

## Course Syllabus

1. **Name of Curriculum** Bachelor of Science Program in Environment  
**Faculty/Institute/College** Mahidol University International College, Faculty of Science, Faculty of Environment and Resource Studies, Mahidol University
2. **Course Code** ICEN 441 **Course Title** Occupational Health and Safety
3. **Number of Credits** 4 (Lecture/Lab) (4-0)
4. **Prerequisite** None
5. **Type of Course** Elective
6. **Trimester / Academic Year**  
Second / 2005
7. **Course Description**

Appropriate design of various environmental sanitation facilities, health assessment and safety measures and works for the industrial factory workers, officers etc. Controlling work-related risks. Workable strategy in managing occupational health and safety.

### 8. Course Objectives

1. The student learn about principle of occupational health and safety which is enough for them to work at the basic operational level.
2. The student understand the relationship between occupational health and safety and environmental science.
3. The student can apply the knowledge obtained to the real working situation appropriately and efficiently.
4. The student can apply basic ideas and knowledge for further specialized study in the field.

### 9. Course Outline

Week	Topic			Instructor
	Lecture/Seminar	Hour	Lab Hour	
1	Introduction to Occupational Health (Hygiene and Safety)	4	-	Asst.Prof.Luepol Punnakanta
2	Recognition and Evaluation of Occupational Hygiene (1) (Noise, Illumination, Heat & Climate, Toxic Substances, etc.)	4	-	Asst.Prof.Luepol Punnakanta
3	Recognition and Evaluation of Occupational Hygiene (2) (Noise, Illumination, Heat & Climate, Toxic Substances, etc.)	4	-	Asst.Prof.Luepol Punnakanta
4	Recognition and Evaluation of Occupational Safety (1)	4	-	Asst.Prof.Luepol Punnakanta
5	Recognition and Evaluation of Occupational Safety (2)	4	-	Asst.Prof.Luepol Punnakanta
6	Ergonomics & Safety Control	4	-	Asst.Prof.Luepol Punnakanta

7	Standard and Regulation	4	-	Asst.Prof.Luepol Punnakanta
8	occupational health and safety in "EIA" process	4	-	Guest Lecturer
9	Occupational health and safety in ISO & BS	4	-	Guest Lecturer
10	Principles of Industrial Sanitation	4	-	Guest Lecturer
11	Seminar on Occupation health and safety	4	-	Asst.Prof.Luepol Punnakanta
	<b>Total</b>	<b>44</b>		

#### 10. Teaching Method

1. Lecture
2. Practical Exercises
3. Discussion
4. Quiz
5. Self-Study

#### 11. Teaching Media

1. Texts and Teaching Materials
2. Transparencies
3. Power Point Presentation

#### 12. Course Achievement

Assessment made from the set-forward criteria. Students who gets 85% up, will have Grade A.

#### 13. Course Evaluation

1. Exercises 10%
2. Seminar on Occupation health and safety 10%
3. midterm Examination 40%
4. Final Examination 40%

#### 14. References

1. Reese, C. Occupational health and safety management : a practical approach. Boca Raton, Fla. : Lewis, 2003.
2. Mark S.Sanders and Ernest J.McCormick. Human Factors in Engineering and Design. New York: McGraw-Hill, 1992.
3. LaDou, J. Occupational health & safety. 2<sup>nd</sup> ed. Itasca, Ill. : National Safety Council, 1994.
4. Anton,T. Occupational safety and health management. New York McGraw-Hill, 1989.
5. IARC, WHO. Occupational exposures in insecticide application and some pesticides. Lyon : IARC,1990.
6. Hammer,W. and Price,D. Occupational safety management and engineering. 5<sup>th</sup> ed. Upper Saddle River, N.J. : Prentice Hall, 2001.
7. Murphy, D. (ed). Ergonomics and the dental care worker. Washington, DC : American Public Health Association, 1998.
8. Kroemer, K.H.E. and et al. Ergonomics : how to design for ease and efficiency. Englewood Cliffs, N.J. : Prentice hall, 1994.

9. Hywel Murrell, K. Ergonomics: man in his working environment. London : Chapman and Hall, 1975.

**15. Instructor**

Asst.Prof. Luepol Punnakanta

**16. Course Coordinator**

Asst.Prof. Luepol Punnakanta