科目ナンハ	<b>バリング</b>	U-LAS70 10002 SE50									
授業科目名 <英訳>	ILAS Seminar-E2 :Global Environmental Issues (地球環境問題) ILAS Seminar-E2 :Global Environmental Issues  H担当者所属 職名・氏名 関連会社 表現										Daniel Epron
群	少人数群	単位数		2単位		週	週コマ数		マ	授業形態	ゼミナール(対面授業科目)
開講年度· 開講期	2025・前期	受講定員 (1回生定員)		15 (15) 人		配当学年		主として1回生		対象学生	全学向
曜時限	月5		教室		共北3A	比3A				使用言語	英語
キーワード	Climate change / Land degradation / Deforestation / Resource depletion / Biodiversity loss										

### [授業の概要・目的]

Several environmental problems preoccupy peoples around the world. They result from conflicts between natural and human systems, affect our daily life and compromise our future. This seminar will explore how several environmental issues are addressed at the regional, national or international level, and how ecology and environmental science are used as a basis for addressing and tackling these issues.

## [到達目標]

Upon successful completion of this seminar, students will (i) have a basic scientific understanding of the major environmental issues, and will be able (ii) to critically assess these issues and (iii) to develop decision-making skills for proposing sustainable options for the future.

### [授業計画と内容]

The course will be based on in-depth analyses of several case studies that will be related to either:

- Climate change: vulnerability, adaptation and mitigation
- Heat waves and urban heat islands
- Air pollution: ozone in the troposphere
- Air pollution: input of nitrogen from the atmosphere to the biosphere
- Water pollution: eutrophication of aquatic ecosystems and scarcity of fresh water resources
- Water pollution: pesticides and endocrine disruptor
- Land degradation and restoration
- Deforestation
- Resource depletion: overfishing and fishing allowance
- Habitat fragmentation and endangered species

The first class will be an introduction and overview of course content. We will review the major environmental issues through reading a scientific paper. Students will work either alone or in small teams on one of these subjects they will select. They will have to read in depth relevant scientific papers, first provided by the instructor and then found by the students. Students will prepare oral presentations based on the paper 's content to the group at the next class as a starting point for a discussion. For all subjects that will be analyzed simultaneously, the guideline of the course will be (i) problem definition, (ii) quantification of impacts, (iii) vulnerability assessment and (iv) identification of appropriate solutions to solve it.

- (1) Introduction and selection of case studies [1 week]
- (2) Problem definition [2-3 weeks]
- (3) Quantification of impacts [3-4 weeks]
- (4) Vulnerability assessment[3-4 weeks]
- (5) Identification of appropriate solutions [3-4 weeks]

#### ILAS Seminar-E2:Global Environmental Issues (地球環境問題)(2)

- (6) Final restitution [1week]
- (7) Feedback [1week]

Total:14 classes and 1 feedback

## [履修要件]

特になし

## [成績評価の方法・観点]

Grading: Class participation (20%, students are expected to actively participate in discussion), oral presentation (40% during the class hours), written report (40%).

In no case will English language proficiency be a criterion for evaluating students.

Class attendance is expected: students who are absent more than three times without sound reasons (documented unavoidable absence) will not be credited.

## [教科書]

No textbooks; reading materials will be distributed before the class (uploaded on PandA).

## [参考書等]

### (参考書)

Reference books will be suggested to each student according to the subject she/he select and her/him interest

# [授業外学修(予習・復習)等]

Students are expected to read the distributed articles, to find additional information and to prepare oral presentations. Works on project outside of class hours is expected (about three hours between two classes).

# [その他(オフィスアワー等)]

Students are encouraged to ask questions and to make comments during the class.

Students are welcome to arrange appointments by email, even outside the official office hour, for questions and discussion

### [主要授業科目(学部・学科名)]