

Course title	Epistemology, Scientific Method, and Research Ethics in Psychology			
Course code	PSY801			
Course type	Core			
Level	PhD			
Year / Semester	Year 1 / Semester 1			
Teacher's name	Dr. Eva Pettemeridou			
ECTS	10	Lectures / week	1	Laboratories / week None
Course purpose and objectives	<p>This course is designed to provide students with a deep understanding of the foundational principles of epistemology, the scientific method, and research ethics as they apply to psychology. The course emphasizes critical thinking, the nature of scientific inquiry, and ethical considerations in conducting research with human participants. Students will explore how philosophical underpinnings shape psychological theories, methods, and ethical decision-making processes.</p>			
Learning outcomes	<p>Upon successful completion of this course, students will be able to:</p> <p>CILO1: Analyze and evaluate the epistemological foundations of psychological research.</p> <p>CILO2: Apply the principles of the scientific method to design and critique psychological studies.</p> <p>CILO3: Identify, assess, and resolve ethical issues in psychological research, adhering to international standards.</p> <p>CILO4: Synthesize epistemological and ethical principles to develop a comprehensive research proposal.</p> <p>CILO5: Critically engage in scholarly discussions about the implications of research ethics and epistemology for diverse research settings and populations.</p> <p>CILO6: Evaluate the epistemological and ethical implications of integrating generative AI tools in psychological research practices.</p>			
Prerequisites	None	Required	None	
Course content	<p>Week 1: Introduction to Epistemology and Psychology</p> <p>Week 2: The Nature and Scope of the Scientific Method – Theories, hypotheses, operationalization. Introduction to open science</p>			

	<p>practices, including pre-registration, reproducibility, and transparency in psychological research</p> <p>Week 3: Research Design in Psychology</p> <p>Week 4: Historical Context of Research Ethics</p> <p>Week 5: Informed Consent and Vulnerable Populations</p> <p>Week 6: Biases and Limitations in Scientific Inquiry – including algorithmic bias and challenges in the use of generative AI</p> <p>Week 7: Ethics in Neuroscience and Technological Research – including ethical use of AI-driven tools in psychological research</p> <p>Week 8: Cross-Cultural and Global Research Ethics</p> <p>Week 9: Epistemological Critiques of Psychology</p> <p>Week 10: Developing Ethical Research Proposals</p> <p>Week 11: Case Studies and Ethical Dilemmas</p> <p>Week 12: Synthesis and Reflection</p>
<p>Teaching methodology</p>	<p>The course employs a combination of:</p> <ul style="list-style-type: none"> • Interactive lectures with discussions. • Case studies and ethical dilemma simulations. • Peer-reviewed research article analyses. • Group projects on ethical proposal designs. • Introduction to the responsible and transparent use of generative AI tools for epistemological inquiry and ethical reasoning in research. • Examination of reproducibility and transparency practices through case studies and use of open science platforms (e.g., OSF).
<p>Bibliography</p>	<p>Required Reading:</p> <p>Bunge, M. (2017). <i>Philosophy of Science: From Problem to Theory</i>. Routledge.</p> <p>Resnik, D. B. (2018). <i>The Ethics of Research with Human Subjects: Protecting People, Advancing Science, Promoting Trust</i>. Springer.</p> <p>American Psychological Association. (2020). <i>Publication Manual of the APA (7th ed.)</i>.</p> <p>Recommended Reading:</p> <p>Smith, J. A. (2015). <i>Qualitative Psychology: A Practical Guide to Research Methods</i>. SAGE.</p> <p>Beauchamp, T. L., & Childress, J. F. (2013). <i>Principles of Biomedical Ethics</i>. Oxford University Press.</p>

	Nosek, B. A., et al. (2015). Promoting an open research culture. <i>Science</i> , 348(6242), 1422–1425.
Assessment	<ol style="list-style-type: none"> 1. Participation in discussions and case studies (20%): Active engagement during class sessions. 2. Written assignment (30%): Critique of a published psychological study, focusing on its epistemological and ethical dimensions. 3. Research ethics proposal (50%): Develop an ethically compliant research proposal, including epistemological justifications. Students are encouraged to reflect on how their proposed study aligns with open science principles and reproducibility standards. <p>Note: If generative AI tools (e.g., ChatGPT, Copilot) are used during any stage of an assignment (e.g., brainstorming, summarizing, idea generation), students must clearly declare their use by submitting the University’s official Declaration of AI Use Form. Undisclosed use of AI tools or presenting AI-generated content as original work constitutes academic misconduct and will be subject to disciplinary action.</p>
Language	English