

## **LECTURE**

## **CONTROL OF MARINE POLLUTION**

Lecturer: Prof. Nguyen Ky Phung MSc. Dang Thi Thanh Le







# LECTURE NOTE MODELLING THE MARINE ENVIRONMENT

### **COURSE SYLLABUS**

Lecturer: Prof. Nguyen Ky Phung MSc. Dang Thi Thanh Le

### **GENERAL INFORMATION**

Vietnamese subject name: Kiểm soát ô nhiễm biển

English subject name: Control of Marine polution

Code subject:

Knowledge block: Specialized

Number of credits: 3 ETCs

Number of theoretical periods / sessions: 30 periods

Number of practice periods / sessions: No

Prerequisite subject: No

#### **COURSE DESCRIPTION**

The course will provide students with in-depth knowledge about the environment and skills to perform environmental management in accordance with modern development trends. Specifically, the subject will equip students with knowledge about measures to prevent and control marine pollution and related legal requirements in the control and monitoring of the marine environment.



#### **COURSE GOALS**

Students are equipped with knowledge of:

- Measuring to prevent and control marine pollution
- Monitoring compliance with legal requirements in marine pollution control.
- Working at an individual level and collaborate in groups to communicate and discuss among individuals in groups for learning and reporting.



#### **LEARNING OUTCOMES**

After completing the course students can:

- Present the current state of the marine environment
- Understand the role of marine pollution control
- Distinguishing sources of marine pollution
- Apply professional ethics in designing solutions to prevent and control marine pollution
- Evaluate the plan to control marine pollution
- Strengthen teamwork skills, report making and presentation skills.
- Demonstrate active learning capacity.

#### **COURSE ASSESSMENT**

Course assignments will constitute a multi-part project:

- Assignment #1 -(in-class): will help students understand the basic knowledge of dynamics currents and tides.
- Assignment #2 (home work): will help students understand the basic knowledge of flow dynamics and hydrography
- Assignment #3 –(home work): will help students understand the processes of the transmission of substances to the marine and ocean environment
- Assignment #4 (mostly in-class): Understanding the basic knowledge of flow dynamics and hydrography, the basic knowledge of modelling of substance transmission in marine environment.

#### **Grading**

Assessment

- Progress assessment (40%):
  - Exercise (15%):
  - Homework (15%):
- Semi- Final examination (10%)
- Final examination (50%)

**Evaluation** 

$$A(8,5-10)$$

B 
$$(7,0-8,4)$$

$$C(5,5-6,9)$$

$$D(4,0-5,4)$$

### **COURSE OUTLINE**

Week 1: Issues about marine resources and environment

Week 2: Legal aspects of marine pollution control

Week 3: General control of marine pollution

Weeks 4, 5, 6, 7 & 8: Prevention and Response to Marine Environmental Incidents

Week 9 & 10: seminar report

## **COURSE ASSESSMENT**

Test time	Evaluation form	Evaluation Tool	Wei- ght	Score scale	Evaluation Criteria
Throughout the learning process	Individual, group	Ask questions, individual exercises, group exercises	10%	10	Answer the question with the right focus, thinking and depth
Week	group	seminar	20%	10	Rubric
Week 11	Individual,	Final exam	70%	10	multiple choice format. content related to the course content.

#### REFERENCES

#### Literature

[1]. Lecture of Control of marine pollution

#### **Recommended:**

- [1] International Convention for the Prevention of Pollution from Ships
- (MARPOL) Adoption: 1973 (Convention), 1978 (1978 Protocol), 1997
- (Protocol Annex VI); Entry into force: 2 October 1983 (Annexes I and II).
- [2] Manual on oil pollution: section IV, combating oil spils. International Maritime Organization, 2005. ISBN 9280141775.
- [3] Manual on oil pollution: Section II: Contingency Planning. International
- Maritime Organization, 1995. ISBN 9789280113303
- [4] United Nations Convention on the Law of the Sea,1992
- [5] National standard TCVN 11465: 2016 (ISO 16304: 2013)