

<b>Course number</b>		U-LAS61 10016 LE80					
<b>Course title (and course title in English)</b>		Sustainable Forest Environment-E2 Sustainable Forest Environment-E2		<b>Instructor's name, job title, and department of affiliation</b>		Graduate School of Agriculture Program-Specific Assistant Professor,VILAYVONG, Khonesavanh	
<b>Group</b>	Interdisciplinary Sciences		<b>Field(Classification)</b>		Environmental Sciences		
<b>Language of instruction</b>	English		<b>Old group</b>		<b>Number of credits</b>	2	
<b>Number of weekly time blocks</b>	1	<b>Class style</b>	Lecture (Face-to-face course)		<b>Year/semesters</b>	2024 • First semester	
<b>Days and periods</b>	Thu.2		<b>Target year</b>	Mainly 1st & 2nd year students	<b>Eligible students</b>	For all majors	
<b>[Overview and purpose of the course]</b>							
<p>This course introduces the basic forest environmental issues and concepts concerning the forest sustainability. The course is focused on (1) the basic physical science of climate change, climate models, and the impacts of climate change; (2) basic science on forest environment and ecosystems; (3) roles of forests and forest environmental issues; and (4) Sustainable approach of managing forests by the concept of "Reducing emissions from deforestation and forest degradation and the role of conservation, sustainable management of forests, and enhancement of carbon stocks in developing countries (REDD+).</p>							
<b>[Course objectives]</b>							
<p>1. To introduce students with knowledge and background on environmental issues related to climate change  2. To introduce students with underlying scientific theories, principles, practices, and measures for sustainable forest management  3. To help students acquire and apply technical knowledge and development practices on management practices for mitigation and adaptation to climate change in forest environment</p>							
<b>[Course schedule and contents)]</b>							
<p>1. Global warming  2. Modelling the climate  3. Climate change and its impacts  4. Forests and forest ecosystems  5. Forest environment and its environmental values  6. Forest ecosystem functions  - Basic forest hydrology  7. Forest ecosystem functions  - Forest soils and nutrient cycles  8. Forest biodiversity  9. Forest hazard and disaster  10. Forest degradation and deforestation  11. Forests and sustainable development  12. Forest products and social values  13. Sustainable forest management  14. Revision and self-learning week  15. Examination  16. Feedback</p>							
<div style="text-align: right;">Continue to Sustainable Forest Environment-E2(2)</div>							

## Sustainable Forest Environment-E2(2)

### [Course requirements]

None

### [Evaluation methods and policy]

Students' evaluation are conducted on the performance basis on  
(1) applying knowledge through answering mini-quizzes (20%);  
(2) developing scientific communication skills through writing summary reports of book chapters, research papers and oral presentation (30%);  
(3) writing a short academic styled essay of a case study using critical & problem-solving skills (10%);  
(4) final examination (40%)

### [Textbooks]

There is no official textbook for this course. The content of the course is an assembly of selected topics from various textbooks, references, online sources and libraries. It is students' duty to acquire the skill of collecting the topics as an supplementary class reading.

### [References, etc.]

#### ( References, etc. )

John Houghton 『Global Warming: The Complete Briefing (5th Ed)』 ( Cambridge University Press )

ISBN:978-1-107-46379-0 ( Only some chapters are covered )

IPCC 『Climate Change 2013: The Physical Science Basis』 ( IPCC ) ( Available online and in library )

### [Study outside of class (preparation and review)]

Students are encouraged to read and review reading materials before classes. Outcome of the reading will be assigned as a class performance, which accounts for the final grade.

### [Other information (office hours, etc.)]

After class, student consultation will be arranged with prior notice.