

Course ID Course Title: Experimental workshop

1. Course details

Semester:	2
Credit rating:	1 ECTS /15TU
Pre-requisite(s):	
Lecturer(s):	Tibor Neugebauer (coordinator)
Administrator:	Roswitha Glorieux
Tutor(s):	
Seminar times and rooms:	Summer semester 2021/2022
Tutorial times and rooms:	
Communications	It is important that students should regularly read their University e-mails, as important information will normally be communicated this way.
Mode of assessment:	Research proposal presentation and written paper
Examination Periods:	May 2022
Course WebPage:	Moodle.uni.lu

2. Aims and objectives

Aims

Students write and present their research proposal including a literature review, formulation of motivation and research questions, show the experimental design and convey the testable hypotheses of their research project. The course focuses on the research project. Professors and students give feedback to experimental design and research proposal. This practice of reflecting on the research question and the associated experimental design before the conduct of the experiment is very important, as the gathering of data in experiments is costly and mistakes in the experimental design cannot be reversed once the experiment has been conducted.

Learning Objectives

1. Think the research project from the beginning to the end
2. Do a careful literature review
3. Motivate your research question
4. Formulate your hypothesis
5. Design the experiment to address the research question
6. Learn to write the research paper
7. Present your research paper

3. Plan of semester

	Dates	Room	Time	Topic	Deadlines
14	March	MSA 2.240	10:00-12:30h	TBA	-
09	May	MSA 2.240	10:00-12:30h	TBA	-
16	May	MSA 2.240	10:00-12:30h	TBA	-
23	May	MSA 2.240	10:00-12:30h	TBA	-
30	May	MSA 2.240	10:00-12:30h	TBA	-

4. Course details (by topics)

This is a reading / tutorial course. Professors and students discuss the students' research proposals. Students prepare under supervision an experimental research study. Students write a research paper including their research question, a careful literature review, design of the experiment to gather the data, formulation of the research hypotheses. Students present their paper to the doctoral teaching unit including the professors and student colleagues to receive feedback. The course will help researchers using experimental methods to think the project from the research question to the implementation in an experiment and should help the researcher to avoid costly mistakes through intensive preparation and scrutinization of the experimental design.

5. Reference list/ Bibliography

References will be provided upon request depending on the research topic of the student.

6. Further information about assessment

Examination(s)	Presentation of research paper	
Weighting:	50% oral	50% writing
Date:		
Length:		
Structure:	Pass/Fail	Pass/Fail