

KYRENIA UNIVERSITY FACULTY OF MEDICINE
2023-2024 EDUCATIONAL YEAR
PHASE II
NEUROLOGICAL SCIENCES COMMITTEE
(18 SEPTEMBER -27 OCTOBER 2023)

| COURSES | THEORETICAL | LAB | TOTAL |
|----------------------------|-------------|-----------|------------|
| Anatomy | 46 | 9X2 | 64 |
| Biophysics | 10 | - | 10 |
| Histology and Embryology | 11 | 3X2 | 17 |
| Physiology | 39 | 5X2 | 49 |
| Medical History and Ethics | 4 | - | 4 |
| TOTAL | 110 | 34 | 144 |

| | |
|-------------|-------------------------|
| Dean | Prof.Dr. Rüveyde BUNDAK |
| Vice Dean | Prof. Dr. Candan ÖZOĞUL |
| Coordinator | Dr. Mete Özkoç |

MEMBERS OF COMMITTEE

| ANATOMY | | PHYSIOLOGY | | HISTOLOGY & EMBRYOLOGY | MEDICAL HISTORY AND ETHICS |
|--------------------------------|----------------------------|---------------------------|-----------------------|------------------------|----------------------------|
| Yrd. Doç. Dr. Shahnaz Sabetkam | Yrd. Doç. Dr. Yavuz Arıcan | Prof. Dr. Deniz Erbaş | Prof. Dr. Ethem Gelir | Dr. Candan Özoğul | Dr . Cemal Güvercin |
| Prof. Dr. Nurettin Oğuz | Prof. Dr. Nail Bulakbaşı | Prof. Dr. Cem Şeref Bediz | Prof. Dr..Barış Çakır | Dr. Bekir Uğur Ergür | BIOPHYSICS |
| Dr. İskender Yılmaz | | Dr..Gülden Madi | | Dr. Güven Erbil | Dr. Ferit Pehlivan |

NEUROLOGICAL SCIENCES COMMITTEE

Aim

To be able to tell the anatomical, histological and physiological information about the embryonic development, developmental anomalies and malformations of the nervous system, the structures and functions of the central nervous system, to be able to explain the clinical connections, to be aware of the deontology, basic concepts and professional rules

LEARNING OUTCOMES

Knowledge Based

To be able to:

- explain legislation for the practice of the medical profession, basic knowledge of medicine, approaches to medicine, physician-patient relationship (evolutionary development and current situation, expected physician-patient relationship)
- list how the nervous system develops from germ layers during each week of development
- say the anatomical location of central nervous system structures
- describe the histological properties of central nervous system cells
- explain how the motor and sensory functions of the nervous system occur at the level of the medulla spinalis, brainstem and cortex
- count cranial nerves
- describe the histological and anatomical structure of the brain, tell the role of motor control and motor learning and related mechanisms
- describe the histological structure of spinal cord of medulla, describe descending pathways, define spinal reflexes
- describe eye anatomy and visual pathways, ear anatomy and hearing pathways, describe the physiological mechanisms of vision and hearing
- explain the autonomic nervous system
- explain the advanced functions of the nervous system, such as conditioned reflexes, learning and memory, with physiological mechanisms
- discuss the electrical properties of EEG and brain

Application Based (practical skills)

- able to distinguish and show macroscopic and microscopic structures of the central nervous system
- can practise the anatomical structure of ear and eye
- must be able to distinguish the gray and white layers of the brain at microscope
- distinguish gray and white layers of medulla spinalis, front and rear horn on microscope
- must show physiological, histological features of eye and ear
- must be able to prepare decerebre and spinal frog preparations. M. Spinalis reflexes should be shown on experiment animal
- can show various reflexes in man
- be able to distinguish reaction time and reflex time

Skills Based (intellectual and transferable skills)

- be aware of the importance of cadaver use in anatomy education
- consider the role of microscopy in histology education
- be aware of the importance of ethical rules in the use of experimental animals and practices on human.

