

UNIVERSITÀ DEGLI STUDI DI MILANO-BICOCCA

COURSE SYLLABUS

Psychobiology of Behavioural Disorders

2526-3-E2401P019

Learning area

Knowledge and skills useful to understand, promote and change individual psychological functioning

Learning objectives

Knowledge and understanding

- To introduce the study of behavioural disorders, and specifically their biological bases and the neural correlates.
- · Correlation between neurobiological aspects and psychopathology.
- Different approaches, typical of psychophysiology, neuropsychology and experimental psychology

Applying knowledge and understanding

- To promote the ability to detect the pathological cognitive, emotional and behavioural functioning
- To detect the relative contribution of biological and environmental components at the basis of pathologic behaviour.

Making Judgments

Through open discussion and debate during lessons, the course aims to develop a critical and independent perspective in analyzing the main theoretical models and empirical evidence related to the psychobiology of behavioral disorders, encouraging the personal formulation of interpretative hypotheses and theoretical solutions.

Communication Skills

The examination format, which involves writing short essays in response to open-ended questions on the main

topics of the course, is designed to strengthen students' ability to communicate complex concepts related to psychobiology, using appropriate scientific language and adapting their communication style to academic and professional contexts.

Learning Skills

The inclusion of recent scientific articles in English in the course bibliography is intended to foster autonomy in study and the ability to critically explore the topics covered through the use of up-to-date scientific sources.

Contents

Genetic, neurotransmitter and anatomical aspects at the basis of the most common cognitive and behavioural disorders will be analysed.

Detailed program

Course Introduction - Methods of Psychobiological Research - Psychobiological Aspects of Major Depressive Disorder - Psychobiological Aspects of Anxiety Disorders - Psychobiological Components of Criminal Behavior and Sociopathy - Psychobiological Foundations of Addictions - Psychobiology of Healthy and Pathological Aging - Psychobiological Aspects of Nutrition and Related Psychological Disorders - Psychibiology of schizophrenia - Psychobiology of Consciousness - Assessment of the Psychobiological Foundations of Near-Death Experiences.

Prerequisites

It is highly suggested to take this course after genetics and biology, functional neuroanatomy, physiological psychology.

Teaching methods

The didactic modality will involve frontal lessons, videos, and individual learning. During frontal lession, a more interactive didactic modality will take place by stimulating open discussion and debate on the relevant topics of the course

Assessment methods

The exam modality is a written test with an optional oral examination.

The written exam will be conducted on the scheduled exam day in a computer laboratory and consists of 30 multiple-choice questions and two open-ended questions that require a comprehensive and reasoned discussion on two course topics. The purpose of these questions is to evaluate the actual acquisition of both theoretical knowledge and the ability to connect different aspects of psychobiology. The responses to the open-ended

questions will be assessed based on the correctness of the answers, the ability to present arguments, and the critical analysis of the topics addressed.

For students who request it and have passed the written exam, there is also an optional oral examination covering all course topics. The final grade will be determined by the average of the grade obtained in the written exam and the grade obtained in the oral exam.

Textbooks and Reading Materials

-Psicobiologia del comportamento normale e patologico. Papagno C. & Gallace A. (a cura di, 2014). Il Mulino: Bologna. Capitoli: 3 (Comportamento emozionale patologico), 7 (Comportamento criminale), 8 (Sociopatia acquisita), 12 (Cambiamenti cognitivi nell'invecchiamento), 13 (Invecchiamento patologico), 14 (C'è morte oltre la vita), Appendice A (Stimolazione magnetica transcranica e trattamento dei disturbi del comportamento).

-Additional teaching material will be provided during the course

Sustainable Development Goals