FACULTY OF DENTAL MEDICINE, University of Rijeka

Course: Neurology
Course coordinator: Assoc. Prof. Vladimira Vuletić, MD, PhD
Department: Department of Neurology
Study program: Integrated Undergraduate and Graduate University Study of Dental Medicine in English
Study year: Third
Academic year: 2023/2024.

SYLLABUS

Course description (a brief description of the course, general instructions, where and in what form the lessons are organized, necessary equipment, instructions for attendance and preparation for classes, student obligations, etc.):

The course "Neurology" is a compulsory course in the 3rd year of the Integrated Undergraduate and Graduate Studiy of Dental Medicine and consists of 5 hours of lectures and 10 hours of practicals. The course is held in the premises of the Neurology Clinic of the Rijeka Clinical Hospital Center.

Objective of the course:
Acquisition of basic knowledge and clinical skills in the field of neurology. The aim is to acquaint students with new knowledge about the functioning of the brain, the current possibilities of the neurological profession and to enable easier understanding and access to neurological patients. Students will be introduced to the specifics of neurological propaedeutics and the basics of clinical neurological examination. Another goal of the course is to acquaint students with neurological diseases, diagnosis, differential diagnosis and their treatment.

Conducting classes:
Teaching is conducted in the form of lectures and practicals. During the practicals, the teacher demonstrates and supervises the active participation of the students in performing the practicals. Teachers discuss with students the specifics of performing individual practicals. During the class there will be a mandatory colloquium, and at the end of the class there will be a written test and an oral final exam. By completing all teaching activities, the student gains 1.5 ECTS.

Assigned reading:

1. Roger Simon, David Greenberg, Michael Aminoff et al. Lange Clinical Neurology, McGraw-Hill Education, 10th ed, 2017.
2. William W. Campbell et al. DeJong's The Neurologic Examination. LWW, 8th ed, 2019.

Optional/additional reading

COURSE TEACHING PLAN:

The list of lectures (with topics and descriptions):

L1 Introduction to neurology
Learning outcomes:
Get to know the purpose of the neurology course.
Get to know and acquire knowledge about the historical facts of the development of neurology.

L2 Consciousness and disorders of consciousness
Learning outcomes:
Explain the concept of consciousness. Know the causes of wakefulness disorders. To be able to judge the degree of disturbance of consciousness. Get to know the clinical indicators of the depth of consciousness disorders.

L3 Cerebrovascular diseases
Learning outcomes:
Know the definition of cerebrovascular disease (CVB). Division and subtypes of CVB. Learn the etiology of stroke. Understand the pathophysiology of cerebral ischemia. Brain hemorrhages. Get to know the diagnosis and methods of treatment of acute stroke. Know how to apply primary and secondary stroke prevention measures.

L4 Disorders and functions of sensory nerves
Learning outcomes:
Know the definition of sensory nerves, their function and disorders.

L5 Cranial neuropathies
Learning outcomes:
Know all 12 cranial nerves and their function. Know how to recognize and explain the clinical picture of a lesion of certain cranial nerves.

List of practicals with descriptions:

Exercises from the Neurology course are conducted in the Neurology Clinic.

P1 Anamnesis of a neurological patient
Learning outcomes:
Explain the specifics of the anamnesis in neurological patients. Know the necessary anamnestic data that should always be examined in a neurological patient.

P2 Examination of patients with impaired consciousness
Learning outcomes:
Explain the concept of consciousness. Know the causes of wakefulness disorders. To be able to judge the degree of disturbance of consciousness. Get to know the clinical indicators of the depth of consciousness disorders.

P3 Examination of the function of the cranial nerves
Learning outcomes:
Know how to examine the function of each individual cranial nerve.

P4 Examination of the motor functions of balance and coordination

Learning outcomes:
Know how to examine the motor functions of the upper and lower motor neuron and know how to interpret them correctly. Know the differences between upper and lower motor neuron lesions. Know how to recognize the symptoms of lower motor neuron damage and know how to examine the innervation area of a certain nerve or root. Know how to apply experiments to test coordination; balance while walking and standing; walking test. Know how to interpret limb coordination disorder and body balance disorder. Be able to recognize damage to the extrapyramidal system.

P5 Examination of muscle and skin reflexes
Learning outcomes:
Know how to examine muscle and skin reflexes.

P6 Examination of sensations
Learning outcomes:
Know how to examine sensory functions - surface and deep sensation. Know how to examine integrative sensory functions.

