



UNIVERSITÀ  
DEGLI STUDI DI MILANO-BICOCCA

## SYLLABUS DEL CORSO

### 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 haemorrhages. 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**

---