

HUM-124(b)

Global issues: mobility B

Geroliminis Nikolaos, Thémans Michaël

Cursus	Sem.	Type
Humanities and Social Sciences	BA2	Opt.

Language of teaching	English
Coefficient	4
Session	Summer
Semester	Spring
Exam	During the semester
Workload	120h
Weeks	14
Hours	4 weekly
Courses	2 weekly
Project	2 weekly
Number of positions	120

Remark

Merci de s'inscrire à un seul cours d'enjeux mondiaux

Summary

This course presents the global issue of Mobility in Logistics Systems. The supply chain management of flows of products and passengers is studied. The interdisciplinary approach integrates SHS with engineering sciences and introduces students to working in teams and to scientific methodologies.

Content

- Introduction to global issues
- Introduction to the global issue of mobility
- Different uses of transport times
- Telecommuting and Information and communications technology (ICT)
- Value of time in our societies
- Free public transport
- Congestion pricing
- Parking pricing
- Long-distance commuting
- Urban forms

The ability to work as part of an interdisciplinary team on a shared project is an essential skill for engineers, architects and scientists. Students will be introduced to the process of team formation and development, and to how to use differences within the team to good effect. Students will also be introduced to project management, and to basic skills in making verbal and visual presentations.

Searching for, accessing, and managing information is also a fundamental competence. Students will be introduced to how to source and access literature and data, and to how to appropriately reference source material.

Keywords

- Global Issues
- Mobility
- Speed
- Value of time

- Pricing
- Zero-fare
- Spaces
- Distances

Learning Prerequisites

Required courses

None

Recommended courses

None

Important concepts to start the course

None

Learning Outcomes

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

- Define the concept of « global issues » and describe it with reference to a number of examples
- Describe the challenges, opportunities and ethical issues related to science and technologies approaches of global issues
- Take into consideration the inter-relationships between social and human sciences and engineering sciences in global issues
- Sketch and generate potential solutions to a problem related to a global issue, taking into account natural, social, cultural, political or economic dimensions of the problem, as appropriate
- Identify potential consequences of their solution
- Respond to questions

Transversal skills

- Set objectives and design an action plan to reach those objectives.
- Communicate effectively with professionals from other disciplines.
- Identify the different roles that are involved in well-functioning teams and assume different roles, including leadership roles.
- Keep appropriate documentation for group meetings.
- Negotiate effectively within the group.
- Resolve conflicts in ways that are productive for the task and the people concerned.
- Access and evaluate appropriate sources of information.
- Design and present a poster.

Teaching methods

Lecture and teamwork
Videos and activities in moodle

Expected student activities

Progress report and poster

Assessment methods

Multiple Choice Questions (MCQ) Exam
Design and present the poster in a group.

Supervision

Office hours	No
Assistants	Yes
Forum	Yes

Resources

Références suggérées par la bibliothèque

- [Enjeux mondiaux : ressources documentaires / Bibliothèque EPFL](#)

Moodle Link

- <http://moodle.epfl.ch/course/view.php?id=14109>