COURSE SYLLABUS

1. Name of Curriculum: Bachelor of Science (Biological Science)
Bachelor of Science (Environment)
Mahidol University International College

2. Course Code: ICBI 257 / ICEN 392 **Course Title**: Environmental Issues: Past, Present and Future

3. Number of Credits: 4 **(Lecture/lab)** (4 - 0)

4. Prerequisites:
None

5. Type of Course:
Elective for 2nd year students

6. Semester / Academic Year:
Trimester 3

7. Course Description:
An in-depth study of environmental issues e.g. Exxon Valdez and other oil spills; Bhopal and other chemical leaks; Chernobyl and other radiation leaks; ozone depletion; global warming; loss of biodiversity; deforestation; genetic engineering and GMOs; water issues; urban issues; includes contemporary and likely future environmental issues

8. Course Objectives:
By the end of the course students should be able to describe and explain:
- how the environment is valued
- the environmental effects of oil and chemical spills and radiation leaks
- the environmental effects of ozone depletion and global warming
- the loss of biodiversity and natural resources
- genetic engineering and the worries concerning GMOs
- the effects poverty has on the environment
- likely future environmental concerns and issues

9. Course Outline

Class	Topic				Lecturer
	Lecture / Seminar	Hour	Lab	Hour	
1	Introduction: valuing the environment	2	-		Dr W. Phillips
2	Setting Environmental Targets	2			
3	Oil Spills and the Environment	2	-		
4	Chemical and Radiation Leaks and the Environment	2	-		
5	Ozone Depletion and the Environment	2	-		
6	Global Warming and the Environment	2	-		
7	Biodiversity and the Environment	4	-		
8	Deforestation and the Environment	4	-		

9	Natural Resources and the Environment	4			
10	Genetic Engineering, Genetically Modified Organisms (GMOs) and the Environment	4			
11	Water Issues and the Environment	4	-		
12	Urban Issues and the Environment	4	-		
13	Poverty and the Environment	4			
14	Presentations	4			

10. Teaching Methods:
Lectures, in-class case studies, discussion, self-study and student presentations.

11. Teaching Media:
Text and teaching materials, Powerpoint, handouts, case studies.

12. Course Achievement:
Assessment made from stated criteria: students with 85%+ obtain grade A

13. Course Evaluation:

1. Case studies (x4)	20%
2. Presentation	20%
3. Mid-term exam	30%
4. Final exam	30%

14. References:
Allin and McCleneghan, 2000. Encyclopedia of Environmental Issues. Salem Pr Inc
Ison *et al*, 2002 Environmental Economics: Issues and Policies. Prentice Hall
Hinchliffe, 2003. Understanding Environmental Issues. John Wiley and Sons Ltd
Additional readings set by the instructor.

15. Instructor:
Dr Wayne Phillips

16. Course Coordinator:
Dr Wayne Phillips