| 1 st week | 18.09.2023 MONDAY | 19.09.2023 TUESDAY | 20.09.2023 WEDNESDAY | 21.09.2023 THURSDAY | 22.09.2023 FRIDAY |
|----------------------|----------------------------------------------------------|------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------|---------------------------------------|
| 08:30-09:15 | FREE STUDY TIME | FREE STUDY TIME | FREE STUDY TIME | Cerebellum Dr. Sabetkam | Nervous system histology Dr. Erbil |
| 09:30-10:15 | General morphology of the nervous system Dr. Sabetkam | FREE STUDY TIME | FREE STUDY TIME | Cerebellum Dr. Sabetkam | Nervous system histology Dr. Erbil |
| 10:30-11:15 | General morphology of the nervous system Dr. Sabetkam | General organization of central nervous system Dr. Madi | Introduction to the Concepts of Ethics-Deontology-Bioethics-Morals (Online) Dr. Güvercin Medical Methodology (Online) Dr. Güvercin | Diencephalon and 3rd ventricle Dr. Sabetkam | Nervous system histology Dr. Erbil |
| 11:30-12:15 | FREE STUDY TIME | Somatoviseral sensory system Dr. Madi | | Diencephalon and 3rd ventricle Dr. Sabetkam | Nervous system histology Dr. Erbil |
| 13:30-14:15 | Nervous system Embryology Dr. Ergür | Internal structure of the spinal cord Dr. Sabetkam | Mesencephalon Dr. Sabetkam | Somatoviseral sensory system Dr. Madi | Pain sensation Dr. Erbaş |
| 14:30-15:15 | Nervous system Embryology Dr. Ergür | Medulla oblongata, pons, and 4.ventricle Dr. Sabetkam | Mesencephalon Dr. Sabetkam | Somatoviseral sensory system Dr. Madi | Pain sensation Dr. Erbaş |
| 15:30-16:15 | Nervous system Embryology Dr. Ergür | Medulla oblongata, pons, and 4.ventricle Dr. Sabetkam | FREE STUDY TIME | The functions of thalamus and somatosensory cortex Dr. Madi | FREE STUDY TIME |
| 16:30-17:15 | FREE STUDY TIME | Medulla oblongata, pons, and 4.ventricle Dr. Sabetkam | FREE STUDY TIME | FREE STUDY TIME | FREE STUDY TIME |

| 2nd week | 25.09.2023 MONDAY | 26.09.2023 TUESDAY | 27.09.2023 WEDNESDAY | 28.09.2023 THURSDAY | 29.09.2023 FRIDAY |
|----------------------------|-------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------|------------------------------------------------------------------|--------------------------------|-------------------------------------------------------------|
| 08:30-09:15 | Telencefalon, basal nuclei and lateral ventricles (Online) Dr. Arican | FREE STUDY TIME | FREE STUDY TIME | Anatomy Lab (1) | CNS ascending and descending tracts Dr. Arican |
| 09:30-10:15 | Telencefalon, basal nuclei and lateral ventricles (Online) Dr. Arican | CNS ascending and descending tracts Dr. Sabetkam | Descending control of spinal motor systems Dr. Madi | Anatomy Lab (1) | CNS ascending and descending tracts Dr. Arican |
| 10:30-11:15 | Telencefalon, basal nuclei and lateral ventricles (Online) Dr. Arican | CNS ascending and descending tracts Dr. Sabetkam | Descending control of spinal motor systems Dr. Madi | Anatomy Lab(1) | Cranial nerves Dr. Arican |
| 11:30-12:15 | Telencefalon, basal nuclei and lateral ventricles (Online) Dr. Arican | CNS ascending and descending tracts Dr. Sabetkam | Descending control of spinal motor systems Dr. Madi | Anatomy Lab (1) | Cranial nerves Dr. Arican |
| 13:30-14:15 | The control of motor function by medulla spinalis (Online) Dr. Çakır | The control of motor function by brain stem (Online) Dr. Çakır | Physiology Lab (1) | Histology Lab (1) | Cranial nerves Dr. Arican |
| 14:30-15:15 | The control of motor function by medulla spinalis (Online) Dr. Çakır | The control of motor function by brain stem (Online) Dr. Çakır | Physiology Lab (1) | Histology Lab (1) | Cranial nerves Dr. Arican |
| 15:30-16:15 | The control of motor function by medulla spinalis (Online) Dr. Çakır | The control of motor function by brain stem (Online) Dr. Çakır | Physiology Lab (1) | Histology Lab (1) | FREE STUDY TIME |
| 16:30-17:15 | FREE STUDY TIME | Motor cortex (Online) Dr. Çakır | Physiology Lab (1) | Histology Lab (1) | FREE STUDY TIME |

