

International School of Medicine / Medicine (English)

2023 - 2024 Academic Year

Neurological Sciences and Psychiatry

Syllabus

Course Description					
Name	Code	Semester	T+A Hour	Credit	ECTS
Neurological Sciences and Psychiatry	17. Committee	Spring Semester	108+16	0	8
Prerequisites Courses					
Recommended Elective Courses					
Language of Instruction	English				
Course Level	First Cycle (Bachelor's Degree)				
Course Type	Committee				
Course Coordinator					
Name of Lecturer(s)					
Assistant(s)	Power point presentation, differential diagnosis through case studies, Inspection videos from websites, source books, question / answer interactive participation, brainstorming, research methods.				
Aim	The aim of this committee is to provide an understanding the information about central and peripheral nervous system diseases, which are common and important causes of morbidity and mortality, diagnosis and treatment of these diseases during primary health care and emergency intervention, referral to upper level health institution when necessary, and counselling on prevention methods and risk factors.				
Course Content	This course contains; Neurological Examination 1, 2,Cranial nerves and attitudes,Disorders of consciousness and approach to comatous patients,Cerebral system and ataxia,Spinal Cord and Muscle Diseases,Headaches,Epilepsy, Pathophysiology and Semiology 1-2,Disorders of consciousness and coma ,Pathophysiology of Extrapyramidal System ,multiple Sclerosis ,Cerebrovascular diseases ,İnme ,Ekstrapiramidal Sistem in Patofizyolojisi,Ekstrapiramidal Sistem in Patofizyolojisi,İnfectious Diseases-Introduction to CNS infections (acute and chronic meningitis) 1-2,Pediatrics-Otism,Pediatrics-Attention deficit disorder ,Pediatrics-Enuresis/Encopresis ,Pediatrics- Normal Neurological Development in Children,Pediatrics -Evaluation of History, Symptoms and Findings in Neurological Diseases,Pediatrics --Chromosome Diseases,Microbiology-CNS infectious agents 1-2,Radiology-Interventional Neuroradiology,Radiology-Diagnostic Imaging in CNS Emergency,Radiology- Introduction to Central Nervous System Radiology,Radiology-SPECT and PET / CT in Nuclear Medicine-Neurology,Psychiatry-Psychiatric Symptoms and Signs 1-2,Psychiatry-Delirium and Neural Disorder 1-2,Psychiatry-Depression and Mood Disorders 1-2-3-4,Psychiatry-Schizophrenia and Other Psychotic Disorders 1-2-3-4,Psychiatry-Anxiety Disorders 1-2-3-4,Psychiatry-Alcohol-Substance Use Disorders 1-2,Psychiatry-Emergency Psychiatric Approach 1-2,Psychiatry-OCD and relationship disorders 1-2-3-4,Pathology -Introduction to CNS pathology , Pathology of Infectious Diseases of CNS,Pathology of Vascular Diseases of CNS,Neurodegenerative,toxic and metabolic diseases of CNS,Pathology of CNS Tumors and hereditary tumor syndromes,Pathology of CNS Tumors and hereditary tumor syndromes ,Pathology of Peripheral Nerve and Muscle disorders ,Infectious diseases -Introduction to CNS infections (encephalitis and Introduction to CNS infections (acute and chronic meningitis brain abscess),Medical Pharmacology -Principles of Neuropharmacology,Medical Pharmacology -Hypnotics & Sedatives,Medical Pharmacology -Pharmacotherapy of Degenerative Disorders ,Medical Pharmacology -Pharmacotherapy in Epilepsy,Medical Pharmacology -Pharmacotherapy of Depressive & Anxiety,Medical Pharmacology -Pharmacotherapy of Psychosis & Mania,Medical Pharmacology -Opioids & Abused Drugs ,Public health -Community Mental Health,Public health -Epidemiology of Neurologic and Psychiatric Problems,Public health -Environmental Health ,Public health -Environmental Epidemiology ,Scientific Research-Qualitative Studies,Qualitative Studies ,Qualitative Studies .				
Course Learning Outcomes			Teaching Methods	Assessment Methods	

