HUM-398

Design for sustainability II

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Cursus	Sem.	Type
Humanities and Social Sciences	MA2	Obl.
UNIL - Autres facultés	E	Opt.
UNIL - Géosciences	E	Opt.
UNIL - HEC	E	Opt.

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	

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. S'inscrit dans le programme TILT (https://go.epfl.ch/tilt).

Summary

This course aims to explore and practice some of the fundamental tools of designing for sustainability with a focus on the desirability and economic viability of interventions.

Content

See the full description in the autumn semester course - HUM-397: Design for sustainability I.

During the spring semester, sessions are devoted to the prototyping of an intervention through a project-based approach.

Lecturers provide guidance on semester projects on a regular basis.

Teams will be made up of engineers (EPFL), social scientists (UNIL) and designers (ECAL).

As part of the TILT program, some of the course sessions will be given in the form of workshops aimed at strengthening professional competences (communication, interdisciplinary work, open-ended problem solving, project management, etc.). Students will be asked to keep a logbook as a basis for their individual reflexive note.

Keywords

design for sustainability, viability, desirability, ideation, prototyping, SDGs, interdisciplinarity

Learning Prerequisites

Required courses

HUM-397: Design for sustainability I

Learning Outcomes

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

- Apply an iterative prototyping approach to test the sustainability, desirability, economic viability and the technical

feasibility of your idea(s)

• Develop an innovative and sustainable intervention through ideation techniques

Transversal skills

• Communicate effectively with professionals from other disciplines.

• Take account of the social and human dimensions of the engineering profession.

Teaching methods

• Group work under lecturer supervision

Expected student activities

• Work in interdisciplinary teams

• Attend regularly project consultations

• Design an intervention through prototyping

• Document and valorize the processes of designing for sustainability

Assessment methods

• Project and documentation: 80% (groupwork)

• Reflexive note: 20% (individual)

Supervision

Office hours	No
Assistants	No
Forum	No

Resources

Bibliography

• Bhamra, T., & Lofthouse, V. (2007). Design for sustainability : a practical approach. Aldershot, England, Burlington, VT: Gower ; Ashgate Pub.

• Ceschin, F., & Gaziulusoy, I. d. (2020). Design for sustainability : a multi-level framework from products to socio-technical systems. Abingdon, Oxon ; New York, NY: Routledge/Taylor & Francis Group.

• Manzini, E. (2015). Design, when everybody designs : an introduction to design for social innovation. Cambridge, Massachusetts: The MIT Press.

• Nova, N., L., L.-H., & M., C. (2016). Beyond Design Ethnography. Geneva: HEAD.

• Papanek, V. J. (1972). Design for the real world; human ecology and social change. New York,: Pantheon Books.

• Thackara, J. (2015). How to thrive in the next economy : designing tomorrow's world today. New York, New York: Thames & Hudson.

• Thompson, P. B., & Norris, P. E. (2021). Sustainability : what everyone needs to know. New York, NY: Oxford University Press.

• Verganti, R. (2016). Overcrowded : designing meaningful products in a world awash with ideas. Cambridge, Massachusetts: The MIT Press.

• Vezzoli, C., Ceschin, F., Diehl, J. C., Moalosi, R., M'Rithaa, M. K., Nakazibwe, V., & Osanjo, L. (2018). Designing Sustainable Energy for All : Sustainable Product-Service System Design Applied to Distributed Renewable Energy. Cham: Springer.

Ressources en bibliothèque

• Bhamra, T., & Lofthouse, V. (2007). Design for sustainability : a practical approach
• Ceschin, F., & Gaziulusoy, I. d. (2020). Design for sustainability : a multi-level framework from products to socio-technical systems
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Websites

• https://designforsustainability.info

Moodle Link

• https://moodle.epfl.ch/course/view.php?id=16665