

科目ナンバリング											
授業科目名 <英訳>	Sustainable Forest Environment-E2 Sustainable Forest Environment-E2					担当者所属 職名・氏名	農学研究科 特定助教 VILAYVONG , Khonesavanh				
群	統合科学科目群				分野(分類)	環境			使用言語	英語	
旧群		単位数	2単位	週コマ数	1コマ	授業形態	講義（対面授業科目）				
開講年度・ 開講期	2024・前期		曜時限	木2		配当学年	主として1・2回生	対象学生	全学向		
【授業の概要・目的】											
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+).											
【到達目標】											
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											
【授業計画と内容】											
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.-7. Forest ecosystem functions - Forest soils and nutrient cycles - Basic forest hydrology: water supply and quality 8. Forest biodiversity 9. Natural hazards and risk management 10. Deforestation and forest degradation 11. Forests and sustainable development 12. Social values of forests and forestry 13. Forest products 14. Sustainable forest management 15. Examination 16. Feedback											
【履修要件】											
特になし											
【成績評価の方法・観点】											
Students' evaluation are conducted on the performance basis on (1) applying knowledge through answering mini-quizzes (15%); (2) <u>developing scientific communication skills through writing summary reports of book chapters, research</u>											
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papers and oral presentation (25%);
(3) writing a short essay of a case study using critical & problem-solving skills (10%);
(4) final examination (50%)

[教科書]

Reading materials and handouts will be distributed.

[参考書等]

(参考書)

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)

[授業外学修 (予習・復習) 等]

Students are encouraged to read and review reading materials before classes.

[その他 (オフィスアワー等)]

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