

HUM-466

Experimental history of science II

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Cursus	Sem.	Type
Humanities and Social Sciences	MA2	Obl.

Language of teaching	English
Credits	3
Withdrawal Session	Unauthorized Summer
Semester Exam	Spring During the semester
Workload	90h
Weeks	14
Hours	3 weekly
Project	3 weekly
Number of positions	30

Remark

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

Summary

The course allows students to learn by doing about the history of science, and the role played by experimentation, technical skills or material objects in the production of knowledge. Students will explore these topics by reconstructing a historical experiment, instrument or practice.

Content

The Spring semester is devoted to the practical realization of the students' projects. Students are expected to work autonomously in the various laboratories and workshops necessary for their projects. For further advice and directions, the instructor will be available on demand during the weekly dedicated hours.

Keywords

re-enactment, past experiments, learning by doing, history of science, practices, artefacts, tacit knowledge

POLY-perspective :

- creative perspective
- interdisciplinary perspective

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

Learning Prerequisites**Required courses**

HUM-402: Experimental history of science I

Learning Outcomes

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

- Identify important research questions in the history of science.
- Formulate a problematic and hypothesis.
- Analyze historical sources.
- Interpret historical artefacts.

- Assess / Evaluate the tacit and technical skills involved in the production of knowledge.
- Critique historical accounts and their own scientific skills.
- Construct an argument.

Transversal skills

- Communicate effectively with professionals from other disciplines.
- Assess progress against the plan, and adapt the plan as appropriate.
- Access and evaluate appropriate sources of information.

Teaching methods

The course relies on the teaching method of *learning by doing*. We consider this to be a particularly appropriate method for imparting knowledge about the history of science.

Spring semester: group work under supervision.

Expected student activities

The Spring semester is dedicated to autonomous practical work. Students are expected to present orally the advancement of their project during a mid-semester session. At the end of the semester, students are expected to present their research and hand a final report on their activities and findings.

Assessment methods

Independent evaluation at the end of both the autumn and spring term (grade associated to 3 ECTS).

Spring term:

- Mid-semester oral presentation (20%)
- Final oral presentation (40%)
- Final written report (40%)

Supervision

Office hours	Yes
Assistants	No
Forum	Yes
Others	Weekly meetings with supervisor or during alternative appointments with supervisor and own group. If appropriate, exchange via email, to be confirmed with respective supervisor.

Resources

Bibliography

Ressources en bibliothèque

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Moodle Link

- <https://go.epfl.ch/HUM-466>