Course Syllabus

1. **Program of Study** Bachelor of Science Program in Environment
   Faculty/Institute/College Mahidol University International College, Faculty of Science, Faculty of Environment and Resource Studies (FERS), Mahidol University
2. **Course Code** ICEN 342 **Course Title** Environmental Pollution II
3. **Number of Credits** 4 **(Lecture/Lab)** (4-0)
4. **Prerequisite *(s)*** ICEN 342
5. **Type of Course** Required
6. **Trimester / Academic Year** Second / 2004
7. **Course Description**

   Air, noise, solid waste, hazardous waste, and also radioactive pollution; types, sources, and effects of air and noise pollution; methods for prevention, control and measures of air and noise pollution; source, type, effect, and management of solid waste and hazardous waste; application of radioactivity, and management of radioactive waste.
8. **Course Objective *(s)***

   The purpose of this course is to give the students an overview of air, noise, solid waste, hazardous waste, and also radioactive pollution including methods for prevention, control, measures and management of the pollution.
9. **Course Outline**

Week	Topic				Instructor
	Lecture/Seminar	Hour	Lab	Hour	
1	Air Pollution	4	-		to be announced
2	Air pollution	4	-		
3	Noise Pollution	4	-		
4	Noise Pollution	4	-		
5	Solid Waste	4	-		
6	Solid Waste	4	-		
7	Hazardous Waste	4	-		
8	Hazardous Waste	4	-		
9	Hazardous Waste	4	-		
10	Remedial Technology	4	-		
11	Radioactive Waste	4	-		
	Total	**44**			

10. **Teaching Method *(s)***
    1. Lecture
    2. Discussion
    3. Self-Study

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

12. Measurement and evaluation of student achievement

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

13. Course evaluation

1. midterm Examination 45%
2. Final Examination 45%
3. Class Participation 10%

14. Reference *(s)*

1. Behar, A., Chasin, M. and Cheesman, M. 2000. Noise Control: A Primer. California: Singular Publishing Group.
2. Boubel, R.W., Fox, D.L., Turner, D.B. and Stern, A.C. xxxx. Fundamental of Air Pollution. 3rd Edition. Academic Press.
3. Cowan, J.P. 1994. Handbook of Environmental Acoustics. New York: Van Nostrand Reinhold.
4. Freeman, H.M. 1998. Standard Handbook of Hazardous Waste Treatment and Disposal. New York: McGraw Hill.
5. LaGrega, M.D., P.L. Buckingham, and J.C. Evans. 1994. Hazardous Waste Management. New York:McGraw Hill.
6. Smith, B.J., Peters, R.J. and Owen, S. 2001. Acoustic and Noise Control. 2nd edition. Essex: Longman Group.
7. Tchobanoglous, G., Thiensen, H., and Vigil, S. 1993. Intregrated Solid Waste Management. Singapore:McGraw Hill.
8. Turco, R.P. 1997. Earth under Siege: From Air Pollution to Global Change. New York: Oxford University Press.

15. Instructor *(s)*

Asst.Prof. Dr. Winai Nutmagul
Asst.Prof. Auemphorn Mutchimwong
Ajarn Bundit Channarong

16. Course Coordinator

Asst.Prof. Dr. Acharaporn Sungpetch