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 319 / ICEN 319 **Course Title**: Conservation Biology

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

4. Prerequisite *(s)*: ICNS 112, ICBI 241

5. Type of Course: Elective for 3rd year students

6. Semester / Academic Year: Trimester 2

7. Course Description:

The aims and origins of conservation biology, conservation problems and issues, causes of habitat degradation and extinction, conservation genetics, small population biology, the values of communities and ecosystems, reducing and management of endangered species, social and ethical issues in conservation

8. Course Objective *(s)*:

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

- The definition of conservation, biodiversity and sustainable use of natural resources
- The need for conservation and the threats faced by some populations
- The IUCN Red List of Threatened Species
- The tragedy of the commons and resource over-exploitation
- The importance of genetic variation
- The selection, design and management of protected areas
- Sociopolitical and economic issues of conservation

9. Course Outline

Class	Topic				Lecturer
	Lecture / Seminar	Hour	Lab	Hour	
1	Introductory concepts - What is conservation biology?	2	-		TBA
2	Values and ethics of conservation	2	-		
3	The concept of species and biodiversity	4	-		

4	Habitat destruction and fragmentation and the loss of biodiversity	6	-		
5	Genetic diversity - The importance of variation (+Mid term)	4 (+2)	-		
6	Community and ecosystem conservation	4			
7	Protected areas – Selection, design and management	4	-		
8	Ecological restoration	4	-		
9	Sociopolitical issues of conservation	4	-		
10	The economics of conservation	4	-		
11	The future of conservation	4	-		

10. Teaching Methods:
Lectures, conservation case studies, discussion, self-study.

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

12. Course Achievement:
Assessment made from stated criteria: students with 80%+ obtain grade A

13. Course Evaluation:
1. Assignments (x3) 30%
2. Mid-term exam 35%
3. Final exam 35%

14. References:
Pullin, 2002. Conservation Biology. CUP
Meffe *et al*, 1997. Principles of Conservation Biology
Fiedler and Kareiva (eds), 1998 Conservation biology : for the coming decade**.** Chapman and Hall, New York
Additional readings set by instructor

15. Instructor:
TBA

16. Course Coordinator:
Dr Wayne Phillips