

## BIOPSYCHOLOGY OF ANXIETY AND ANXIETY DISORDERS

### 1. GENERAL

<b>SCHOOL</b>	SOCIAL SCIENCES		
<b>DEPARTMENT</b>	PSYCHOLOGY		
<b>LEVEL</b>	Undergraduate		
<b>COURSE CODE</b>	Ψ-3406	<b>SEMESTER</b>	5 <sup>th</sup>
<b>COURSE TITLE</b>	<b>PSYCHOPHARMACOLOGY OF ADDICTION</b>		
<b>COURSE INSTRUCTOR</b>	<b>George Panagis,</b> Professor of Biopsychology		
<b>TEACHING ACTIVITIES</b>	<b>WEEKLY HOURS</b>	<b>ECTS</b>	
Lectures and training in new skills	<b>3</b>	<b>6</b>	
<b>COURSE TYPE:</b>	Skills Development (Seminar)		
<b>PREREQUISITES COURSES:</b>	Physiology of Behavior I Physiology of Behavior II or Psychopharmacology of addiction and drugs of abuse Research Methods I		
<b>INSTRUCTION/EXAM LANGUAGE:</b>	Greek		
<b>OFFERED TO ERASMUS STUDENTS:</b>	No		
<b>COURSE WEB PAGE (URL):</b>	<a href="https://elearn.uoc.gr/course/view.php?id=49">https://elearn.uoc.gr/course/view.php?id=49</a>		

### 2. LEARNING OUTCOMES

<b>Learning Outcomes</b>
<p>Students enrolled in this seminar will conduct bibliographic searches and critically evaluate research focusing on the study of the biopsychological and psychopharmacological basis of drug abuse and addiction. Those who enroll in this seminar will prepare a bibliographic synthesis, which will be delivered during either the January or September examination period. At the outset of the course, students will be introduced to the subject matter and via hands-on activities will learn how to conduct a literature search, find apropos references, and write a seminar paper. Each student will present an empirical study which has been published in a peer-reviewed scientific journal on a topic s/he has chosen. The aim here is not only for the presenter to provide the findings of the article but to generate class discussion and critique regarding pertinent issues.</p> <p>The papers that will be presented weekly will be read and evaluated by all seminar participants, who will also submit a written report that will include: a) a summary of the study (400 words) and b) an assessment of the contribution made to the literature with respect to the research problem, as determined by the researchers (150-200 words).</p> <p>Upon completion of the seminar, the students will have acquired in-depth insight into various aspects of the biopsychology and psychopharmacology of drug abuse and addiction. They will also be able to conduct literature searches from databases and critically analyze the relevant literature.</p>
<b>General Competencies</b>
<ul style="list-style-type: none"> <li>• Search for, analysis and synthesis of data and information, with the use of the necessary technology</li> </ul>

- Working independently
- Project planning and management
- Working in an interdisciplinary environment
- Production of free, creative and inductive thinking
- Criticism and self-criticism

### 3. COURSE CONTENT

- Use - abuse of psychotropic substances and the development of drug addiction: Epidemiological data, behavioral mechanisms, sociocultural aspects, new trends in drug abuse, underlying causes, politics.
- Genetic factors, epigenetics and vulnerability in drug addiction.
- Impulse disorders and drug addiction.
- Brain reward systems and drug addiction.
- Neural mechanisms related to the development of drug tolerance, drug dependence and withdrawal syndrome.
- Neurochemistry of drug addiction.
- Molecular and cellular mechanisms of drug addiction.
- Biopsychological-Neurobiological theories and theoretical explanations of drug addiction.
- Animal behavioral models in the study of drug addiction.
- The relationship between schizophrenia and depression with drug abuse and addiction.
- Legal drugs of abuse: Alcohol and benzodiazepines.
- Alcoholism.
- New trends in drug abuse: cannabinoids & hallucinogens.
- Designer drugs.
- Anabolic steroids and doping.
- Behavioral addictions (gambling, internet and/or social media addiction, sex addiction, exercise addiction, shopping addiction).
- Adverse consequences of drug abuse and addiction.
- Treatment Approaches for Drug Addiction.
- Contribution of the neurobiological perspective in the prevention of relapse after detoxification and/or treatment.
- Drugs of abuse and society: Dealing with Legalization of addictive drugs (e.g. marijuana) and other social and political factors.

