

**ISTANBUL OKAN UNIVERSITY**

**FACULTY OF MEDICINE**

**MED527**

**NEUROSURGERY**

**COURSE PROGRAM**

**LECTURERS**

Prof. Dr. Sedat Dalbayrak

Assoc. Prof. Dr. Atilla Yılmaz

Assoc. Prof. Dr. Ahmet Öğrenci

Assist. Prof. Dr. Orkun Koban

### MED527 Neurosurgery(5 credit)

Aim of the Course

The purpose of this course is to train medical student to become proficient in diagnosis and treating neurosurgical emergencies. The students shall also learn the general outline of neurosurgical pathologies, the diagnostic work up differential diagnosis and treatment options. Prerequisites: *MED401,MED402, MED403, MED404, MED405, MED411, MED412, MED413 and MED414.*

Learning Objectives

At the end of this course the student will be able to:

* Recognize common neurosurgical conditions presentations.
* Preparation of the neurosurgical patient for the operation
* Generate a differential diagnosis for common neurological complaints.
* Perform and interpret a neurological examination, localize a lesion based on clinical information and neurological examination.
* Demonstrate a basic understanding of the common indications and interpretations for neurological diagnostics (e.g., EEG, EMG, lumbar puncture, CT and MR imaging, angiology, pathological examinations).
* Develop a practical approach to the evaluation and management of common neurological complaints.
* Describe emergency neurosurgical conditions

Course Content

* Introduction to Neurosurgery
* Neuroanatomy and Neurophysiology
* Neurological Examination
* Intracranial Pressure(ICP) and Increased ICP and Hydrocephalus
* Head Trauma–Evaluation and management
* Cerebrovascular Diseases: Intracerebral Hematomas and Subarachnoid Hemorrhage
* Brain Tumours – Diagnosis and Treatment Method
* Congenital Cranial Anomalies, Spinal Anomalies
* Spinal Trauma and Medulla Spinalis Injuries
* Spinal deformities
* Degeneratvef spine diseases
* Tumours of Spine and Spinal Cord Tumours
* Omurilik ve Omurga Tümörleri
* Peripheral Nerve Injurie and Trap Neuropathies
* Cranial and Spinal infections
* Neuromodulation

**COURSE INFORMATION**

Theoretical : 14 hours

Practical : 15 hours

Duration : 12 days

Location : Okan University Hospital

**LEARNING METHODS**

Theroretical / Practical / Seminars/ / Case discussion / Problem based learning

Clinic visits / Patient assessment / Case investigations

Outpatient unit / Clinical observation

**ASSESSMENT**

* Clinical performance assessment
* Exam
* Verbal exam