

## COURSE OUTLINE

### COURSE TITLE: **ENVIRONMENTAL RISK ASSESSMENT**

**Learning outcome:** The students will be expected to apply the environmental risk assessments framework by completing an environmental risk assessment project.

Students are expected to:

- Be able to apply commonly used hazard, vulnerability and risk assessment methodologies.
- Critically review existing hazard and risk based standards/guidelines and the rationale supporting the guidelines.
- Formulate remedial hazard and risk management plans..`

**Content:** The content of this course is highlighted in the table below.

<b>Time duration (minute)</b>	<b>Content</b>	<b>Tasks, questions, working steps</b>	<b>Method</b>	<b>Materials (technical)</b>	<b>Moderator</b>
30	<i>Introduction to Basic Concepts: Hazard and Risk</i>	Risk fundamentals  Vulnerability assessment methodologies	Lecture; discussion	LCD projector, computer, flipchart stands and pads	Luong and assistant
30	<i>Risk management and decision analysis</i>	Basic definitions of risk, hazard and vulnerability	Lecture; discussion	LCD projector, computer, flipchart stands and pads	Luong and assistant
30	<i>Risk and decision analysis application</i>	Decision tree analysis	Lecture; discussion	LCD projector, computer, flipchart stands and pads	Luong and assistant
30	<i>HAZUS: Dealing with Natural Disasters</i>	Multi-hazard analysis  Applications to earthquake, flood and hurricane scenarios	Lecture; discussion	LCD projector, computer, flipchart stands and pads	Luong and assistant

30	<i>Threat Assessment Methodology for Man-made Hazards</i>	Threat and risk assessment  Applications to attack scenarios	Lecture; discussion	LCD projector, computer, flipchart stands and pads	Luong and assistant
30	<i>Asset Value Assessment</i>	Value analysis  Applications to attack scenarios	Lecture; discussion	LCD projector, computer, flipchart stands and pads	Luong and assistant
30	<i>Accidental Events and Emergency Responses</i>	Introduction to emergency response  Incident control	Lecture; discussion	LCD projector, computer, flipchart stands and pads	Luong and assistant
30	<i>Environmental Risk Management</i>	Application of basic risk management principles  Risk analysis using software	Lecture; discussion	LCD projector, computer, flipchart stands and pads	Luong and assistant

**Didactic remarks:** This short course is designed for learners who were previously trained in aquaculture field of study and who are working in aquaculture enterprises, where their production activities need environmental risk assessment, in order to minimize environmental impacts. And it is relevant to the conditions of Nong Lam University- Ho Chi Minh City, Vietnam.

**Tasks for learners:** Learners should have (basic) knowledge of aspects of aquaculture and aquatic resources management.

**Supportive material:** supportive materials for this course are presented in the above table.

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