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| **C:\Users\Namariel\Downloads\TıpF (1)\TıpF\TıpF-2.png****MARMARA UNIVERSITY SCHOOL of MEDICINE** |
| **indir.jpg**NERVOUS SYSTEM AND RELATED DISORDERS YEAR 3 COURSE 3January 04, 2021 – March 12, 2021 |
| **Coordinator of the Course 3.3**Assist. Prof., Sinem Yıldız İnanıcı | **Coordinator of the Module 3.3**Prof., Adnan DAĞÇINAR |
| **Year 3 Coordinators** Prof., Arzu İLKİ & Assoc. Prof., Pınar Mega TİBER |
| **Module Coordinator**Prof., Rezzan GÜLHAN, Assist.Prof., Sinem YILDIZ İNANICI | **Introduction to Clinical Practice (ICP) Coordinators**Prof., Pemra CÖBEK ÜNALAN & Prof., Serap ÇİFÇİLİ |
|  **Coordinator of Multidisciplinary Students’ Lab**.Assoc. Prof., Betül KARADEMİR | **Coordinator of Clinical Skills Lab.**Assoc. Prof., Çiğdem APAYDIN KAYA |
|  **Coordinator of Assessment Unite**Assist. Prof., Cevdet NACAR | **Coordinator of Student Exchange Programs**Assist. Prof., Can ERZİK |
| **Vice-Chief Coordinators** |
| **Program**Prof., Oya ORUN | **Assessment** Assoc. Prof., Hasan R. YANANLI | **Students’ Affairs**Assist. Prof., Can ERZİK |
| **Chief Coordinator (Pre-Clinical Education)** Prof., Serap ŞİRVANCI | **Coordinator of Medical Education Program Evaluation and Development Commission**Prof., Harika ALPAY |
| **Vice Dean (Education)**Prof., Ümit ŞEHİRLİ | **Dean**Prof., Hakan GÜNDÜZ |

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| MU MEDICAL SCHOOL PRE-CLINICAL EDUCATION PROGRAM |
| LEARNING OUTCOMES / COMPETENCIES1. Clinical Care: Qualified patient care and community oriented health care
2. Basic clinical skills
3. The organization and management of the patient and the patient care
4. The organization and the management of health care delivery services / system
5. Health promotion and disease prevention
6. Medical Knowledge and Evidence-Based Medicine
7. Appropriate information retrieval and management skills
8. The integration of knowledge, critical thinking and evidence-based decision making
9. Scientific methods and basic research skills
10. Professional Attitudes and Values
11. Communication skills and effective communication with patients / patient relatives
12. Interpersonal relationships and team working
13. Ethical and professional values, responsibilities
14. Individual, social and cultural values and responsibilities
15. Reflective practice and continuing development
16. Healthcare delivery systems, management and community oriented health care
17. Education and counseling
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| PHASE-1 LEARNING OBJECTIVES1. Understanding the normal structures and functions of human body
2. Correlating the basic concepts and principles to each other that define health and disease; applying basic concepts and principles to health and disease conditions
3. Developing clinical problem solving, clinical reasoning and evaluation skills by integrating biomedical, clinical, social and humanities knowledge
4. Gaining basic clinical skills by applications in simulated settings.
5. Awareness of the professional values in health and disease processes (professional, individual, societal) and acquisition necessary related skills
6. Evaluating critically and synthesizing all the medical evidence and perform respecting scientific, professional and ethical values
7. Acquisition skills in reflective thinking and practicing, being open to continuous individual / professional development.
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| PHASES – 1 THEMA/ORGAN SYSTEM-BASED COURSE PROGRAMSYear 1, Course 1: Introduction to Cell and Cellular ReplicationYear 1, Course 2: Cellular Metabolism and TransportYear 1, Course 3: Development and Organization of Human BodyYear 1, Course 4: Introduction to Nervous System and Human BehaviorYear 2, Course 1: Cell and Tissue Injury I Year 2, Course 2: Cell and Tissue Injury IIYear 2, Course 3: Hematopoietic System and Related DisordersYear 2, Course 4: Musculoskeletal, Integumentary Systems and Related DisordersYear 2, Course 5: Respiratory System and Related DisordersYear 3, Course 1: Cardiovascular System and Related DisordersYear 3, Course 2: Gastrointestinal System, Metabolism and Related DisordersYear 3, Course 3: Nervous System and Related DisordersYear 3, Course : Growth, Development, Mental Health and Related DisordersYear 3, Course 5: Urinary and Reproductive System and Related Disorders |

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| NERVOUS SYSTEM AND RELATED DISORDERS |
| **AIM and LEARNING OBJECTIVES of COURSE** **Aim:** At the end of this course, third year students will gain knowledge about the development, structure and physiology of the nervous system and pathogenesis of the disorders related to this system. They will also gain knowledge about the signs and symptoms of nervous system disorders, related risk factors, prevention, diagnosis and principles of treatment.**Learning Objectives:** At the end of this course, third year students will, * review the structure and function of the nervous system.