### 4. INSTRUCTIONAL AND LEARNING METHODS - EVALUATION

<b>INSTRUCTION METHOD</b>	In class (face-to-face; In the first meetings, the instructor will present some topics on biopsychology and psychopharmacology of drug abuse and addiction, how to search relevant scientific literature and use APA format to cite relevant papers).Then each student will present a recent
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	<p>original research paper published in a peer-reviewed scientific journal. After presenting the students will discuss and critique aspects of the research paper.</p> <p>The students who enroll in this seminar are required to be present in all lectures and presentations (maximum allowed absences: 2).</p> <p>The students are also required to write a critical review paper that should be submitted by the end of the exams period in September the latest.</p>																					
<p><b>INFORMATION AND COMMUNICATION TECHNOLOGIES USED</b></p>	<p>Use of ICT in teaching</p> <p>Support for learning (communication with students and delivery of all course material) via the website of course on UoC e-learn online platform.</p>																					
<p><b>TEACHING ORGANIZATION</b></p>	<table border="1"> <thead> <tr> <th data-bbox="612 728 884 797"><i>Activity</i></th> <th data-bbox="884 728 1131 797"><i>Semester Workload</i></th> <th data-bbox="1131 728 1370 797"><i>ECTS credits</i></th> </tr> </thead> <tbody> <tr> <td data-bbox="612 797 884 866">Lectures</td> <td data-bbox="884 797 1131 866">12</td> <td data-bbox="1131 797 1370 866">0,48</td> </tr> <tr> <td data-bbox="612 866 884 999">Oral presentation of the research papers</td> <td data-bbox="884 866 1131 999">27</td> <td data-bbox="1131 866 1370 999">1,08</td> </tr> <tr> <td data-bbox="612 999 884 1167">Skill training: Preparation for the oral presentation (in-class)</td> <td data-bbox="884 999 1131 1167">20</td> <td data-bbox="1131 999 1370 1167">0,8</td> </tr> <tr> <td data-bbox="612 1167 884 1335">Group assignments and exercises: Writing of abstracts</td> <td data-bbox="884 1167 1131 1335">30</td> <td data-bbox="1131 1167 1370 1335">1,2</td> </tr> <tr> <td data-bbox="612 1335 884 1467">Independent study &amp; writing a review article</td> <td data-bbox="884 1335 1131 1467">65</td> <td data-bbox="1131 1335 1370 1467">2,6</td> </tr> <tr> <td data-bbox="612 1467 884 1536"><b>Course Total</b></td> <td data-bbox="884 1467 1131 1536"><b>154</b></td> <td data-bbox="1131 1467 1370 1536"><b>6,16</b></td> </tr> </tbody> </table>	<i>Activity</i>	<i>Semester Workload</i>	<i>ECTS credits</i>	Lectures	12	0,48	Oral presentation of the research papers	27	1,08	Skill training: Preparation for the oral presentation (in-class)	20	0,8	Group assignments and exercises: Writing of abstracts	30	1,2	Independent study & writing a review article	65	2,6	<b>Course Total</b>	<b>154</b>	<b>6,16</b>
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<p><b>STUDENT EVALUATION</b></p>	<p>The evaluation is in Greek.</p> <p>Evaluation will be based on:</p> <ol style="list-style-type: none"> <li>I. Oral presentation of an original research article; 30% of the final grade</li> <li>II. Homework reports (abstracts of original research articles) delivered every week and class participation; 30% of the final grade</li> <li>III. Writing a literature review on a specific topic based on recent scientific literature; 40% of the final grade</li> </ol> <p>The evaluation criteria are presented during the 1st lecture of</p>																					

	the semester. Moreover, all criteria are available to the students via the website of course on UoC e-learn platform.
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## 5. BIBLIOGRAPHY

- Abadinsky, H. (2018). *Drug use and abuse: A comprehensive introduction*. Boston, USA: Cengage Learning.
- Davis, K. L., Charney, D., Coyle, J.T. & Nemeroff, C. (2002). *Psychopharmacology: The Fifth Generation of Progress*. Philadelphia: Lippincott Williams & Wilkins.
- Koob, G. F., Arends, M. A. & Le Moal, M. (2014). *Drugs, Addiction and the Brain*. New York, NY: Elsevier Academic Press.
- Meyer, J. S, & Quenzer, L. F. (2013). *Psychopharmacology: Drugs the Brain and Behavior*. Sunderland: Sinauer.
- Goldstein, A. (2001). *Addiction: From Biology to Drug Policy* (2nd ed.). Oxford: Oxford University Press.
- Maisto, S. A., Galizio, M. & Connors, G. J. (2019). *Drug Use and Abuse* (8th ed.). Boston, USA: Cengage Learning.