



Department of Psychology

General information		
Name of the course	Science in Crisis?	
Course instructor	Dr. Ljerka Ostojić	
Study programme	Undergraduate Psychology	
Status of the course	Elective	
Year of study	2022-2023	
Language	English	
ECTS credits and manner of instruction	ECTS credits	3
	Number of class hours (Lectures + Exercises + Seminars)	30+0+15

1. COURSE DESCRIPTION
1.1. Course objectives
<p>The aim of the course is to familiarise students with the contemporary issues in different scientific disciplines and the different factors influencing these issues as well as provide students with the tools and skills to critically evaluate these.</p> <p>Due to the training and background of the lecturer, the emphasis will be on contemporary developments within life sciences, however, whenever appropriate and possible, we will also cover examples from other scientific disciplines (also depending on the students' own background and training).</p>
1.2. Course enrolment requirements and entry competences required for the course
Undergraduate study programme (the course is open to 2 nd and 3 rd year students of all study programmes). B2 level of English.
1.3. Expected course learning outcomes
<p>After completing the course, students are expected to be able to</p> <ul style="list-style-type: none">- describe and critically evaluate what has become known as the 'credibility revolution' within psychological and related biological sciences. This includes questions and issues about replicability, reproducibility, validity and generalisability of empirical findings as well as recent movements that have formed as a result of these issues (e.g. metascience as a new research area; Open Science tools, multi-lab collaborations),- discuss science as a situated endeavour (incl. academic structure, hiring and promotion, publishing systems, funding bodies),- argue about claims of science in crisis from a multi-disciplinary and interdisciplinary perspective,- analyse how outcomes of science are perceived by the public and which factors influence these processes,- critically evaluate claims in scientific articles,- analyse examples of science communication,- evaluate different Open Science tools, and discuss their benefits and challenges

1.4. Course content

Principles of science; Replicability crisis: claims, evidence, counter-arguments, Replications: types, value to science, challenges, Questionable Research Practices; contemporary issues with validity and generalisation of scientific results; 'Credibility' movements: Meta-science, large-scale collaborations, Open Science tools; Pre-registrations and registered reports; science as a situated activity within academia, science as a situated activity within society, science communication; fraud and error detection, dangers of a 'crisis' narrative at the individual level and at a societal level

1.5. Manner of instruction

- ✓ Lectures
- ✓ Exercises
- ✓ Individual assignments
- ✓ Multimedia and network
- ✓ Mentorship
- ✓ Other: consultations