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<p>Lists the steps of neurological examination. Defines the functions of any instrument used during examination. Performs mental state examination. Describes cranial nerve examination step by step. Describes step by step necessary neurological examination methods for the assessment of motor functions. Lists primary headache syndromes. Describes the definition of migraine-type headache, principles of immediate medical response and methods of prevention-monitoring. Inquires about the anamnesis of the patient with a headache. Assesses the examination of the patient with a headache. Describes the definitions of symptomatological terms used in the discipline of neurology. Establishes correlation between the existing clinical neurological condition and the neurological syndrome. Establishes correlation between the neurological symptomatology and the anatomical localization and pre-diagnosis. Recalls the secondary causes which might lead to headaches. Distinguishes a secondary headache from primary headache syndromes. Recognizes urgent pathologies in secondary headache causes and can carry out patient referral procedure. Is knowledgeable about the steps of neurological examination and the functions of any instrument used during examination. Has the ability to perform mental state examination. Has the ability to perform cranial nerve examination. Recalls the anatomy and functions of cranial nerve system. Recognizes the facial nerve paralysis. Lists clinical findings in case of optic nerve damage. Defines pathological findings on all cranial nerves. Lists neurological emergency diseases. Explains the basic principles of immediate approach to and treatment for acute ischemic strokes and intracerebral hemorrhage. Summarizes the definition, pathophysiology and classification of status epilepticus and the immediate treatment approaches. Lists the steps of immediate approach and immediate treatment for acute meningitis and meningoencephalitis. Lists the clinical findings on myopathies. Lists the etiology of myopathies. Assesses laboratory findings. Assesses the symptoms of respiratory failure which might develop in connection with muscle diseases. Learning Objective of Course / Practice Lists the symptoms of peripheral neuropathy. Categorizes polyneuropathies as acute and chronic processes. Has the ability to interpret the findings from acute polyneuropathy examination. Plans the immediate treatment for acute polyneuropathies. Recalls the definition of consciousness and the anatomical centers associated with consciousness. Describes symptomatological definitions of impaired consciousness. Diagnoses the patient with impaired consciousness. Lists the potential diseases leading to impaired consciousness. Distinguishes the patient with syncope from others. Plans the immediate treatment of a patient with syncope. Defines the concepts of epilepsy and epileptic seizure. Lists the differential diagnosis of epilepsy and epileptic seizure. Categorizes epilepsy and epileptic seizure. Explains the basics of epilepsy treatment and the characteristics of the anti-epileptic drugs used. Describes the principles of approach to initial seizure. Lists the criteria for terminating anti-epileptic treatment. Lists the names of sleep stages. Diagnoses the respiratory diseases that develop in sleep. Sets the framework of narcolepsy. Lists the diagnostic criteria for Restless Legs Syndrome. Describes the terms included in cognitive disorder symptomatology. Lists dementia etiologies. Lists the diagnostic criteria for dementia. Describes the things to consider when monitoring a patient with dementia. Describes the principles of immediate treatment for any potential conditions that develop in the course of a disease. Discusses necessary preventive actions against cognitive disorder. Recalls speech physiology. Distinguishes between the terms 'dysarthria' and 'aphasia'. Recalls the anatomy of medulla spinalis and the ascending and descending pathways in it. Correlates clinical findings with anatomical localization in neurological diseases. Assesses the clinical findings on diseases of the medulla spinalis of immediate nature. Describes how to respond immediately to diseases of the medulla spinalis of immediate nature. Lists the types of hemorrhagic stroke. Lists the symptoms of subarachnoid hemorrhage. Describes in which clinical cases subarachnoid hemorrhage may happen. Recognizes the intracranial pressure increase syndrome. Plans the immediate treatment for intracranial pressure increase syndrome. Learning Objective of Course / Practice Distinguishes the patient with stroke from others by clinical characteristics. Plans the immediate treatment for stroke. Lists the risk factors for stroke. Guides the patient through stroke prevention. Plans the referral of the patient with stroke to a Neurologist. Describes the pathogenesis of neuroimmunological diseases. Lists the names of neuroimmunological diseases. Describes the epidemiology of and clinical findings on multiple sclerosis. Recalls the anatomical characteristics and physiology of basal ganglia. Diagnoses hypokinetic movement disorders. Lists the cardinal symptoms of Parkinson's disease. Distinguishes hyperkinetic movement disorders from others. Lists the clinical findings on neuromuscular junction diseases. Recalls the physiology and anatomy of neuromuscular junctions. Lists the etiology of neuromuscular junction diseases. Anticipates emergencies associated with life-threatening neuromuscular junction diseases. Refers the patient with life-threatening neuromuscular junction diseases to a Neurologist. Defines the symptoms of superior motor neuron disease. Defines the symptoms of inferior motor neuron disease. Lists anterior horn diseases. Correlates anterior horn diseases with clinical findings. Defines the terms associated with the symptomatology of neuromuscular diseases. Lists and performs the steps of motor system examination. Defines the findings from pathological examination on posture and walk. Lists the causes of vertigo. Distinguishes between peripheral vertigo and central vertigo. Lists the principles of approach to vertigo complaint. Plans the simple treatment for vertigo. Decides which of the patients are to be referred to a Neurologist. Lists the pathological examination findings on diseases of the cerebellar system. Defines the steps of cerebellar system examination. Lists the names of potential systemic diseases resulting in neurological deficit. Lists the symptoms of major neurological deficits which are likely to be caused by systemic diseases. Handles emergencies which are likely to arise from hypoglycemia, metabolic disorder and vasculitis syndrome, and immediate treatments applicable to such emergencies. Defines the symptom of ataxia. Lists the causes of ataxia. Recalls the physiology of cerebrospinal fluid. Lists the conditions resulting in intracranial pressure increase. Is knowledgeable about the symptoms of intracranial pressure increase. Lists the steps of immediate treatment. Recalls the anatomical characteristics and physiology of basal ganglia. Diagnoses hypokinetic movement disorders. Lists the cardinal symptoms of Parkinson's disease. Distinguishes hyperkinetic movement disorders from others.</p>	<p align="center">10, 13, 16, 37, 4, 5, 9</p>	<p align="center">A</p>

