COURSE OUTLINE

1. GENERAL

SCHOOL	SOCIAL SCIENCES
DEPARTMENT	PSYCHOLOGY
LEVEL	*Undergraduate*

COURSE CODE	PSY-4401	**SEMESTER**	6th

COURSE TITLE	BASIC TECHNIQUES AND METHODS FOR THE STUDY OF BRAIN AND BEHAVIOR

TEACHING ACTIVITIES	WEEKLY HOURS	ECTS
Lectures and laboratory exercises	3	7

COURSE TYPE	Skills Development (Laboratory)
PREREQUISITES COURSES:	Physiology of Behavior I Physiology of Behavior II Research Methods I
INSTRUCTION/EXAM LANGUAGE:	Greek
OFFERED TO ERASMUS STUDENTS	No
COURSE WEB PAGE (URL)	https://elearn.uoc.gr/course/view.php?id=143

2. LEARNING OUTCOMES

Learning Outcomes

The purpose of this workshop is to familiarize students with some of the techniques and research methods used in biopsychology. After completing the workshop, participants will have acquired skills as to how to conduct research in a biopsychology lab, be able to critically analyze an empirical study, and write a laboratory report and a research proposal.

General Competencies

- Search for, analysis and synthesis of data and information, with the use of the necessary technology
- Working independently
- Teamwork
- Project planning and management
- Production of free, creative and inductive thinking
- Criticism and self-criticism

3. COURSE CONTENT

- Scientific literature

- Writing a research paper

- Searching the scientific literature

- Critical presentation of a research paper

- Research methods in behavioral neuroscience

- Basic aspects of experimental research in biopsychology

- Ethics in Biopsychology

- Basic laboratory techniques/methods (care and handling of laboratory animals, drug administration in rodents, general anesthesia, stereotaxic surgery, basic neuroanatomical and histological techniques).

- Laboratory exercises

  o Morphine-induced analgesia in rats. Reversal by naloxone

  o Effects of psychostimulants on the motor activity of rats

  o Intracranial self-stimulation: Pharmacological study

  o Assessing brain asymmetry through the haptic recognition of letters and numbers

4. INSTRUCTIONAL AND LEARNING METHODS - EVALUATION

INSTRUCTION METHOD	In class (face-to-face) lectures; video demonstrations and laboratory exercises		
INFORMATION AND COMMUNICATION TECHNOLOGIES USED	Use of ICT in teaching Support for learning (communication with students and delivery of all course material)via the website of course on UoC e-learn online platform.		
TEACHING ORGANIZATION	*Activity*	*Semester Workload*	*ECTS credits*
	Lectures	18	0,72
	Video demonstrations	3	0,12
	Laboratory exercises	18	0,72
	Written laboratory reports	40	1,6
	Oral presentation of research papers	6	0,24
	Skill training: Preparation for the oral	20	0,8

	presentation(in-class)		
	Critical appraisal and presentation of a research paper and research proposal	65	2,6
	Course Total	**170**	**6,8**
STUDENT EVALUATION	The evaluation is in Greek.		

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Evaluation will be based on:

    I.   Written laboratory reports;30% of the final grade

    II. Oral presentation of an original research paper; 20% of the final grade

    III. Written analysis of an original research paper and research proposal; 50% of the final grade

The evaluation criteria are presented during the 1st lecture. Moreover, all criteria are available to the students via the website of course on UoC e-learn platform.

5. BIBLIOGRAPHY

- Kandel, E.R., Schwartz, J.H., & Jessell, T.M. (2004). *Principles of Neural Science.* Nikosia: Broken Hill Editions Ltd (Greek edition).

- Kandel, E.R., Schwartz, J.H., Jessell, T.M. (1999). *Essentials of Neural Science and Behavior.* Heraklion: Crete University Publications (Greek edition).

- Panagis, G. (2002). *Behavioral Neuroscience: Principles, Methods, Techniques & Laboratory Exercises.* Nikosia: Broken Hill Editions Ltd (Greek edition).