

| Course Title | Code | Semester | Theoretical (hours/week) | Practice (hours/week) | Laboratory (hours/week) | ECTS |
|--|--|--------------------|--------------------------|-----------------------|-------------------------|----------|
| FUNCTIONAL NEUROANATOMY | BBM 513 | 2. Semester | 2 | 0 | 0 | 5 |
| Prerequisites | None | | | | | |
| Course Language | Turkish | | | | | |
| Course Type | Elective | | | | | |
| Do you think learning and teaching techniques | Lecture, Discussion, Question & Answer, Homework Preparation and / or Presentation of Seminar, Problem Solving, Brain Storming, Other. | | | | | |
| Responsible for the course (s) | | | | | | |
| Course content | -Preventing human neuroanatomical formations with their structure and functional properties | | | | | |
| Course Learning Outcomes | <p>Students who complete this course;</p> <p>1-To classify the anatomical structures of the central and peripheral nervous system, to define the basic functional properties.</p> <p>2-Explain the nuclei of the cranial nerves, peripheral branching and innervation.</p> <p>3-Can explain the organization and innervation properties and functions of peripheral and autonomic nervous systems.</p> | | | | | |
| References | <ol style="list-style-type: none"> 1- Anatomi ve Fizyoloji (Anatomy and Physiology, Fifth Edition), Çeviri Editörü Doç Dr. İlkan Tatar, Nobel Akademik Yayıncılık Eğitim Danışmanlık, 2017 2- Nöroanatomî, Prof. Dr. Reha Erzerumlu, Prof. Dr. Gülgün Şengül ve Prof. Dr. Emel Ulupınar. Güneş Tıp Kitabevleri, 2019. 3- Ganong'un Tıbbi Fizyolojisi (Ganong Medical Physiology) 25.inci Baskı, Çeviri Editörü Prof. Dr. Ümmühan İşoğlu-Alkaç, Nobel Tıp Kitabevleri, 2019 4- Klinik Anlatımlı Tıbbi Fizyoloji, Halis Köylü, Nobel Tıp Kitabevleri, 2016 | | | | | |

WEEKLY COURSE TOPICS

| Weeks | DISCUSSION TOPICS TO BE PROCESSED |
|-------|---|
| 1. | General Organization of Nervous System, Classifications, Descriptions |
| 2. | Structures Protecting Central Nervous System; Membranes and Cerebrospinal Fluid |
| 3. | Telencephalon & Diencephalon |
| 4. | Synaptic Transmission, Neurotransmitter and Neuromodulators |
| 5. | Truncus Encephali & Cerebellum |
| 6. | Nervous System; Motor and Integrative Neurophysiology |
| 7. | Spinal cord & Central Tracts |
| 8. | Midterm exam |
| 9. | Contributions of the Cerebellum and Basal Ganglia to Overall Motor Control |
| 10. | Cranial Nerves |
| 11. | Cerebral Cortex, Intellectual Functions of the Brain, Learning and Memory |
| 12. | Spinal Nerves |
| 13. | Autonomic and Enteric Nervous Systems and Their Functions |
| 14. | Autonomic Nervous System |
| 15. | Final Exam |

ECTS / WORK LOAD TABLE

| Activities | Number | Duration | Total Work Load |
|--|------------|----------|-----------------|
| Course | 14 | 2 | 28 |
| Laboratory | | | |
| Practice | | | |
| Field Study | | | |
| Outclass course work hours (Self working / Teamwork / Preliminary work) | 15 | 3 | 45 |
| Presentations (Video preparation / Poster preparation / Oral presentation / Focus group discussion / Applying questionnaire/ Observation and report writing) | | | |
| Seminars | 1 | 12 | 12 |
| Project | | | |
| Case study | | | |
| Role playing, dramatization | | | |
| Preparing and criticizing article | | | |
| Semester midterm exams | 1 | 20 | 20 |
| Semester final exams | 1 | 20 | 20 |
| Total Work Load (hour) / 25(s) | 125/25 = 5 | | |
| ECTS | 5 | | |

EVALUATION SYSTEM

| Midterm Studies | Number | Contribution |
|---|---------------|---------------------|
| Midterm exam | 1 | 100% |
| Quiz | | |
| Laboratory | | |
| Practice | | |
| Field Study | | |
| Specific practical training (If exists) | | |
| Homework assignment | | |
| Presentation and seminar | 1 | |
| Projects | | |
| Other evaluation methods | | |
| Total of Midterm Studies | | 100% |
| Final Studies | | |
| Final | 1 | 100% |
| Homework assignment | | |
| Practice | | |
| Laboratory | | |
| Total of Final Studies | | 100% |
| Contribution of midterm studies to course grade | | %50 |
| Contribution of final studies to course grade | | %50 |
| Total Grade | | 100 |

RELATIONSHIPS BETWEEN COURSE LEARNING OUTCOMES AND PROGRAM QUALIFICATIONS

| Program Qualifications | | Learning Outcomes | | |
|------------------------|---|-------------------|-----|-----|
| | | LO1 | LO2 | LO3 |
| 1. | Based on undergraduate level qualifications, it has up-to-date knowledge in the field of Biological and Biomedical Sciences and develops and deepens them. | 4 | 3 | 3 |
| 2. | Have knowledge about information technologies, technical equipment and the devices and instruments that are specific to the field in the field of Biomedical Sciences. | 3 | 3 | 4 |
| 3. | To integrate the information in the field of Biological and Biomedical Sciences with information from different disciplines and to create new information, interpret and analyze by using different research methods and propose solutions. | 5 | 4 | 3 |
| 4. | He writes the report of his research. | 3 | 2 | 3 |
| 5. | Can plan and apply an experimental research | 3 | 4 | 3 |
| 6. | In the field of Biological and Biomedical Sciences, can offers solutions, solves the problems, evaluates the results obtained and applies when necessary. | 3 | 3 | 3 |
| 7. | Makes scientific clinical and / or descriptive research / presentation / publication on priority topics related to Biological and Biomedical Sciences and public health. | 3 | 3 | 2 |
| 8. | Evaluates the knowledge related to Biological and Biomedical Sciences with a critical approach. | 5 | 4 | 4 |
| 9. | Applies the principles of professional development and lifelong learning in the field of Biological and Biomedical Sciences. | 4 | 4 | 3 |
| 10. | Students will be able to discuss and share their knowledge in the field of Biological and Biomedical Sciences in their written, oral and visual form in a systematic manner with current and other groups. | 2 | 3 | 5 |
| 11. | Examines the social relations in the professional environment and the norms that direct these relations from a critical point of view and makes necessary to develop them. | 5 | 4 | 3 |
| 12. | Observes and teaches the social, scientific and ethical values in the stages of data collection, recording, interpretation and announcement in the field of Biological and Biomedical Sciences. | 3 | 3 | 3 |
| 13. | Evaluates the current developments in the field of Biological and Biomedical Sciences in line with national values and realities of the country, including children and families, which are the basic unit of society. | 5 | 4 | 5 |
| 14. | Knows the importance of ethical principles and rules for the individual and society, behaves ethically. | 4 | 4 | 3 |
| 15. | Develops strategy, policy and implementation plans in the field of Biological and Biomedical Sciences and evaluates the obtained results within the framework of quality processes. | 4 | 2 | 3 |

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Contribution to the level of proficiency: 1: Low **2:** Low/Moderate **3:** Moderate **4:** High **5:** Excellent