

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 361 **Course Title** Principles of Environmental Impact Assessment
3. **Number of Credits** 4 (**Lecture/Lab**) (4-0)
4. **Prerequisite** None
5. **Type of Course** Required
6. **Trimester / Academic Year**
Third / 2004

7. Course Description

Knowledge on principle of environmental impact assessment (EIA), definition, history and law related to EIA. Tools for evaluate impact. Principles of EIA on Physical, Biological, human use and quality of life are focused. Study cases.

8. Course Objectives

To learn and understand principles, process, and necessary techniques for environmental impact assessment, mitigation and monitoring. Analysis impact on resources and environment as well as evaluate impact from development projects.

9. Course Outline

Week	Topic			Instructor
	Lecture/Seminar	Hour	Lab	
1	Definition and history of environmental impact assessment, related law necessary for EIA	4		Dr. Suvaluck Satumanatpan
2	Process for EIA, TOR, IEE Components of EIA Reports	4		Dr. Suvaluck Satumanatpan
3	Tools for assess environmental impact: Checklist, Network, Matrices, Overlays, Mathematical Modeling, Adhoc committee	4		Mr. Sonti Kotchawat
4	Environmental Impact Assessment for air and noise	4		Assist. Aumporn Muchimwong
5	Environmental Impact Assessment for soil and land use	4		Dr. Charlie Navanugraha
6	Environmental Impact Assessment for water quantity and quality	4		Dr. Chumlong Arunlertaree
7	Environmental Impact Assessment for biological: terrestrial ecology forest and wildlife	4		Dr. Sura Pattanikriat
8	Environmental Impact Assessment for biological aquatic ecology: plankton, nekton, benthos and importance coastal habitat	4		Dr. Suvaluck Satumanatpan

Week	Topic			Instructor	
	Lecture/Seminar	Hour	Lab		Hour
9	Environmental Impact Assessment for human use	4			Assoc. Sukhum Puthong
10	Environmental Impact Assessment for quality of life, socio-economic	4			Assist. Ladawan thongnob
11	Mitigation and Monitoring process for environmental impact assessment	4			Mr. Sonti Kotchawat
	Total	44			

10. Teaching Method

1. Lecture
2. Practical Exercises
3. Discussion
4. 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 80% up, will have Grade A.

13. Course Evaluation

1. Participation 10%
2. Report 40%
3. Examination 50%

14. References

1. Canter L.W. 1977. Environmental Impact Assessment. McGraw-Hill, Inc. Printed in the United States of America. 331pp.
2. Eccleston, H.C. 2000. Environmental Impact Statements. John Wiley & Sons, Inc. Canada. 346 pp.
3. Environmental Impact Evaluation Division. Office of Environmental Policy and Planning. 1998. Environmental Impact Assessment in Thailand. Bangkok. 43 pp.
4. Hutachoen R., L. Thong-Nop and S. Choowaew. 1990. Environment impact assessment in practice. Faculty of Environment and resources Studies, Mahidol University, Nakhon Pathom.
5. Lee, N. and C. George (editors). 2000. Environmental Assessment in Developing and Transitional Countries. John Wiley & Sons Ltd, England. 290 pp.
6. United Nations. 1988. Environmental Impact Assessment: A Management Tool for Development Projects. Proceedings of the Expert Group Meeting on Environmental Impact Assessment of Development Projects Bangkok, Thailand. 155pp.
7. United Nations. 1988. Environmental Impact Assessment: Basic procedures for developing countries. United Nations Environment Programme. Regional Office for Asia and the Pacific. Bangkok, Thailand. 16 pp.

8. United Nations. 1989. Environmental Impact Assessment: An Enquiry into Operational Aspects. Proceedings of the Training Workshop on Environmental Impact Assessment in Thailand, Bangkok, Thailand. 119 pp.
 9. United Nations. 1992. A preliminary Study on Environmental Management of Tourism Development in the ESCAP Region, New York. 68 pp.
 10. Wathern P. 1995. Environmental Impact Assessment: Theory and Practice. Biddles Ltd, Guildford and King's Lynn, Great Britain. 332 pp.
 11. Westmman W. E. 1985. Ecology, Impact Assessment, and Environmental Planning. John Wiley & Sons, Inc. Canada. 532 pp.
- 15. Instructor**
Asst.Prof. Dr. Suvaluck Satumanatpan
- 16. Course Coordinator**
Asst.Prof. Dr. Suvaluck Satumanatpan