P7 Epilepsies
Learning outcomes:
Know how to classify epileptic seizures. Recognize individual types of epileptic seizures. Know the etiology of epileptic crises. Apply specific antiepileptic treatment.

P8 Extrapyramidal disorders
Learning outcomes:
Understand the pathogenesis and etiology of movement disorders. Know how to recognize the main characteristics of Parkinson's disease. Know how to use diagnostic methods and ways of treating Parkinson's disease. Recognize forms of atypical parkinsonism.

P9, P10 Local and regional anesthesia in chronic neurological patients
Learning outcomes:
Understand the pathogenesis and etiology of local and regional anesthesia in chronic neurological patients.

Students' obligations:

Students are required to regularly attend and actively participate in all forms of classes.

Exam (method of taking the exam, description of the written/oral/practical part of the exam, method of scoring, evaluation criteria):

Student grading is conducted according to the current University of Rijeka Studies and studying regulation.

Percentage of acquired knowledge, skills and competences (classes + final exam)	Numerical evaluation	ECTS grade
90 - 100%	5 (Excellent)	A
75 – 89,9%	4 (Very good)	B
60 - 74,9%	3 (Good)	C
50 - 59,9%	2 (Sufficient)	D
0 - 49,9%	1 (Insufficient)	F

The possibility of teaching in a foreign language:

Other notes (related to the course) important for students:

Teaching contents and all information related to the course as well as exam dates are available on the website of the Department of Neurology.

COURSE SCHEDULE (for academic year 2022/2023)

Date	Lectures (time and place)	Seminars (time and place)	Practicals (time and place)	Teacher
22.1.2024.	L1 (13:15 - 14:00) Clinic of Neurology			Assoc. Prof. Vladimira Vuletić, MD, PhD
22.1.2024.	L2 (14:15 - 15:00) Clinic of Neurology			Assoc. Prof. Vladimira Vuletić, MD, PhD
22.1.2024.	L3 (15:15 - 16:00) Clinic of Neurology			Assoc. Prof. Vladimira Vuletić, MD, PhD
22.1.2024.	L4 (16:15 - 17:00) Clinic of Neurology			Assoc. Prof. Vladimira Vuletić, MD, PhD
22.1.2024.	L5 (17:00 - 17:45) Clinic of Neurology			Assoc. Prof. Vladimira Vuletić, MD, PhD
23.1.2024.			P1, P2, P3 (09:00 - 11:15) Clinic of Neurology	Assist. Prof. David Bonifačić, MD, PhD
23.1.2024.			P4,P5,P6 (11:30 – 13:45) Clinic of Neurology	Assist. Prof. Vladimira Vuletić, MD, PhD
23.1.2024.			P7,P8 (14:00 - 15:30) Clinic of Neurology	Assoc. Prof. Olivio Perković, MD, PhD
23.1.2024.			P9, P10 (16:00 - 17:30) Clinic of Neurology	Assist. Prof. Siniša Dunatov, MD, PhD
24.01.2024.				EXAM PERIOD

List of lectures, seminars and exercises:

	LECTURES (Topics)	Teaching hours	Location/Lecture room
P1	Introduction to neurology	1	Clinic of neurology
P2	Consciousness and disorders of consciousness	1	Clinic of neurology
P3	Cerebrovascular diseases	1	Clinic of neurology
P4	Disorders of the function of the brain nerves	1	Clinic of neurology
P5	Cranial neuropathies	1	Clinic of neurology
	Total number of lecture hours	**5**	

	PRACTICALS (Topics)	Teaching hours	Location/Lecture room
P1	Anamnesis of a neurological patient	1	Clinic of neurology
P2	Examination of patients with impaired consciousness	1	Clinic of neurology

P3	Examination of the function of the cranial nerves	1	Clinic of neurology
P4	Examination of the motor functions of balance and coordination	1	Clinic of neurology
P5	Examination of muscle and skin reflexes	1	Clinic of neurology
P6	Examination of sensations	1	Clinic of neurology
P7	Epilepsies	1	Clinic of neurology
P8	Extrapyramidal disorders	1	Clinic of neurology
P9,P10	Local and regional anesthesia in chronic neurological patients	2	Clinic of neurology
	Total number of practical hours	**10**	

	FINAL EXAM DATES
1.	23.01.2023.
2.	In arrangement with the students
3.	