

HUM-470

Economic growth and sustainability II

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Cursus	Sem.	Type
Humanities and Social Sciences	MA2	Obl.

Language of teaching	English
Credits	3
Withdrawal	Unauthorized
Session	Summer
Semester	Spring
Exam	During the semester
Workload	90h
Weeks	14
Hours	3 weekly
Project	3 weekly
Number of positions	80

It is not allowed to withdraw from this subject after the registration deadline.

Remark

Une seule inscription à un cours SHS+MGT autorisée. En cas d'inscriptions multiples elles seront toutes supprimées sans notification.

Summary

In this seminar, students work in groups to prepare a report illustrating material taught in the first semester. Specifically, the groups will choose a significant environmental impact or resource use, and apply decomposition analysis to understand the role of the underlying drivers.

Content

A convenient way to understand the evolution of an environmental impact (e.g., polluting emissions, depletion of a natural resource) is to relate the time series of that impact to the time series of the corresponding population, its economic activity and living standard, and technical determinants. This IPAT decomposition helps predict the future evolution of the impact and guides possible proposals for policy measures to reduce that impact.

More generally, decomposition analysis can help understand how main drivers explain the evolution of an impact or differences in impact levels across regions or countries.

Students will work in groups of four, first finding an environmental impact that they want to analyse, then, collecting the data needed to understand its evolution through time in the IPAT framework. Next, they will analyse the data, referring to the scientific literature, and derive recommendations of policy measures for reducing the environmental impact. The environmental impact can be local, national, international.

Keywords

Sustainable development, economy, growth, environment.

POLY-perspective :

- interdisciplinary perspective
- global perspective

<https://www.epfl.ch/schools/cdh/cdhs-vision/>

Learning Prerequisites**Required courses**

HUM-471 Economic growth and sustainability I

Learning Outcomes

By the end of the course, the student must be able to:

- Critique theories and proposals related to economic growth and sustainable development
- Reason on social and economic issues
- Explain the relationships between economic, demographic and environmental variables
- Compute growth rates and the links between growth rates
- Differentiate between scientific and propaganda arguments
- Restate concepts and mechanisms seen in class

Transversal skills

- Assess progress against the plan, and adapt the plan as appropriate.
- Plan and carry out activities in a way which makes optimal use of available time and other resources.
- Communicate effectively with professionals from other disciplines.
- Access and evaluate appropriate sources of information.
- Evaluate one's own performance in the team, receive and respond appropriately to feedback.
- Demonstrate the capacity for critical thinking
- Make an oral presentation.

Teaching methods

This semester is dedicated to conducting research in groups. It aims at promoting teamwork in the formulation of a problem and its resolving, in a project logic.

Expected student activities

Students pick an environmental impact and analyse by decomposition into main drivers, as shown in class in the first semester. They write a report of about 20-30 pages, not counting references and appendix (if any) before presenting it to the class.

Assessment methods

Graded report (80%) and oral presentation with Q&A (20%) in the last one or two sessions of the semester.

Supervision

Office hours	Yes
Assistants	Yes
Forum	Yes

Resources

Bibliography

See Economic growth and sustainability I

Moodle Link

- <https://go.epfl.ch/HUM-470>