| 3 rd week | 02.10.2023 MONDAY | 03.10.2023 TUESDAY | 04.10.2023 WEDNESDAY | 05.10.2023 THURSDAY | 06.10.2023 FRIDAY |
|----------------------|-----------------------------------------------------------------------------------|-----------------------|-----------------------------------------------------------------------|------------------------------------------------------------------|--------------------------------------------------------------------------------------------------|
| 08:30-09:15 | Meninges and vessels of the brain Dr. Arican | Anatomy Lab (2) | FREE STUDY TIME | FREE STUDYTIME | Brain Electrical Activity and EEG (Online) Dr. Pehlivan |
| 09:30-10:15 | Meninges and vessels of the brain Dr. Arican | Anatomy Lab (2) | The role of cerebellum in the control of motor functions Dr. Erbaş | Spinal meninges, vessels and cerebrospinal fluid Dr. Sabetkam | Evoked Potentials and Averaging, Basic Principles of Biological Control (Online) Dr. Pehlivan |
| 10:30-11:15 | Limbic system Dr. Dr. Arıcan | Anatomy Lab (2) | The role of cerebellum in the control of motor functions Dr. Erbaş | Autonomic nervous system (sympathetic) Dr. Sabetkam | Limbic system and monoaminergic system (Online) Dr. Gelir |
| 11:30-12:15 | Limbic system Dr. Arican | Anatomy Lab (2) | Neural plasticity Dr. Madi | Autonomic nervous system (sympathetic) Dr. Sabetkam | Limbic system and monoaminergic system (Online) Dr. Gelir |
| 13:30-14:15 | The role of basal ganglia in the control of motor functions (Online) Dr. Çakır | Physiology Lab (2) | Physiology Lab (3) | Autonomic nervous system (parasympathetic) Dr. Sabetkam | Medicine and Medical Scientific Knowledge (Online) Dr. Güvercin |
| 14:30-15:15 | The role of basal ganglia in the control of motor functions (Online) Dr. Çakır | Physiology Lab (2) | Physiology Lab (3) | Eye anatomy and visual pathways Dr. Sabetkam | Physician-Patient Relationship (Online) Dr. Güvercin |
| 15:30-16:15 | The role of basal ganglia in the control of motor functions (Online) Dr. Çakır | Physiology Lab (2) | Physiology Lab (3) | Eye anatomy and visual pathways Dr. Sabetkam | FREE STUDY TIME |
| 16:30-17:15 | Cerebral cortex and high functions of the nervous system (Online) Dr. Çakır | Physiology Lab (2) | Physiology Lab (3) | FREE STUDY TIME | FREE STUDY TIME |

| 4 th week | 09.10.2023 MONDAY | 10.10.2023 TUESDAY | 11.10.2023 WEDNESDAY | 12.10.2023 THURSDAY | 13.10.2023 FRIDAY |
|----------------------|------------------------------------------------|----------------------------------------------------------------------------------------------|----------------------------------------------------|------------------------|-------------------------------------------------------------------------------------------------|
| 08:30-09:15 | Ear anatomy and hearing pathways Dr. Arican | Eye anatomy and visual pathways Dr. Sabetkam | FREE STUDY TIME | Anatomy Lab(4) | FREE STUDY TIME |
| 09:30-10:15 | Ear anatomy and hearing pathways Dr. Arican | Eye anatomy and visual pathways Dr. Sabetkam | FREE STUDY TIME | Anatomy Lab(4) | Physiology of sleep Dr. Gelir |
| 10:30-11:15 | Ear anatomy and hearing pathways Dr. Arican | Clinical Anatomy Dr. Sabetkam | Eye emb. and histology Dr. Özogul | Anatomy Lab(4) | EEG Epilepsy Sleep Dr. Gelir |
| 11:30-12:15 | Ear anatomy and hearing pathways Dr. Arican | Clinical Anatomy Dr. Sabetkam | Eye emb. and histology Dr. Özogul | Anatomy Lab(4) | EEG Epilepsy Sleep Dr. Gelir |
| 13:30-14:15 | Anatomy Lab(3) Dr. Arican | Sensory Biophysics General Concepts, Laws of Psychophysics (Online) Dr. Pehlivan | Central Control of Autonomic Function Dr. Bediz | Histology Lab (2) | Visual Acuity, Functions of the Iris (Online) Dr. Pehlivan (Online) Dr. Pehlivan |
| 14:30-15:15 | Anatomy Lab(3) Dr. Arican | Light and Vision, Visual Defects (Online) Dr. Pehlivan | Central Control of Autonomic Function Dr. Bediz | Histology Lab (2) | Photoreceptors, Electroretinogram (Online) Dr. Pehlivan |
| 15:30-16:15 | Anatomy Lab(3) Dr. Arican | FREE STUDY TIME | FREE STUDY TIME | Histology Lab (2) | Depth Vision, Color Vision, Vision Aids (Online) Dr. Pehlivan |
| 16:30-17:15 | Anatomy Lab(3) Dr. Arican | FREE STUDY TIME | FREE STUDY TIME | Histology Lab (2) | FREE STUDY TIME |

