

KASETSART UNIVERSITY
DEPARTMENT OF FOREST BIOLOGY, FACULTY OF FORESTRY

Course No: 302581: **Biodiversity Conservation Policy and Planning 3(0-3)**

Semester: 2nd Semester (November – February)

Pre-requisite: Biodiversity Conservation 2(0-2); or
Tropical Forest Biology 2(0-2)

Instructors: Yongyut Trisurat, Ph.D.
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Room# 511, the 60th Anniversary Bld.

Class Schedule: Tuesday 08.00-9.00 am
Thursday 15.00-17.00 pm
Room # 303, 60th Anniversary Building

Course Description: Definitions, biodiversity concepts and values; distribution and measurement of biological diversity; destruction and extinction of biodiversity of various parts of the world and Thailand; biodiversity assessment and monitoring; approaches for biodiversity conservation; strategies for conserving biodiversity; TNC's guide to planning for biodiversity conservation; biodiversity conservation corridor; community-based biodiversity conservation; and conservation conventions, legislation and the role of statutory agencies.

Objectives:

1. To provide the students with the appropriate principles and problems associated with the preservation and conservation of biodiversity
2. To introduce advanced spatial analysis techniques of collecting, manipulating and analyzing biodiversity data
3. To analyze conventional applications of conservation science at a single-species level, and we will evaluate the conservation efforts at levels of communities, ecosystems, and landscapes, and to provide students with practical approaches for conservation planning practiced by leading agencies in various parts of the world and Thailand
4. To study the conservation and environmental laws in Thailand that are relevant to biodiversity and convention on biological diversity, as well as their implications.

Course Outline:

Item	Topic	Hrs.
PART I: MEANING, PATTERNS AND MEASURING BIODIVERSITY		
1	Definitions, biodiversity concepts and values	2
2	The distribution and measurement of biological diversity	3

3	Destruction and extinction of biodiversity of various parts of the world and Thailand	2
4.	Biodiversity assessment and monitoring	
	• <i>Species richness: measure and measurement</i>	2
	• <i>Defining and measuring functional aspects of biodiversity</i>	2
	• <i>Monitoring indicators and tools</i>	2
PART II: CLASSICAL APPROACHES TO CONSERVATION		
5	Approaches for Biodiversity Conservation	
	• <i>Conservation at genetic, species and population levels</i>	3
	• <i>Conservation at community and ecosystem levels</i>	3
PART IV: PRACTICAL APPROACHES		
6	Strategies for Conserving Biodiversity	5
7	TNC's Guide to Planning for Biodiversity Conservation	
	• <i>Selecting conservation targets and goals</i>	3
	• <i>Assessing population viability and ecological integrity</i>	3
	• <i>Selecting, designing and setting priorities among conservation areas</i>	3
8	Biodiversity conservation corridor	3
9	Community-based biodiversity conservation	3
PART V: CONVENTIONS AND LEGISLATIONS		
10	Conservation conventions, legislation and the role of statutory agencies	3
	<i>Presentation</i>	3
	Final Examination	

Course Evaluation:

Mid-term exam	30 %
Final exam	30 %
Attention and discussion	10%
Assignment and presentation	30 %

Selected References

Baydack et al. (eds.). 1999. Practical Approaches to the Conservation of biological diversity. Island Press, Washington, D

Borrini-Feyerabend et al. 2004. Indigenous and local communities and protected areas: towards equity and enhanced conservation. IUCN, Gland, Switzerland and Cambridge, UK.

EPA. 1997. Community-based environmental protection: a resource book for protecting ecosystems and communities. U.S. Environmental Protection Agency, Office of Policy, Planning and Evaluation, Washington, D.C. (<http://purl.access.gpo.gov/GPO/LPS45066>).

Gaston, K.J. (ed). 1996. Biodiversity: a biology of number and difference. Blackwell Science, Cambridge.

Groves, C.R. 2003. Drafting a conservation blueprint: a practitioner's guide to planning for biodiversity. Island Press, Washington.

Primack, R.B. 1995. A primer of conservation biology. Sinauer Associates Inc., Sunderland.

Reaka-Kudla et al. (eds.). 1997. Biodiversity II: Understanding and Protecting Our Biological Resources. Joseph Henry Press, Washington, D.C.

Journals

Biodiversity and Conservation
Conservation Biology
Ecological Applications
Journal for Nature Conservation
Journal of Applied Ecology.
Etc.