

## Course Syllabus

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|----------------------------------|--|
| <b>1. Program of Study</b>       | Bachelor of Science (Biological Science)   |
| <b>Faculty/Institute/College</b> | Mahidol University International College   |
| <b>2. Course Code</b>            | ICBI 257 / ICEN 392/ ICNS 257  |
| <b>Course Title</b>              | Environmental Issues: Past, Present and Future   |
| <b>3. Number of Credits</b>      | 4(4 – 0-8) (Lecture/lab/Self-Study)  |
| <b>4. Prerequisite (s)</b>       | ICNS 112   |
| <b>5. Type of Course</b>         | General Education Course   |
| <b>6. Session</b>                | 3 <sup>rd</sup> trimester  |
| <b>7. Conditions</b>             | -  |
| <b>8. Course Description</b>     | 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; contemporary and likely future environmental issues.  |
| <b>9. Course Objective (s)</b>   | <p>After successful completion of this course, students should be able to understand</p> <ul style="list-style-type: none"> <li>9.1 how the environment is valued.</li> <li>9.2 the environmental effects of oil and chemical spills and radiation leaks.</li> <li>9.3 the environmental effects of ozone depletion and global warming.</li> <li>9.4 the loss of biodiversity and natural resources.</li> <li>9.5 genetic engineering and the worries concerning GMOs.</li> <li>9.6 the effects poverty has on the environment.</li> <li>9.7 likely future environmental concerns and issues.</li> </ul> |

## 10. Course Outline

Week	Topic	Hour			Instructor
		Lecture	Lab	Self-Study	
1	Introduction: valuing the environment Setting Environmental Targets	4	0	8	Wayne Phillips
2	Oil Spills and the Environment Chemical and Radiation Leaks and the Environment	4	0	8	Wayne Phillips
3	Ozone Depletion and the Environment Global Warming and the Environment	4	0	8	Wayne Phillips
4	Biodiversity and the Environment Deforestation and the Environment	4	0	8	Wayne Phillips
5	Natural Resources and the	4	0	8	Wayne Phillips
6	Genetic Engineering, Genetically Modified Organisms (GMOs) and the	4	0	8	Wayne Phillips
7	Water Issues and the Environment	4	0	8	Wayne Phillips
8	Urban Issues and the Environment	4	0	8	Wayne Phillips
9	Poverty and the Environment	4	0	8	Wayne Phillips
10-11	Presentations	4	0	8	Wayne Phillips
	Total	44	0	88	Wayne Phillips
Final Examamination					

## 11. Teaching Method (s)

- 11.1 Lectures, in-class case studies, discussion, self-study and student presentations.

## 12. Teaching Media

- 12.1 Text and teaching materials.  
12.2 Powerpoint, handouts, case studies.

## 13. Measurement and evaluation of student achievement

Student achievement is measured and evaluated by

- 13.1 the ability to describe how the environment is valued.  
13.2 the ability to describe the environmental effects of oil and chemical spills and radiation leaks.  
13.3 the ability to describe the environmental effects of ozone depletion and global warming.  
13.4 the ability to describe the loss of biodiversity and natural resources.  
13.5 the ability to describe genetic engineering and the worries concerning GMOs.  
13.6 the ability to describe the effects poverty has on the environment.

13.7 the ability to describe likely future environmental concerns and issues.

Student's achievement will be graded according to the faculty and university standard using the symbols: A, B+, B, C+,C,D+, D, and F.

Students must have attended at least 80% of the total class hours of this course. MUIC standard grading criteria: 90% and above is grade A

Ratio of mark

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

Assessment made from stated criteria: students with 85%+ obtain grade A

#### 14. Course evaluation

14.1 Students' achievement as indicated in number 13 above.

14.2 Students' satisfaction toward teaching and learning of the course using questionnaires.

#### 15. Reference (s)

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.

#### 16. Instructor (s)

Dr Wayne Phillips

#### 17. Course Coordinator

Dr Wayne Phillips