



UNIVERSITÀ  
DEGLI STUDI DI MILANO-BICOCCA

## COURSE SYLLABUS

### Psychobiology of Behavioural Disorders

2324-3-E2401P019

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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 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.

#### 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 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**

Frontal lessons, videos, and individual learning.

## **Assessment methods**

The assessment of learning includes a written exam, which will be conducted on the scheduled exam day in a computer laboratory. The written exam 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**

