

# UNIVERSITÀ DEGLI STUDI DI MILANO-BICOCCA

### **COURSE SYLLABUS**

## Neurochirurgia

1819-5-H4101D025-H4101D100M

#### **Aims**

To recognize signs and symptoms of neurological and neurosurgical disorders through deep knowledge of physiopathology and semeiology of nervous system dysfunction.

To learn the nosology and clinical expression of the main neurosurgical diseases. To learn the principles of the correct management of neurosurgical disorders in elective and emergent scenarios

#### **Contents**

BASIC NEUROANATOMY AND NEUROPHYSIOLOGY of CSF DYNAMIC AND CEREBRAL VASCULARIZATION, NEUROLOGIC SYMPTOMS AND SIGNS, CASE TAKING, NEUROLOGIC EXAMINATION, LABORATORY EXAMS, LOCALIZATION AND DIFFERENTIAL DIAGNOSIS OF NEUROLOGICAL SYNDROMES.

DESCRIPTION WITH CLINICAL CASES AS EXAMPLES OF INTRACRANIAL HYPERTENSION, BRAIN TRAUMA, BRAIN TUMORS, CEREBROVASCULAR DISEASES AND OF THE MOST COMMON RADICULOMEDULLARY DISORDERS. TO BE ABLE TO IDENTIFY THE DIAGNOSIS AND THERAPY OF NEUROSURGICAL EMERGENCIES.

#### **Detailed program**

Physiopathology and semiology of motor, sensory, higher cortical dysfunctions, CSF dynamic and brain haemodynamic.

Alteration of consciousness and coma.
Primary and secondary brain and spine tumors
Hydrocephalus
Head Trauma.
Traumatic and degenerative spine conditions affecting the spinal cord and roots
cerebrovascular neurosurgical conditions determining haemorrages. aneurysms, AVMs, FAVDs and cavernomas
Principles of evidence-based neurology
Prerequisites
Knowledge of morphology and functions of different parts of central and peripheral nervous system.
Neuropharmacology and neuroradiology
Teaching form
Frontal lessons, small groups seminars, clerkship in neurological wards and with outpatients
Textbook and teaching resource
Core Curriculum "Malattie del sistema nervoso"
Carlo Ferrarese et al.
Mc Graw-Hill 2nd ed. 2016
and
pdf of Literature review papers
Semester

**Assessment method** 

Oral exam

## Office hours