

HUM-403

**Experimental cognitive psychology I**

Mohr Christine

<b>Cursus</b>	<b>Sem.</b>	<b>Type</b>
Humanities and Social Sciences	MA1	Obl.

Language of teaching	English
Credits	3
Session	Winter
Semester	Fall
Exam	During the semester
Workload	90h
Weeks	14
<b>Hours</b>	<b>3 weekly</b>
Courses	2 weekly
Project	1 weekly
<b>Number of positions</b>	<b>30</b>

**Summary**

The media frequently report on trendy studies that have been conducted in experimental cognitive psychology, and which inform the public on "human functioning" and its causes. We teach students basic skills and requirements when performing, understanding and comprehending such studies.

**Content****Performing an empirical study in cognitive psychology**

Cognitive psychology covers all aspect of our mental world, whether it is perception, attention, memory, language, mental imagery, emotion, concept formation, problem solving, creativity, decision making, reasoning, etc. To assess cognitive functioning, psychologists working in this field have traditionally applied experimental scientific methods. In this course, we will elaborate research questions that are closely linked to those of the respective project supervisor. By accounting for the recent published scientific literature, students will elaborate the study questions determined with their respective project supervisor, and will develop their own research activities performed in groups of max 4 students. After having read the relevant literature and decided on a hypothesis (autumn term), students will refine their method (autumn term), test participants (data collection) (spring term), treat the data for statistical analysis (spring term), and write a final scientific report (spring term).

**Keywords**

experimental psychology, cognition, scientific methods, empirism, statistics, hypothesis testing, reading scientific articles, writing scientific article, testing human subjects, data collection - input - analysis, colour, emotion, free will, consciousness, body image and body representation

**POLY-perspective :**

- creative perspective
- citizen perspective

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

**Learning Outcomes**

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

- Choose a method
- Design an experimental study in cognitive psychology
- Formulate a hypothesis
- Interpret empirical data
- Produce a scientific report
- Test human subjects in a laboratory setting

- Search scientific literature

### Transversal skills

- Assess progress against the plan, and adapt the plan as appropriate.
- Set objectives and design an action plan to reach those objectives.
- Evaluate one's own performance in the team, receive and respond appropriately to feedback.
- Negotiate effectively within the group.
- Assess one's own level of skill acquisition, and plan their on-going learning goals.
- Manage priorities.
- Write a scientific or technical report.

### Teaching methods

Group work

### Expected student activities

Attending weekly meetings, contributing to team work, communicating reliably and responsibly with group members and project supervisor, find research articles, read research articles, understand research articles, share knowledge with group members, write your own research report

### Assessment methods

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

Autumn term: Knowledge acquisition and elaboration of a project plan. Determination and set up of research method.

Evaluation of written introduction to the research report

Spring term: Experiment is performed, data collected, data input, data analysis. Evaluation of the final written research report consisting of a title page, abstract, introduction, method section, result section, discussion and bibliography.

### Supervision

Office hours	No
Assistants	Yes
Forum	No
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

Research articles, depend on the project to be performed. Information and skills to find the literature in the course of the autumn term