Teaching Methods	10: Discussion Method, 13: Case Study Method, 16: Question - Answer Technique, 37: Computer-Internet Supported Instruction, 4: Inquiry-Based Learning, 5: Cooperative Learning, 9: Lecture Method
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Assessment Methods	A: Traditional Written Exam
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Lecture Schedule

Sequence	Topics	Preliminary Preparation
1	Neurological Examination 1, 2	
2	Cranial nerves and attitudes	
3	Disorders of consciousness and approach to comatous patients	
4	Cerebral system and ataxia	
5	Spinal Cord and Muscle Diseases	
6	Headaches	
7	Epilepsy, Pathophysiology and Semiology 1-2	
8	Disorders of consciousness and coma	
9	Pathophysiology of Extrapyramidal System	
10	multiple Sclerosis	
11	Cerebrovascular diseases	
12	İnme	

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13	Ekstrapiramidal Sistem Patofizyolojisi	
14	Ekstrapiramidal Sistem Patofizyolojisi	
15	Infectious Diseases-Introduction to CNS infections (acute and chronic meningitis) 1-2	
16	Pediatrics-Otism	
17	Pediatrics-Attention deficit disorder	
18	Pediatrics-Enuresis/Encopresis	
19	Pediatrics- Normal Neurological Development in Children	
20	Pediatrics -Evaluation of History, Symptoms and Findings in Neurological Diseases	
21	Pediatrics --Chromosome Diseases	
22	Microbiology-CNS infectious agents 1-2	
23	Radiology-Interventional Neuroradiology	
24	Radiology-Diagnostic Imaging in CNS Emergency	
25	Radiology- Introduction to Central Nervous System Radiology	
26	Radiology-SPECT and PET / CT in Nuclear Medicine-Neurology	
27	Psychiatry-Psychiatric Symptoms and Signs 1-2	
28	Psychiatry-Delirium and Neural Disorder 1-2	
29	Psychiatry-Depression and Mood Disorders 1-2-3-4	
30	Psychiatry-Schizophrenia and Other Psychotic Disorders 1-2-3-4	
31	Psychiatry-Anxiety Disorders 1-2-3-4	
32	Psychiatry-Alcohol-Substance Use Disorders 1-2	
33	Psychiatry-Emergency Psychiatric Approach 1-2	
34	Psychiatry-OCD and relationship disorders 1-2-3-4	
35	Pathology -Introduction to CNS pathology	none
36	Pathology of Infectious Diseases of CNS	none
37	Pathology of Vascular Diseases of CNS	none
38	Neurodegenerative,toxic and metabolic diseases of CNS	none
39	Pathology of CNS Tumors and hereditary tumor syndromes	none
40	Pathology of CNS Tumors and hereditary tumor syndromes	none
41	Pathology of Peripheral Nerve and Muscle disorders	none
42	Infectious diseases -Introduction to CNS infections (encephalitis and Introduction to CNS infections (acute and chronic meningitis brain abscess)	none
43	Medical Pharmacology -Principles of Neuropharmacology	none
44	Medical Pharmacology -Hypnotics & Sedatives	none
45	Medical Pharmacology -Pharmacotherapy of Degenerative Disorders	none
46	Medical Pharmacology -Pharmacotherapy in Epilepsy	none
47	Medical Pharmacology -Pharmacotherapy of Depressive & Anxiety	none
48	Medical Pharmacology -Pharmacotherapy of Psychosis & Mania	none
49	Medical Pharmacology -Opioids & Abused Drugs	none
50	Public health -Community Mental Health	none
51	Public health -Epidemiology of Neurologic and Psychiatric Problems	none
52	Public health -Environmental Health	none
53	Public health -Environmental Epidemiology	none
54	Scientific Research-Qualitative Studies	none
55	Qualitative Studies	
56	Qualitative Studies	
Evaluation Methods		Weight(%)
Midterm Exam		60
General Exam		40

Resources
Bradley's Review manual for Neurology in Clinical Practice. http://www.itfnoroloji.org/ekitap.htm http://www.neuroexam.com/neuroexam/ https://meded.ucsd.edu/clinicalmed/neuro2.htm Illustrated Neurology and Neurosurgery