HCMC UNIV.OF TECHNOLOGY AND EDUCATION
Faculty of Chemical and Food Technology

Programme : Environmental Engineering Technology
Level : Undergraduate

Course Syllabus

1. **Course Title:** Health Safety Environment
2. **Course Code:** HSEN125610
3. **Credit Units:** 2 (2/0/4) (2 units of theory/ 0 unit of practice/ 4 units of self-study)
   Duration: 15 weeks (2 hours of theory+0 hours of practice, and 4 hours of self-study per week)
4. **Course Instructors**
   1/ MSc. Nguyen Ha Trang
   2/ MSc. Nguyen Thi Thu Thao
5. **Course Requirements**
   Prerequisite courses: None
   Previous courses: None
   Parallel courses: None
6. **Course Description**
   The course refers to occupational safety, the current legal system and other risk factors, hazards and risks management, solutions to prevent occupational accidents
7. **Course Goals**

Goals	Goal description	Programme ELOs
G1	The ability to apply the knowledge of HSE to manage risks in the work environment	ELO3
G2	The ability to make action plan which is able to apply in a organization	ELO6
G3	There are ethical, honest, determined and goal oriented career	ELO8
G4	The ability to practise team working skills and systematic problem solving and communication skill in writing	ELO9. ELO10

8. Course Learning Outcomes (CLOs)

CLOs		CLO description	Programme ELOs
G1	CLO1	Identify these physiological changes and occupational diseases during the period of working	ELO3
	CLO2	Assess risks in the work environment based on laws and safety standards	
	CLO3	Identify and present preservation, maintenance and use guide of equipment used in the work safety	
G2	CLO4	Design technical solutions of environmental hygiene and safety in the labor area	ELO6
G3	CLO5	Predict recruitment needs and summarize requirements of employers for HSE staff positions.	ELO8
G4	CLO6	Engage in group discussion and group work	ELO9
	CLO7	Make a report	ELO10

9. Learning resources

- Textbooks:

[1] Hoàng Trí (2015), Occupational safety and industrial environments, Vietnam National University Ho Chi Minh City

- References:

[2] International Finance Corporation (2010), General guidance for the Environment, Health, Safety

[3] International Labour Organization (2014), Investigating occupational accidents and occupational diseases, ISBN: 978-92-2-829419-4, ISBN: 978-92-2-829420-0 (web pdf)

10. Student Assessment

- Grading scale: **10**
- Assessment plan:

Type	Content	Timeline	Assessment method	CLOs	Rate (%)
Processing Assessment					**50**
BT#1	Assess the needs and requirements of employers for HSE staff positions and	Week 3	Assignment	**CLO5 CLO7**	10

	build an action plan to achieve requirements				
BT#2	Essay: Overview information relating to one of the topics - Safety of lifting equipment - Safety of electrical equipment - Safety of the working at heights - Safety of the working in tight spaces - Safety of cooling equipment - Chemical Safety - Safety of forklift - Personal protected equipment - Ergonomics	Week 6	Assignment	**CLO1** **CLO6** **CLO7**	10
BT#3	Identify hazards and assess risks in the laboratory in the department of Environmental Technology	Week 7	Report	**CLO2** **CLO9** **CLO10**	10
	Planning measures to improve safety conditions in the survey area.	Week 12	Report	**CLO6** **CLO9** **CLO10**	20
Final exam					**50**
	- Covering contents of all the important outcomes of the course. - 60-90 minutes duration.		Wtiting test	**CLO1** **CLO2** **CLO3**	50
Total					**100**

11. Course Content

Week	Content	CLOs
1-3	**Chapter 1: General introduction of HSE** *(6,0,12)*	
	A/ Content and pedagogical methods in class*: (6h)* **Content:** 1.1 Introduction of HSE 1.2 Job Opportunities 1.3 Integrated management system 1.4 Setup HSE management system in the manufactory 1.5 The system of legal documents relating to Safety, Health and Environment	**CLO5** **CLO6** **CLO7**

	Pedagogical methods: + Presentation of lecture + Focus group discussion	
	B/ Self-study content: *(12h)* + BT#1	
4-5	**Chapter 2: Labor hygiene and occupational diseases** *(4,0,8)*	
	A/ Content and pedagogical methods in class*: (4h)* **Content:** 2.1 Occupational health 2.2 Physiology in the labor 2.3 Factors can cause occupational diseases 2.4 Technical solutions 2.5 Environmental management system 2.6 Food safety **Pedagogical methods**: + Presentation of lecture + Group exercises + Discussion	**CLO1** **CLO6** **CLO7**
	B/ Self-study content: *(8h)* + BT#2	
6-12	**Chapter 3: Occupational safety** *(12,0,24)*	
	A/ Content and pedagogical methods in class*: (12h)* **Content:** 3.1. Current status of occupational accidents 3.2. Legal requirement 3.3. Method of investigating labor accidents 3.4. First aids 3.5. Safety regulations 3.6. Risk assessment methodology and control tools 3.7. Observation techniques and effective communication 3.8. 5S **Pedagogical methods**: + Presentation of lecture + Group exercises	**CLO2** **CLO3** **CLO6** **CLO9** **CLO10**

	B/ Self-study content: *(24h)* + BT#3	
13	**Chapter 4: Fire safety** *(2,0,4)*	
	A/ Content and pedagogical methods in class*: (2h)* **Content:** 4.1 Theory 4.2 Fire safety in the industrial manufactory 4.3 Fire safety in the high buildings 4.4 Guidance in emergency **Pedagogical methods**: + Presentation of lecture + Powerpoint presentation + Focus group discussion + Experiments	**CLO2** **CLO3** **CLO4**
	B/ Self-study content: *(4h)* + Review	
14-15	**Presentation BT#3**	**CLO7**

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:

Dean	**Head of department**	**Compiler**
Prof. Nguyen Van Suc	**MSc Nguyen Thi Minh Nguyet**	**MA Nguyen Thi Tinh Au**

15. Date and Up-to-date content

1st time in 2015 - Update content and structure of the programme adjusted in: - Content and assessment method	Instructor: Nguyen Ha Trang Head of Department: Dr Tran Thi Kim Anh