

Souphanouvong University

No _____/.....

Place, Date ____/____/____

Course Syllabus

1 Program

Title of the study programme: **M.Sc. on Agriculture and Environmental Forestry**

2 Course details

Course name: Biodiversity Conservation

Course code: XXXXX

Number of credits (hours/week): 3 (2-3-4); 4 hours per week but two classes per week, total 144 hours. 32 hours Lecture and Practice 48 hours and Practice 64 hours.

Course type (tick the appropriate box): Required, Elective, Other, if other please explain:

Prerequisites courses: Botany, Dendrology, Forestry Inventory, Wildlife Management

Semester, in which the course is taught: *tick the appropriate box below*

Year 1		Year 2	
Semester 1	Semester 2	Semester 1	Semester 2
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

3 Responsible unit

3.1 Department:

Names and affiliations of lecturer(s): **Lecturer:** Sengkham PHONCHALUEN. **Affiliation:** Department of Forest Resource, Faculty of Agriculture and Forest Resource. Souphanouvong University.

4 Course description

The course of biodiversity conservation is designed to introduce the students to get knowledge about the meaning and Importance of biodiversity conservaton, species diversity, species loss, habitats and ecosystems. the use and values of biodiversity, as well as policies, Laws and Strategies for Biodiversity Conservation at national, regional and international levels. Promotion of participatory biodiversity tourism and Biodiversity Assessment.

5 Course objectives

- To allow students knowledge about the meaning and Importance of biodiversity, species diversity, species loss, habitats and ecosystems.
- To allow students knowledge about the use and values of biodiversity, as well as policies, Laws and Strategies for Biodiversity Conservation at national, regional and international levels.
- To allow students knowledge about the diversity of living organisms like animals , plants , animals and microorganisms.
- To allow students knowledge of the main threats to biological diversity and the ability to evaluate the effects of human influences such as habitat fragmentation, climate changes and invasive species on biodiversity;
- To allow students knowledge about Promotion of participatory biodiversity tourism and Biodiversity Assessment.

Knowledge:

After completing this course, students will have knowledge about biodiversity conservation of theoretical, principle and be able into practice well

Skills:

After completing this course, Students will have the ability to apply their new knowledge to conduct research, assessments of biodiversity and sustainable biodiversity conservation.

Application of theories to practice:

Students can apply knowledge from the classroom, theory and application in experiments, research, data collection and analysis to report results.

Social knowledge and skills:

- Students can work as a team, jointly experiment and coordinate with the community in the implementation of related projects.

5.1 Learning objectives of particular modules

If the course is divided into sections or modules, please state the learning objectives for the specific sections/modules taught within the course

6 Course teaching methods

This course will provide lectures with PPT presentations and show images og lessons, Q and A, Group Discussion, assignment and practical sessions ('Practice') including a field survey with data collection, and group and individual presentations.

7 Teaching plan

Theory of biodiversity (basic knowledge) → biodiversity assessment → Use and values → Importance to Laos → Policies and laws → Conservation (traditional e.g. protected areas) → participatory conservation and tourism

Specify the teaching plan for each week of the course, including the methods used to relay information to the students and the number of hours spent on the subjects

Week	Content	Method/activity	Hours
1-2	Chapter 1: Basic knowledge of Biodiversity 1. The meaning and importance of biodiversity 2. Identification of biodiversity levels 3. Species diversity 4. Species loss 5. Habitats and ecosystems. Biodiversity hotspots	- Lecture - Group Discussion - Assign homework to research in the library	8
3	Practice 1: Identify of Species diversity, Habitats and ecosystems.	Field survey and data collection and Report & Presentation	8
13-14	Chapter 7: Biodiversity Assessment 1. Biodiversity Indicators 2. Assessment of biodiversity abundance 3. Major threats to biodiversity	- Lecture - Q and A - Group Discussion	4
15	Practice 5: Field study to assess diversity.	- Field survey and data collection and Report and Presentation	8
5	Chapter 3: The use and values of biodiversity 1. Uses of Biodiversity 1.1 Plant uses 1.2 Animal uses 2. Valuing biodiversity 2.1 Biodiversity and economics Ecosystem services	- Lecture - Q and A - Group Discussion	4
6	Practice 2: Study on the use and values of biodiversity	Field survey and data collection and	8



