UNIVERSITÀ
DEGLI STUDI DI MILANO-BICOCCA

SYLLABUS DEL CORSO

Neuroscience 1

2526-4-H4102D028

Aims

To provide the basic knowledge to evaluate the patient with neurological and psychiatric problems and to understand the relationship between site of lesions and clinical symptoms.
To understand the biochemical pathways underlying the CNS metabolism under physiological conditions. To understand how derangement of metabolism can affect CNS functions.
To recognize signs and symptoms of neurological disorders through deep knowledge of physiopathology and semeiology of nervous system dysfunction.
To learn the principles of the main neuroradiologic examinations (plain x-rays, CT, MRI, DSA); to learn the indications to neuroradiologic examinations and to the use of contrast media for the main neurological, neurosurgical and psychiatric pathologies; to learn the neuroradiolgic pictures of the main neurological and neurosurgical pathologies and psychiatric disorders.

Knowledge and Understanding - at the end of this course, the student will be able to understand and integrate info useful for understanding clinical neuroscience.
Applying Knowledge and Understanding - At the end of this course, the student should be able to use the acquired knowledge for understanding the potential of clinical neuroscience in the medical field.
Making Judgments - At the end of this course, the student will be able know and understand the principles of neuroscience to be applied to clinical practice.
Communication Skills - At the end of this course, the student will have acquired an adequate scientific terminology and will be able to expose with the correct use of language the course topics.
Learning Skills - At the end of this course, the student will be able to comprehend and critically evaluate neuroscience literature.

Contents

Morphology and functions of different parts of central and peripheral nervous system.

Biochemistry of neurons and glial cells, molecular basis of neurological and psychiatric disorders.

Neuroradiology and imaging of normal brain and neurological and psychiatric disorders.

Semeiology of neurological disorders.

Detailed program

See each didactic unit.

Prerequisites

Basic knowledge of neuroanatomy, neurophysiology, biochemistry and pharmachology.

Teaching form

Frontal lessons with discussion of clinical cases through a problem based learning approach.

Textbook and teaching resource

See each didactic unit.

Semester

Fourth year, second semester.

Assessment method

Written examination for each module, with the exception of the final oral examination of neuroanatomy and neurological semiology.

Office hours

Appointment by e-mail with the teachers.

Sustainable Development Goals

GOOD HEALTH AND WELL-BEING