| 5 th week | 16.10.2023 MONDAY | 17.10.2023 TUESDAY | 18.10.2023 WEDNESDAY | 19.10.2023 THURSDAY | 20.10.2023 FRIDAY |
|----------------------|---------------------------------------------------|---------------------------------------------------------------------------------------------------------------------|------------------------------------------------------|------------------------|----------------------------------|
| 08:30-09:15 | FREE STUDY TIME | Vision Dr. Gelir | Ear emb and histology Dr.Özoğul | Anatomy Lab(5) | FREE STUDY TIME |
| 09:30-10:15 | Clinical and radiographic Anatomy Dr. Sabetkam | Vision Dr. Gelir | Ear emb and histology Dr.Özoğul | Anatomy Lab(5) | FREE STUDY TIME |
| 10:30-11:15 | Clinical and radiographic Anatomy Dr. Sabetkam | Vision Dr. Gelir | Hearing and vestibular system Dr. Gelir | Anatomy Lab(5) | Taste and olfaction Dr. Gelir |
| 11:30-12:15 | radiographic Anatomy Dr. Sabetkam | FREE STUDY TIME | Hearing and vestibular system Dr. Gelir | Anatomy Lab(5) | Taste and olfaction Dr. Gelir |
| 13:30-14:15 | Histology Lab (3) | Sound Waves, Sensory Properties of Sound (Online) Dr. Pehlivan | Conditioned reflex, learning and memory Dr. Gelir | Anatomy Lab(6) | Physiology Lab (4) |
| 14:30-15:15 | Histology Lab (3) | Processing of Sound Waves in the Ear (Online) Dr. Pehlivan | Conditioned reflex, learning and memory Dr. Gelir | Anatomy Lab(6) | Physiology Lab (4) |
| 15:30-16:15 | Histology Lab (3) | Sound Analysis, Hearing aids. Basic Concepts of Information Transfer in Biological Systems (Online) Dr. Pehlivan | FREE STUDY TIME | Anatomy Lab(6) | Physiology Lab (4) |
| 16:30-17:15 | Histology Lab (3) | | FREE STUDY TIME | Anatomy Lab(6) | Physiology Lab (4) |

| 6 th week | 23.10.2023 MONAY | 24.10.2023 TUESDAY | 25.10.2023 WEDNESDAY | 26.10.2023 THURSDAY | 27.10.2023 FRIDAY |
|----------------------|-----------------------|-----------------------|--------------------------|--------------------------|-------------------------------|
| 08:30-09:15 | Anatomy Lab(7) | Anatomy Lab(8) | PHASE II APPLIED EXAM | PHASE II APPLIED EXAM | PHASE II THEORICAL EXAM |
| 09:30-10:15 | Anatomy Lab(7) | Anatomy Lab(8) | PHASE II APPLIED EXAM | PHASE II APPLIED EXAM | PHASE II THEORICAL EXAM |
| 10:30-11:15 | Anatomy Lab(7) | Anatomy Lab(8) | PHASE II APPLIED EXAM | PHASE II APPLIED EXAM | PHASE II THEORICAL EXAM |
| 11:30-12:15 | Anatomy Lab(7) | Anatomy Lab(8) | PHASE II APPLIED EXAM | PHASE II APPLIED EXAM | PHASE II THEORICAL EXAM |
| 13:30-14:15 | Physiology Lab (5) | Anatomy Lab(9) | PHASE II APPLIED EXAM | PHASE II APPLIED EXAM | PHASE II THEORICAL EXAM |
| 14.30-15.15 | Physiology Lab (5) | Anatomy Lab(9) | PHASE II APPLIED EXAM | PHASE II APPLIED EXAM | PHASE II THEORICAL EXAM |
| 15:30-16:15 | Physiology Lab (5) | Anatomy Lab(9) | PHASE II APPLIED EXAM | PHASE II APPLIED EXAM | PHASE II THEORICAL EXAM |
| 16:30-17:15 | Physiology Lab (5) | Anatomy Lab(9) | PHASE II APPLIED EXAM | PHASE II APPLIED EXAM | PHASE II THEORICAL EXAM |

