| Course Name | Code | Semester | Theory (hrs/week) | Application (hrs/week) | Laboratory (hrs/week) | ECTS |
|---|---|---|---|---|---|---|
| **Anatomy of the Central Nervous System** | ANA618 | 1st Semester | 2 | 0 | 2 | 3 |
| Prerequisites | No | | | | | |
| Course language | Turkish | | | | | |
| Course Type | Imperative | | | | | |
| Learning and teaching techniques of the course | Theoretical Lectures, Discussion and Laboratory Studies | | | | | |
| Course instructor(s) | Prof. Dr. Salih Murat Akkın, Prof. Dr. Özdemir Sevinç, Assist. Asst. Prof. Ayşe İmge Uslu | | | | | |
| Course objectives | Central nervous system; To know the morphological features, to understand the complicated functions and functions of the central nervous system, to explain the anatomical basis of clinically occurring problems. | | | | | |
| Learning outcomes of the course | 1. Know the morphological features of the central nervous system.<br>2. Explain the functions of the central nervous system.<br>3. Describe the cross-sectional anatomy of the central nervous system in three basic planes. | | | | | |
| Resources | 1- Kaplan Arıncı, Alaittin Elhan. Anatomy, 2 Volumes, Güneş Bookstore, Ankara, 2020.<br>2- Dogan Taner. Functional Neuroanatomy. METU Publishing, Ankara, 2018.<br>3- Richard S. Snell. Snell Clinical Neuroanatomy. Mehmet Yildirim (Trans. Ed.). Nobel Medical Bookstores, Istanbul, 2011.<br>4- Figen Gövsa Gökmen. Systematic Anatomy. İzmir Güven Bookstore, Izmir, 2017.<br>5- Reha Erzurumlu, Gülgün Şengül, Emel Ulupınar. Neuroanatomy. Güneş Medical Bookstores, Ankara, 2019.<br>6- Douglas J. Gould. Neuroanatomy. Yasin Arifoğlu (Trans. Ed.). Istanbul Medical Bookstores, Istanbul, 2018.<br>7- Susan Standring. Grays's Anatomy. The Anatomical Basis of Clinical Practice. 41th ed. Philadelphia, PA: Elsevier; 2015.<br>8- Johannes W. Rohen, Chihiro Yokochi, Elke Lütjen-Drecoll. Human Anatomy Photo Dissection Atlas. Salih Murat Akkın (Trans. Ed.). Deomed, Istanbul, 2009.<br>9- Urban & Fischer F. Paulsen, J. Waschke. Sobotta Atlas of Human Anatomy. Süleyman Tuna Karahan (Trans. Ed.). Medipres Publishing, Malatya, 2019.<br>10- Michael Schünke, Erik Schulte, Udo Schumacher, Markus Voll, Karl Wesker. Prometheus Atlas of Anatomy, 3. skin (head, neck and neuroanatomy). Mehmet Yıldırım, Tanya Marur (Trans. Ed.), Palme Publishing House, Istanbul, 2021. | | | | | |

**Weekly Course Topics:**

| WEEKS | TOPICS TO BE DISCUSSED |
|---|---|
| 1. Week | Development of the Central Nervous System and General Information |
| 2. Week | Telencephalon-Gri Cevher |
| 3. Week | Telencephalon-White Matter |
| 4. Week | Ventricular System, Cerebral Membrane and Vessels |

| | |
|---|---|
| 5. Week | Diencephalon I |
| 6. Week | Diencephalon II |
| 7. Week | Mesencephalon |
| 8. Week | **MIDTERM EXAM** |
| 9. Week | Pons and Medulla Oblongata |
| 10. Week | Cerebellum |
| 11. Week | Internal and External structure of the medulla spinalis |
| 12. Week | Transmitter Pathways of the Central Nervous System |
| 13. Week | Limbic System |
| 14. Week | Ways of Seeing and Hearing |
| 15. Week | **FİNAL SINAVI** |

**Student Workload Table**

| **Events** | Number | Time | Total Workload |
|---|---|---|---|
| Lesson | 14 | 2 | 28 |
| Laboratory | 14 | 2 | 28 |
| Application | | | |
| Fieldwork | | | |
| Out-of-Class Study Time (Freelancing/Group Work/Pre-Study) | 14 | 1 | 14 |
| Presentation (Shooting videos/Preparing posters/Making Oral Presentations/Focus Group Interviews/Conducting Surveys/Observation and Report Writing) | | | |
| Seminar Preparation | | | |
| Project | | | |
| Case Study | | | |
| Role Playing, Dramatizing | | | |
| Writing an article-Criticizing | | | |
| Mid-term exams | 1 | 2 | 2 |
| Final exams | 1 | 3 | 3 |
| **Total workload (hours) / 25(s)** | 75/25 | | |
| **Ders ACT** | **3** | | |

**Evaluation System**

| **Semester Studies** | **Number** | **Contribution** |
|---|---|---|
| Midterm Exam | 1 | %40 |
| Quiz | | |
| Laboratory | | |
| Application | | |
| Fieldwork | | |
| Course-Specific Internship (If Available) | | |
| Assignments | | |
| Presentation and Seminar | | |
| Projects | | |
| Other | | |

| | | |
|---|---|---|
| **Total of Semester Studies** | | %40 |
| **Final Work** | | |
| Finale | 1 | %40 |
| Homework | | |
| Application | | |
| Laboratory | 1 | %20 |
| **Total of Final Studies** | | %60 |
| The Contribution of Semester Studies to the Success Grade | | %40 |
| The Contribution of the Final Exam to the Success Grade | | %60 |
| **Sum of Success Grade** | | 100 |

**THE RELATIONSHIP BETWEEN COURSE LEARNING OUTCOMES AND PROGRAM COMPETENCIES**

| No | Program Qualifications | Learning Outcomes | | |
|---|---|---|---|---|
| | | **ÖÇ1** | **ÖÇ2** | **ÖÇ3** |
| 1 | Knows the basic structure, functions and working mechanisms of organs and systems and can explain each system in detail. | 5 | 4 | 5 |
| 2 | Describe the basic microanatomical structures and developmental processes of tissues, organs and systems in the human body. | | | |
| 3 | Knows the topographic layouts, surface projections and courses of organs and formations. | 5 | | 4 |
| 4 | It alone can dissect different parts of cadavers, identify organs and other structures. | 5 | | 5 |
| 5 | Radiography can describe normal anatomical structures in MRI and CT images and provide anatomical explanation for pathological conditions. | | | |
| 6 | Can establish, solve and develop hypotheses about anatomy by using anatomy knowledge at a high level. | | | |
| 7 | Can design, implement, conclude and manage an original research process related to anatomy by using appropriate technologies. | | | |
| 8 | Present and publish the results of academic studies in the field of anatomy in reputable domestic and international academic environments. | | | |
| 9 | Observes and teaches social, scientific and ethical values in the stages of collecting, recording, interpreting and announcing data related to the field of anatomy. | | | |
| **Qualification level: 1: Low, 2: Low/Medium, 3: Medium, 4: High, 5: Excellent** | | | | |