HUM-403 **Experimental cognitive psychology I**

Mohr Christine

Cursus	Sem.	Type
Humanities and Social Sciences	MA1	Obl.

Language of teaching	English
Credits	3
Session	Winter
Semester	Fall
Exam	During the semester
Workload	90h
Weeks	14
Hours	**3 weekly**
Courses	2 weekly
Project	1 weekly
Number of positions	**60**

Remark

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

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 annual course, we will elaborate research questions based on already available experiments provided by the respective project supervisor. These experiments are presented in the first week of term. In groups of max 6 students, the team has to analyse and synthesize the recent published scientific literature, formulate their study question, adapt and be able to apply the method for the experiment, collect data, analyse and interpret the data.
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. Likely topics are conservation psychology and belief in lie detection abilities.
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:

- Identify important research questions based on the published scientific literature

- Formulate a study question and hypothesis.
- Analyze the previous research findings
- Interpret the previous research findings
- Assess / Evaluate the tacit and technical skills involved in the production of knowledge.
- Critique constructively the previous research accounts and outcomes
- Construct an argument

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

Attend weekly meetings, contribute intellectually to team work, communicate reliably and responsibly with group members and project supervisor, find, read, and understand research articles, critical analyses of own and others' scientific work, share knowledge with group members, contribute to shared sections of research report, write individual sections of esearch report

Assessment methods

Independent evaluation at the end of each term (grade associated to 3 ECTS). Individual written work is submitted.
Autumn term: Evaluation will be based on the first two sections of a written scientific research report, namely, the introduction and method sections. Each student writes their own introduction (60% of the overall individual mark). The method section is prepared and written by the group (40% of the overall individual mark).
Spring term: Evaluation will be based on the final written research report consisting of a title page, abstract, introduction, method section, result section, discussion and bibliography. Each student writes their own abstract and discussion (60% of the overall individual mark). The updated method and result sections are prepared and written by the group (40% of hte overall individual mark).

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

Moodle Link

- https://go.epfl.ch/HUM-403