Programme : Environmental Engineering Technology

Level : Undergraduate

Course Syllabus

1. Course title: Environmental Impact Assessment (EIA)

2. Course code: EIAA124810

3. Credit units: 2 (2/0/4) (2 units of theory/ 0 units of practice, experiment/ 4 units of self- study)

Duration: 10 weeks (3 hours of theory + 0 hour of practice + 6 hours of self-study per week)

4. Course instructors:

1/ MSc. Nguyen Thi Thu Thao

2/ Dr. Nguyen Thai Anh

5. Course requirements:

Preresiquisite courses: None

Previous course: General Environment, Environmental engineering chemistry

Parallel course : None **6. Course Description :**

The course refers to the role of environmental impact assessment for sustainable development,

introduce impact assessment methods and EIA process in Vietnam.

7. Course Goals

Goals	Goal description	Programme ELOs
G1	Identify basic concepts related to EIA, requirements, and procedures for EIA.	ELO3
G2	Classify methods for a EIA report; Assess and predict environmental impacts.	ELO3, ELO12
G3	Build teamwork skills and develop presentation skill.	ELO10
G4	Utilize EIA process to development projects.	ELO13

8. Course learning outcomes: (CLOs)

CLOs		CLOs description (After accomplishing this course, students are able to:)	Programme ELOs
G1	CLO1 Distinguish some basic concepts of environment and EIA; develop a EIA process		ELO3
G2	2 CLO2 Analyze environmental impacts of a particular project based on integrated perpectives; determine alternative possibilities.		ELO3

	CLO3	Choose suitable EIA methods for a particular project	ELO12
G3	CLO4	Evaluate environmental impacsts of a project.	ELO10
G4	CLO5	Adapt EIA process to manage and appraise projects.	ELO13

9. Learning Resources

- Text book:
 - 1. Hoang Hung, 2007, textbook of EIA, National University Publishing House
- References:
 - 2. Le Trinh, 2015, Environmental Impact Assessment and Social investment projects in the country and internationally, Scientific and Technical Publishing House
 - 3. Pham Ngoc Ho, Hoang Xuan Co, 2004, EIA, Publisher of Vietnam National University Hanoi
 - 4. Alexander P. Economopoulos, 1993, Assessment Of Sources of Air, Water, and Land Pollution, World Health Organization, Geneva

10. Student Assessment:

Grading scale : 10Assessment plan :

Type	Content	Timeline	Assessment method	CLOs	Rate (%)
Assignments					15
Ex#1	Select, analyze legal documents regarding EIA.	Week 2	subtest	CLO1, CLO2	5
Ex#2	List the EIA methods; identify the advantages and disadvantages of each method.	week 5	subtest	CLO3	5
Ex#3	Describe field survey progress; Determine the environmental impacts.	Week 7	subtest	CLO4, CLO5	5
Proces	ssing test		20		
	Writing test	Week 8	Test	CLO1, CLO2, CLO3	20
Essay					15
	Students work in groups. Each group is assigned to develop of a complete EIA report.	15	Report file	CLO4, CLO5	15
Final test				15	50
	It covers all of course's contents.	50	Test	CLO1, CLO2, CLO3	50

11. Course content

Week	Content	
	Chapter 1: Overview of environmental protection and environmental impact assessment (EIA) (3/0/6)	
	A/ Teaching content in classroom (3)	CLO1
	1.1. Basic concepts of environment, EIA, sustainable development	
	1.2. The relationship between socio-economic development and the	
1	environment	
	1.3. EIA perspectives	
	Summary of teaching methodology:	
	Presentation (Powerpoint)	
	B/ Self-study content (6)	CLO1
	1.4. Environmental Indicators and indices	
	Chapter 2: General policies on EIA in Vietnam (6/0/12)	
	A/ Teaching content in classroom (6)	CLO1,
	2.1. The development of EIA	CLO2
	2.2. EIA process	
	2.3. EIA report	
	2.4. Regulations on implementing EIA reports	
	2.5. Organization and management of EIA implementation	
2-3	2.6. The current issues in EIA (UNEP)	
	2.7. Vietnam environmental policies	
	Summary of teaching methodology:	
	• Speech	
	Presentation (Powerpoint)	
	B/ Self-study content (12)	CLO1
	2.8. Requirements for EIA in Vietnam and international organizations	
	Chapter 3: EIA methods (9/0/18)	
	A/Teaching content in classroom (9)	CLO2, CLO3,
	3.1. Checklists	CLO3, CLO4
4-6	3.2. Matrices	
	3.3. Networks	
	3.4. Rapid assessment	
	3.5. Simulation modeling	
	3.6. Other methods	
	Summary of teaching methodology:	
	• Speech	

	Presentation (Powerpoint)	
	Work in group	
	B/ Self-study content (18)	CLO1
	3.7. Interrelation of environmental components and priority in environmental impact analysis	
	Chapter 4: Evaluate impacts on the environmental components (6/0/12)	
	A/Teaching content in classroom (6)	CLO3,
	4.1. Environmental baseline	CLO4, CLO5
	4.2. Evaluate impacts on the environmental components	
	4.3. Concerned issues in forecasting environmental impacts	
	4.4. Analyze the impacts on the environment	
7-8	Summary of teaching methodology:	
	• Speech	
	Presentation (Powerpoint)	
	Work in group	
	B/ Self-study content (12)	CLO2
	Environmental impacts of different types of industry	
	Chapter 5: Develop EIA report (6/0/12)	
	A/Teaching content in classroom (6)	CLO4,
	5.1. Structure and content requirements of the EIA report	CLO5, CLO6
	5.2. Impact mitigation and management	
	5.3. Environmental monitoring	
9-10	Summary of teaching methodology:	
	• Speech	
	Presentation (Powerpoint)	
	Work in group	
	B/ Self-study content (12)	CLO6
	+ Particular EIA reports in Vietnam	

12. Learning ethics:

Students must do homework by themselves. If plagiarism is found students will get zero point.

13.Date of first approval: August 1st, 2012

14.Approved by:

A/Prof. Nguyen Van Suc

MSc Nguyen Thi Minh Nguyet

Nguyen Thi Thu Thao

15.Date and Up-to-date content

1 st time: Date: August 25 th , 2015	Instructor:
- Update content and structure of the programme adjusted in: teaching content and assessment method	
	Head of Department:
	Dr. Tran Thi Kim Anh