

COMMITTEE COURSE CONTENT

University: Muğla Sıtkı Koçman University

Faculty: Faculty of Medicine/ **Program:** English Program

Academic Year: 2024-2025

Phase: 2 Comitee: 3 (NERVOUS SYSTEM COMMITTEE)

Course Code: 2300/ ECTS: 12 / Theoric+Practice Lesson +Laboratory Lesson

Course Type : Compulsory/ Course Length : 8 weeks/ Type of Teaching : Formal/ Language of Instruction : English

Anatomy (MED 2004)

Theoretical:

1. Arterial Blood Supply to Brain (2 hour)
2. Auditory System: Pathways (1 hour)
3. Autonomic Nervous System (2 hour)
4. Bulbus oculi / Eyeball (1 hour)
5. Central Nervous System (1 hour)
6. Cerebellum (2 hour)
7. Cerebral cortex and white matter (2 hour)
8. Cerebral Hemispheres (2 hour)
9. Cranial meninges and Venous drainage of Brain (1 hour)
10. Cranial Nerves 1 (4 hour)
11. Hypothalamus (1 hour)
12. Medulla oblongata and rhomboid fossa (2 hour)
13. Mesencephalon (1 hour)
14. Nuclei Basales (1 hour)
15. Pons (1 hour)
16. Spinal Cord (2 hour)
17. Supporting Apparatus of Orbita (1 hour)
18. Thalamus (1 hour)
19. The ear (2 hour)
20. The olfactory Pathway and Rhinencephalon and Limbic System (2 hour)
21. The Orbit and its Contents and the Eyeball (1 hour)
22. Tract of Spinal Cord 1 (4 hour)
23. Ventricular System of Brain and CSF (1hs)
24. Vestibular System (1 hour)
25. Visual pathway (1 hour)
26. Subthalamus, epithalamus and metathalamus (1 hour)

Practical:

1. Arterial Blood Supply to Brain (2 hour)
2. Autonomic Nervous System (2 hour)
3. Cerebellum (2 hour)
4. Cerebral cortex and white matter (2 hour)
5. Cranial meninges and Venous drainage of Brain (2 hour)
6. Cranial Nerves (2 hour)
7. Diencephalon (2 hour)
8. Medulla, oblongata, rhomboid fossa (2 hour)
9. Nuclei Basales, Cerebral Hemispheres (2 hour)
10. Orbita ve bulbus oculi (2 hour)
11. Pons, mesencephalon (2 hour)
12. Spinal Cord (2 hour)
13. The ear (2 hour)
14. The olfactory Pathway and Rhinencephalon and Limbic System (2 hour)

15. Tract of Spinal Cord (2 hour)

Biophysics (MED 2002)

Theoretical:

1. Biophysics of Hearing (2 hour)
2. Electroencephalography and Stimulated Potentials (2 hour)
3. Information in Biological Systems (2 hour)
4. Lenses and Defects (2 hour)
5. Receptors and Psychophysics (2 hour)
6. Refraction and Reflection of Light (1 hour)
7. Synapses and Numerical Applications of EEG (1 hour)
8. Synapses Models and Synaptic Potentials (2 hour)
9. Visual Activity and F.yc Defects (1 hour)

Histology- Embryology (MED 2003)

Theoretical:

1. Development of Nervous System (2 hour)
2. Histology and Development of Ear (2 hour)
3. Histology and Development of Eye (2 hour)
4. Integument (3 hour)
5. Integument; microscopic introduction (1 hour)
6. Nervous System (4 hour)
7. Nervous System; microscopic introduction (2 hour)

Practical:

1. Integument (1 hour)
2. Nervous System (1 hour)

M. Biochemistry (MED 2001)

Theoretical:

1. Biochemistry of Nervous System & Synaptic impulses (2 hour)
2. Neurotransmitters (2 hour)

M. Microbiology (MED 2007)

Theoretical:

1. Aerobic Gram Positive Rods (2 hour)
2. Anaerobic bacteria (2 hour)
3. Antibacterial Drugs (2 hour)
4. Campylobacter, Helicobacter, Spirochetes (2 hour)
5. Gram negative rods other than Enterobacteriaceae (Aeromonas, Vibrio, Pseudomonas, Brucella, Legionella, etc.) (4 hour)
6. Gram-Positive Cocci (4 hour)
7. Mycobacteria (2 hour)
8. Neisseria, Haemophilus (1 hour)
9. Resistance to Antibacterial Drugs (1 hour)

Practical:

1. Acquaintance to Gram Positive Cocci and Bacilli (2 hour)
2. Acquaintance to Gram Negative Rods (2 hour)
3. Acquaintance to Mycobacteria (2 hour)

Physiology (MED 2006)

Theoretical:

1. Brain Blood Flow, Blood- Brain Barriers and Cerebrospinal Fluid Circulation (2 hour)
2. Cortical and Brain Stem Control of Motor Function (2 hour)
3. Electrical Activity of the Brain and Physiology of Sleep (2 hour)
4. Function of Cerebellum (2 hour)
5. Functions of Basal Ganglia (1 hour)
6. Intellectual Functions of the Cerebral Cortex (2 hour)

7. Introduction to the Nervous System, Action Potentials and Synaptic Transmission (2 hour) 8. Introduction to the Sensory Physiology. Sensory Receptors and Pathways; Pain and Temperature (2 hour) 9. Limbic System and Hypothalamus (2 hour) 10. Motor Functions of the Spinal Cord and Reflexes (2 hour) 11. Neurotransmitters and Receptors (2 hour) 12. Physiological Laboratory Methods IV (EMG, EEG, Reflexes) (2 hour) 13. Physiology of Taste, Smell, Hearing and Balance (2 hour) 14. Physiology of Vision (2 hour) 15. The Autonomic Nervous System (2 hour) 16. Functions of Basal Ganglia (1 hour)
Other: 1.
Non- Comitee Courses: 1. Foreign Language (22 hour)