		Report & Presentation	
7-8	Chapter 4: Policies, Laws and Strategies for Biodiversity Conservation 1. National policies and Instruments 1.1 National legislations and Strategy 1.2. National Environmental Policy on Biodiversity and Wildlife in Lao PDR 1.3 Protected areas 2. International policies and instruments 2.1 Multilateral treaties 2.2 International policy and legal assistance 2.3 International aid 2.4 Management of international resources 3. The convention of Biodiversity	- Lecture - Q and A - Assign homework to research in the library	8
9	Midterm		4
10-11	Chapter 5: Importance of Biodiversity in Lao PDR at the International Level 1. Biodiversity Conservation in Lao PDR 2. Valuing biodiversity for tourism in Lao PDR 3. Valuing biodiversity for villages in forested areas 4. Valuing biodiversity of village forest management and commercial afforestation 5. Valuing biodiversity of aquatic ecosystems 6. Valuing biodiversity for Agricultural 7. Valuing biodiversity of urban ecosystems	- Lecture - Q and A - Group discussions on conservation topics - Assign homework to research in the library	8
12	Practice 3: Field study to Valuing biodiversity	- Field survey and data collection and Report and Presentation	8
4	Chapter 2: Biodiversity Conservation (break into two chapters) Begin with threats to biodiversity 1. The meaning of conservation 2. Identification of types of conservation 3. The meaning of biodiversity conservation 4. The benefits of biodiversity and conservation 5. Climate Change and Loss of Biodiversity 6. Causes of declining biodiversity 7. Biodiversity conservation issues 8. Environment of biodiversity 9. Guidelines for the conservation of biodiversity 10. Current practices in biodiversity conservation	- Lecture - Q and A - Group discussions on conservation topics	8
10-11	Chapter 6: Promotion of participatory biodiversity conservation tourism	- Lecture - Q and A	4

	1. The importance and importance of biodiversity to tourism 2. Biodiversity tourism 3. Benefits from biodiversity tourism 4. Potential for biodiversity tourism 5. Promotion of biodiversity tourism 6. Participatoion in Biodiversity Tourism	- Assign homework to research and create a questionnaire	
12	Practice 4: Field study to participatory biodiversity tourism	- Field survey and data collection and Report and Presentation	8
16	An example of a biodiversity study in Lao PDR.	- Lecture - Q and A - Group Discussion	4
17	Presentation a report	- Lecture - Q and A	8
18-19	Weekly / Semester exam review		
20	Final Exam	written examination	2

8 Material needs

8.1 Course equipment:

. link to equipment needs/purchases as part of the project

9 References

9.1 Compulsory reading list

- Spellerberg, I.F., and Harnes, S.R., (1992). Biological conservation. Cambridge University Press, 123 pp.
- Millennium Ecosystem Assessment. (2005). Ecosystems and Human Well-being: Biodiversity Synthesis. World Resources Institute, Washington, DC.
- UNEP (1995). Global Biodiversity Assessment. Cambridge University Press, Cambridge.

9.2 Suggested reading list

- Niwat Ruangpanich. (2003). Conservation of Natural Resources and Environment, Fourth Edition, Bangkok: Kasetsart University Press.
- Thecla M. Mutia. (2009). Biodiversity conservation. Presented at Short Course IV on Exploration for Geothermal Resources. organized by UNU-GTP, KenGen and GDC, at Lake Naivasha, Kenya
- textbooks and manual of Biodiversity conservation
- <https://www.treehugger.com/what-is-forest-ecosystem-and-biodiversity-1342815>



- <https://sustainability-innovation.asu.edu/biodiversityoutcomes/biodiversity-introduction/>
- Jimmy Kund. 2020. Species Diversity - Definition, Importance and Example : <https://www.stfuandplay.com/species-diversity/>
- World Bank, 2020. ຊີວະນາໆພັນ ຂອງ ສປປ ລາວ: ບູລິມະສິດເພື່ອການເຕີບໂຕສີຂຽວ

10. Assessment of students

10.1 Description of assessment

- Class Attendance 10 %
- Reporting/Assignment 20 %
- Small Exam 10 %
- Midterm 25 %
- Final Exam 35 %

10.2 Grade distribution and student assessment

Grading scale

Grade		Total score	Scale
Symbol	Verbal grade		
A	Excellent	90-100	4.00
B ⁺	Very Good	85-89	3.5
B	Good	80-84	3.00
C ⁺	Fairly Good	75-79	2.50
C	Fair	70-74	2.00
D ⁺	Poor	65-69	1.50
D	Very Poor	60-64	1.00
F	Fail	59	0.00

Place, Date/...../.....