Course Syllabus

1.Program of Study Bachelor of Science (Biological Science)
Bachelor of Science (Environment)

Faculty/Institute/College Mahidol University International College
Faculty of Science,
Faculty of Environment and Resource Studies,
Mahidol University

2.Course Code ICBI 257

Course Title Environmental Issues: Past, Present and Future

3.Number of Credits 4(4-0-8) (Lecture/lab/self-study)

4.Prerequisite *(s)* None

5.Type of Course Elective

6.Trimester / Academic Year

Trimester 3/every academic year

7. Course Condition

Number of students is 20-30.

8.Course Description

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

9.Course Objective *(s)*

By the end of the course students should be able to describe and explain:

1. how the environment is valued
2. the environmental effects of oil and chemical spills and radiation leaks
3. the environmental effects of ozone depletion and global warming
4. the loss of biodiversity and natural resources
5. genetic engineering and the worries concerning GMOs
6. the effects poverty has on the environment
7. likely future environmental concerns and issues

10. Course Outline

week	Topics/Seminar	Hours			Instructor
		Lecture	Lab	Self-study	
1	-Introduction: valuing the environment -Setting Environmental Targets	4	0	8	Dr Wayne Phillips
2	- Oil Spills and the Environment - Chemical and Radiation Leaks and	4	0	8	Dr Wayne Phillips

	the Environment				
3	- Ozone Depletion and the Environment - Global Warming and the Environment	4	0	8	Dr Wayne Phillips
4	Biodiversity and the Environment	4	0	8	Dr Wayne Phillips
5	Deforestation and the Environment	4	0	8	Dr Wayne Phillips
6	Natural Resources and the Environment	4	0	8	Dr Wayne Phillips
7	Genetic Engineering, Genetically Modified Organisms (GMOs) and the Environment	4	0	8	Dr Wayne Phillips
8	Water Issues and the Environment	4	0	8	Dr Wayne Phillips
9	Urban Issues and the Environment	4	0	8	Dr Wayne Phillips
10	Poverty and the Environment	4	0	8	Dr Wayne Phillips
11	Presentations	4	0	8	Dr Wayne Phillips
FINAL EXAMINATION					
	Total	44	0	88	

11. Teaching Method *(s)*

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

12. Teaching Media

Text and teaching materials, 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 and explain the likely future environmental concerns and issues

Student's achievement will be graded according to the college and university standard using the symbols: A, B+, B, C+, C, D+, D and F. Minimal passing level is 60%. Student who earns 85% up will have Grade A, 80-84% Grade B+ , 75-79% Grade B, 70-74% Grade C+, 65-69% Grade C, 60-64% Grade D+, 55-59% D, less than 55 Grade F. Students must attend at least 80% of the total class hours of this course.

Case studies (x4)	20%
Presentation	20%
Mid-term exam	30%
Final exam	30%

14. Course evaluation

14.1 Students' achievement as indicated in number 13 above.

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

15. Reference *(s)*

Allin, C.W. and McCleneghan, 2000. Encyclopedia of environmental issues. USA. Salem Pr Inc. 2000.

Ison, s., Peake, S. and Wall, S. Environmental issues and policies. USA Publisher: Pearson Education, 2002.

Hinchliffe,S., Blowers, A. and Freeland, J.R.. Understanding environmental issues. USA. John Wiley and Sons Ltd. 2003.

Additional readings set by the instructor.

16. Instructor *(s)*

Dr. Wayne Phillips

17. Course Coordinator

Dr. Wayne Phillips