. The EIA and SEA process: Analytical review of all different stages
4. Impact prediction, evaluation and mitigation measures
5. Participation, presentation and review; monitoring and auditing; stakeholder involvement
6. Environmental impact studies during prospecting
7. Environmental impact studies during exploration
8. Environmental impact studies during exploitation (development and production)
9. Causes of marine oil spills and best practices acquired from the management of oil and gas production accident
10. Case studies of SEA in practice
11. Case studies of EIA in practice
12. Research/Case Study Assignment Presentation

Learning Activities and Teaching Methods:

Course is delivered by lectures and seminars, power point presentations, case studies, interactive group work, in-class exercises and in-class discussions

Assessment Methods:

Assignments, weekly exercises, final exam

Required Textbooks / Readings:

Title	Author(s)	Publisher	Year	ISBN
Environmental, Health and Safety Guidelines: Offshore Oil and Gas Development	International Finance Corporation, World Bank Group	IFC/World Bank Group	2015	https://www.ifc.org/wps/wcm/connect/f3a7f38048cb251ea609b76bcf395ce1/FINAL_Jun+2015_Offshore+Oil+and+Gas_EHS+Guideline.pdf?MOD=AJPERES
Environmental Impact Assessments	Fridian, Y., & Halley, G.,	Nova Science Publishers	2009	9781606926673
Climate Change and the Oil Industry Common Problems, Varying Strategies	Skjærseth, Jon Birger Skodvin, Tora	Manchester University Press	2003	9780719065583

Recommended Textbooks / Readings:

Environmental Technology in the Oil Industry	Orszulik, S.,	Springer	2008	9781402054723
Companies and Environmental Impact: Identification and Visualization of Key Ecological Indicators	Knura, M.,	Diplomica Verlag	2013	9783842879898