

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 466 **Course Title** Environmental Management Systems
3. **Number of Credits** 4 (**Lecture/Lab**) (4-0)
4. **Prerequisite** None
5. **Type of Course** Elective
6. **Trimester / Academic Year**

First / 2005

7. **Course Description**

Principle of Environmental Management System of ISO14001. Development and setting of environmental policy, environmental management system planning. EMS implementation and operating, EMS checking and correction, Management review, including management audit.

8. **Course Objectives**

After completing this course, the student is able to

1. Creating environmental management system and EMS document to an organization
2. Planning the internal environmental auditing for the organization

9. Course Outline

Week	Topic		Instructor
	Lecture	Hour	
1	- History of Environmental Management System (ISO14001) - ISO 14001 Standard Series - ISO 14001 Requirement and Implementation - Principle of ISO 14001	4	Asst.Prof. Sayam
2	Principle of Environmental Awareness	4	Asst.Prof. Sayam
3	Environmental Policy Setting and Environmental Aspects	4	Asst.Prof. Sayam
4	Environmental Aspects Identification and Evaluation	4	Asst.Prof. Sayam
5	Environmental Law and Other Requirements	4	Dr.Kraichart
6	Environmental Objective, Target and Management Program	4	Asst.Prof. Sayam
7	Principle of Pollution Prevention and Waste Minimization	4	Asst.Prof. Sayam
8	- Organization Structure and Responsibility - Personal Development on Awareness and Competence - Communication	4	Asst.Prof. Sayam
9	EMS Documentation, Record and Control	4	Asst.Prof. Sayam
10	Environmental Monitoring and Measurement	4	Asst.Prof. Sayam
11	- Non-conformance, Corrective and Preventive Action - Principle of Internal Environmental Auditing	4	Asst.Prof. Sayam
	Total	44	

10. Teaching Method

1. Lecture
2. Practical Exercises
3. 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. Student who gets 85% up, will have Grade A.

13. Course Evaluation

1. Exercises 20%
2. midterm Examination 40%
3. Final Examination 40%

14. References

1. Sayam Aroonsrimorakot.(2000). Environmental Management System Standard of ISO 14001. Faculty of Environment and Resource Studies. Mahidol University.
2. Sayam Aroonsrimorakot and Sadamsit Sangsayan.(2002). Internal Environmental Management System Auditing Under the Standard of ISO 14001. Faculty of Environment and Resource Studies. Mahidol University.
3. Sayam Aroonsrimorakot.(2003). Documentation and Control of Environmental Management System Standard of ISO 14001. Faculty of Environment and Resource Studies. Mahidol University.
4. Thailand Industrial Standard Institute. (1996). Environmental Management Systems: Specification with Guidance for Use (TIS/ISO 14001).

15. Instructors

Asst.Prof. Sayam Aroonsrimorakot
Dr.Kraichart Tantakanarpa

16. Course Coordinator

Asst.Prof. Sayam Aroonsrimorakot