UNIVERSITÀ
DEGLI STUDI DI MILANO-BICOCCA

COURSE SYLLABUS

Psychobiology of Behavioural Disorders

2122-3-E2401P019

Learning area

I: 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

Research methods in psychobiology - Psychobiological bases of disorders of the nervous system - Behavioural disorders following brain lesions or neurodegenerative pathologies or sensory deprivation - Psychobiological aspects of emotional behaviour and of emotional disorders –Synaesthesia - Psychobiological aspects of sociopathy and criminal behaviour – Psychobiology of body representation and plasticity – Disorders in body representation – Psychobiology of pain and chronic pain pathologies – Psychobiology of mind-body-consciousness connection – Psychobiological aspects of nutrition and eating disorders– Psychobiological bases of near-death experience 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.

Lessons will be held in presence, unless further COVID-19 related restrictions are imposed.

Assessment methods

The exam includes a written test to be performed in a computer lab. The written test consists of 30 multiple choices questions and an open question that requires a large and critical discussion on one topic of the course. The questions are aimed at ascertaining the effective acquisition of both theoretical knowledge and the ability to connect different aspects of psychobiology. The answers to the open question will be evaluated in terms of correctness of the answers, argumentative capacity, and analytic discussion of the topics of the course. For students who request it and that have passed the written test, an oral interview will be also made available, on all the topics of the course. The final mark will be obtained by the average of the scores obtained in the written test and in the oral evaluation.

Textbooks and Reading Materials

-*Psicobiologia del comportamento normale e patologico*. Papagno C. & Gallace A. (a cura di, 2014). Il Mulino: Bologna. Chapters: 3 (Comportamento emozionale patologico), 5 (Rappresentazione corporea e disturbi), 6 (Percezione del dolore), 7 (Comportamento criminale), 8 (Sociopatia acquisita), 10 (Comportamento sessuale e identità di genere), 12 (Cambiamenti cognitivi nell'invecchiamento), 14 (C'è morte oltre la vita), Appendice A (Stimolazione magnetica transcranica e trattamento dei disturbi del comportamento), Appendice B (Sinestesia).

- *Additional teaching material provided during the course*