

COURSE OUTLINE

1. GENERAL

SCHOOL	SOCIAL SCIENCES		
DEPARTMENT	PSYCHOLOGY		
LEVEL	Undergraduate		
COURSE CODE	PSY-3113	SEMESTER	
COURSE TITLE	Applied Cognitive Psychology (Lab)		
TEACHING ACTIVITIES	WEEKLY HOURS	ECTS	
Workshops, practical training in research design and methodology, laboratory exercises. Student presentations, research design, supervised research, data analysis and presentation.	3	6	
COURSE TYPE	Skills Development (Laboratory)		
PREREQUISITES COURSES:	Research Methodology I; Statistics I		
INSTRUCTION/EXAM LANGUAGE:	Greek		
OFFERED TO ERASMUS STUDENTS	No		
COURSE WEB PAGE (URL)	https://elearn.uoc.gr/course/view.php?id=4596#section-0		

1. LEARNING OUTCOMES

Learning Outcomes
<p>Applied Cognitive Psychology involves the experimental investigation of memory, learning, attention, thinking, problem solving, language, and consciousness as they occur under real-life conditions. It also studies human performance and core cognitive abilities in everyday environments.</p> <p>Special emphasis is placed on research in autobiographical memory, lifespan memory development, lie detection and deception, eyewitness memory and its reliability, as well as cognitive perspectives on consumer behavior, health, and education.</p> <p>The laboratory gives students the opportunity to design, under supervision, an original research study in Applied Cognitive Psychology. This includes a full research protocol, along with study materials, as if it were to be submitted to the University Research Ethics Committee.</p>

By the end of the course, participants are expected to:

- Be able to design an original experimental study investigating cognitive processes in real-world conditions.
- Gain in-depth understanding of how human performance is explained through cognitive processes using different experimental designs.
- Strengthen critical understanding of methodological limitations across experimental paradigms in applied cognitive psychology.
- Develop awareness of the interaction between methodological and ethical issues in studying cognition in everyday life.
- Be able to creatively adapt or develop new experimental materials.
- Reflect on group dynamics and decision-making processes.

The laboratory primarily focuses on Research Methodology in Psychology, and also on Cognitive Psychology, Individual Differences, and Personality Theories.

General Competences

- Teamwork skills
- Independent work
- Adaptability to new situations
- Generation of new research ideas
- Constructive use of supervisor feedback
- Project design and management
- Awareness of ethical issues
- Promotion of free, creative, and inductive thinking
- Searching, analyzing, and synthesizing data using appropriate technologies

2. COURSE CONTENT

The course's content is linked to the 5 main axes of the curriculum:

Scientific Foundations [1], Scientific Research and Critical Thinking [2], Ethical and Social Responsibility [3], Communication Ability [4], Basic Preparation for Career Decisions and Vocational Rehabilitation [5].

Week 1: Introduction to key topics. Formation of groups

Week 2: 2x2 experimental design. Individual assignments and feedback

Week 3: Hypothesis formulation. Group work and feedback

Week 4: Development of experimental materials

Week 5: Group presentations and feedback

Week 6: Individual presentations and feedback

Week 7: Group presentations and feedback

Week 8: Pilot data collection

Week 9: Pilot data analysis

Week 10: Results presentation and feedback

Week 11: Results presentation and feedback

Week 12: Writing the research protocol

Week 13: Discussion and reflection

Activities:

- Workshops on conceptual and methodological issues in Applied Cognitive Psychology
- Experimental paradigms
- Workshops on research design, hypothesis testing in real-life conditions, factorial designs, randomization, sampling, confounding variables, validity and reliability, ecological validity, ethics
- Group exercises for developing experimental stimuli and research tools
- Adaptation of research material, scales and stimuli into Greek

3. INSTRUCTIONAL and LEARNING METHODS - EVALUATION

INSTRUCTION METHOD	Face-to-face / in class		
INFORMATION AND COMMUNICATION TECHNOLOGIES USED	<ul style="list-style-type: none">• Use of bibliographic databases• Use of Word, Excel, PowerPoint		
TEACHING ORGANIZATION	Activity	Semester workload (hours)	ECTS
	Interactive teaching, lectures, supervision, lab exercises:	39	1.56
	Assignment writing and reflective report	48	1.92
	Study and implementation of research project	41	1.64
	Preparation for presentations	20	0.80
	Total	148	6
STUDENT EVALUATION	I. Group research project / protocol (10,000–15,000 words, 60%) II. Oral presentation, participation, activities (30%) III. Reflective report (1,000–1,500 words, 10%)		

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4. BIBLIOGRAPHY

Bobak, A. K., Hancock, P. J. B., & Bate, S. (2016). Super-recognisers in action. *Applied Cognitive Psychology*, 30, 81–91. <https://doi.org/10.1002/acp.3170>

Billieux, J., Van der Linden, M., & Rochat, L. (2008). Impulsivity and mobile phone use. *Applied Cognitive Psychology*, 22, 1195–1210. <https://doi.org/10.1002/acp.1429>

Eitel, A., Bender, L., & Renkl, A. (2019). Seductive details and relevance. *Applied Cognitive Psychology*, 33, 20–30. <https://doi.org/10.1002/acp.3479>

Lobato, E., Mendoza, J., Sims, V., & Chin, M. (2014). Conspiracy beliefs and pseudoscience. *Applied Cognitive Psychology*, 28, 617–625. <https://doi.org/10.1002/acp.3042>

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