



UNIVERSITÀ  
DEGLI STUDI DI MILANO-BICOCCA

## COURSE SYLLABUS

### Psychobiology of Behavioural Disorders - 2

2526-3-E2401P019-T2

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#### Learning area

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

#### Learning objectives

##### *Knowledge and understanding*

To introduce behavioral disorders with a specific focus on their psychobiological foundations and neural correlates. To understand the interactions between neurobiological aspects and psychopathology, while gaining familiarity with approaches from psychophysiology, neuropsychology, and experimental psychology.

##### *Applying knowledge and understanding*

To foster the ability to recognize pathological cognitive, emotional, and behavioral functioning. To critically assess the contribution of biological and environmental components to the origin of dysfunctional behaviors, also through the analysis of case studies and scientific data.

##### *Making judgements*

Through open discussion and classroom debate during lectures, 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 - Psychobiology 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 lessons, 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.
- Neuroscienze per la Psicologia clinica. Elisabetta Mundo. Cortina Editore.  
-Additional teaching material will be provided during the course

## **Sustainable Development Goals**

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