科目ナンハ	<b>ジリング</b>	U-LAS70 10002 SE50										
授業科目名 <英訳>	ILAS Seminar-E2 :Climate change impacts on the humanosphere (気候変動が生存圏に 与える影響) ILAS Seminar-E2 :Climate change impacts on the humanosphere											
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・後期	受講定員 (1回生定員)		5 (5) 人		配当学年		主として1回生		対象学生	全学向	
曜時限	金5		教:	教室 1共23						使用言語	英語	
キーワード	Climate change / environmental impacts / socio-economic impacts											
「坞类の概要,日的1												

### [授業の概要・目的]

This seminar will provide an overview of our knowledge of current climate change, its causes, and its observed and potential environmental and socio-economic impacts. Within the framework of the Sustainable Development Goals (SDG13: Climate Action) of the United Nations, possible strategies to either adapt to or mitigate climate change will be presented and discussed. The lecture is partly based on information from the reports of the Intergovernmental Panel on Climate Change (IPCC) and used in popular scientific works.

### [到達目標]

Students will gain an in-depth understanding of the issue of climate change and its causes in relation to our development model, which is essentially based on the use of non-renewable fossil fuels and raw materials. They will be able to discuss the issue in English from an informed point of view. This will be done through individual or group projects to focus on a particular aspect covered during the sessions. "Real time " discussions will be organized around the themes addressed by the Conference Of Parties (COP) of the United Nations Framework Convention on Climate Change (UNFCCC), held every year in November.

### [授業計画と内容]

# 1. (Weeks 1-3)

Introduction: The anthropogenic causes of the current climate change

- The increasing impact of human activities on the environment.
- The fossil fuels: Sources of considerable progress, why have they become a problem?

### 2. (Weesk 4-5)

An in-depth description of the physical mechanisms responsible for climate change.

### 3. (Weeks 6-8)

Environmental impacts

- Extreme weather events: floods, droughts, storms, ...
- Oceans and cryosphere: sea level rise, acidification, ice melt, ...
- Biosphere: Species migration, habitat loss, extinctions, ...
- lands: degradation, wildfires, permafrost melting, ...

### 4. (Week 9)

The potentially most affected regions by the climate change:

- The polar regions
- <u>- The coastal regions </u>

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- The semi-arid regions
- 5. (Weeks 10-11)

Socio-economic impacts

- Agricultural disruption and freshwater issues
- Health risks
- Economic losses
- Livelihood, migration, conflicts
- 6. (Weeks 12-14)

Discussion sessions

- Solutions to climate change?
- How to define responsibilities?
- Adaptation, mitigation, loss and damage.
- The complex issue of "energy transition"
- 7. (Week 15)

Final examination.

8. (Week 16)

Feedback.

# [履修要件]

This seminar does not require prior knowledge on the topic and is mainly based on graphics and documents to interpret.

## [成績評価の方法・観点]

Evaluation will be:

Active participation in class: 40 pts Assignments/projects at home: 30 pts

Final examination: 30 pts

## [教科書]

Not used. Slide handouts will be distributed.

## [参考書等]

### (参考書)

Mainly, Intergovernmental Panel on Climate Change (IPCC) reports.

# [授業外学修(予習・復習)等]

Materials (pdf files) will be made available before class.

Students are encouraged to study the materials before and after each class in order to assimilate technical or uncommon words.

Depending on the topic, the study of the materials and the preparation of the report for the evaluation may take several hours per week.

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ILAS Seminar-E2 :Climate change impacts on the humanosphere (気候変動が生存圏に与える影響) (3)										
[その他(オフィスアワー等)]										
Materials (pdf files) are available on the Kulasis website. Email communication is available for questions outside of class time.										
[主要授業科目(学部・学科名)]										