* define the pathologic processes in neurological disorders
* gain knowledge about microorganism that affect the nervous system and associated infections
* gain knowledge about the risk factors related to neurological disorders
* gain knowledge about the signs and symptoms of these disorders
* gain knowledge about the prevention of nervous system disorders, approach to diagnosis, principles of treatment and rehabilitation
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| **ASSESSMENT SYSTEM**Module examination: Written exam at the end of module (10 % of final score)Practical examination: Practical exams at the end of courseCourse examination: Written exam at the end of course |  **PROGRAM EVALUATION** Evaluation at the end of the course, is done both orally and by using structured evaluation forms |
| DEPARTMENTS PARTICIPATING IN COURSE-3.3 & MODULE-3.3 |
| * Anatomy
* Anesthesiology
* Biophysics
* Emergency Medicine
* Family Medicine
* Forensic Medicine
* Histology and Embryology
* Infectious Diseases
* Medical Biology
* Microbiology
* Neurology
 | * Neurosurgery
* Pathology
* Pharmacology
* Physical Therapy and Rehabilitation
* Physiology
* Psychiatry
* Physical Therapy and Rehabilitation Medical Education
* Radiology
* Public Health
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| LECTURERS / TUTORS |
| Kadriye AĞAN YILDIRIM, Professor of NeurologyRengin Asiye AHISKALI, Professor of Medical PathologyDilek AKAKIN, Assoc. Professor of Histology and EmbriologyAhmet AKICI, Professor of Medical PharmacologyMehmet AKMAN, Professor of Family MedicineYaşar İnci ALİCAN, Professor of PhysiologyÇiğdem APAYDIN KAYA, Assoc. Professor of Family MedicinePınar ATA, Professor of Medical BiologyNadiye Pınar AY, Professor of Public Health Fatih BAYRAKLI, Prof. of NeurosurgeryBeliz BİLGİLİ, Assist. Professor of AnesthesiologySüheyla BOZKURT, Professor of Pathology Onur BUĞDAYCI, Assist. Professor of RadiologyBuket ERTÜRK ŞENGEL, Assist. Professor of Infectious DiseasesGünseli Ayşe GARİP İNHAN, Assoc. Professor of Biophysics Zafer GÖREN, Professor of Medical Pharmacology Rezzan GÜLHAN, Professor of Medical Pharmacology İpek GÜRSOY MİDİ, Professor of Neurology Ferhat HARMAN, Assoc. Prof. of NeurosurgeryDilek İNCE GÜNAL, Professor of NeurologyBarış İŞAK, Professor of Neurology Pınar KAHRAMAN KOYTAK, Assoc. Professor of NeurologyAtila KARAALP, Professor of Medical Pharmacology N. Evrim KARADAĞ SAYGI, Professor of Physical Therapy andUfuk HASDEMİR, Professor of Microbiology | Ayşegül KARAHASAN, Professor of Microbiology Özgür KASIMAY ÇAKIR, Assoc. Professor of Physiology Nimet Emel LÜLECİ, Professor of Public Health Pınar MEGA TİBER, Assoc. Professor of BiophysicsFiliz ONAT, Professor of Medical Pharmacology Necmettin Ömer ÖZDOĞMUŞ, Assoc. Professor of Anatomy Özlem SARIKAYA, Professor of Medical EducationÜmit Süleyman ŞEHİRLİ, Professor of AnatomyGülin SÜNTER, , Assist. Professor of NeurologySerap ŞİRVANCI, Professor of Histology and Embryology Tülin TANRIDAĞ, Professor of Neurology Ahmet TOPUZOĞLU, Professor of Public Health Emine Neşe TUNCER ELMACI, Professor of Neurology Dilşad TÜRKDOĞAN, Professor of Pediatrics Arzu UZUNER, Professor of Family Medicine Nurver ÜLGER, Professor of Microbiology Gülru Pemra ÜNALAN, Professor of Family Medicine Olcay ÜNVER, Assist. Professor of Pediatrics Ural VERİMLİ, Assist. Professor of AnatomyAlper YILDIRIM, Assoc. Professor of PhysiologySinem YILDIZ İNANICI, Assist. Professor of Medical Education |
| READING / STUDYING MATERIALS• Biochemistry; Stryer, 4th ed., Freeman • Biochemistry; Zubay, 3rd ed., WCB • Clinical Anatomy for Medical Students; Richard S. Snell • Clinically Oriented Anatomy; Keith L. Moore, Arthur F. Dalley • Color Textbook of Histology; Gartner & Hiatt, 3rd ed., Elsevier Health Sciences, 2004 • D.H. Hubel; Eye, Brain and Vision • Gray Anatomi; Çeviri Editörü: Prof. Dr. Mehmet YILDIRIM, Güneş Kitabevi, 2006 • Gray’s Anatomy for Students; Richard L. Drake, Henry Gray, Adam W.M. Mitchell • Guyton & Hall ; Textbook of Physiology, 11th edition, Elsevier-Saudersd, 2006. • Histology A Text and Atlas; Michael H Ross, Michael R. Ross, Wojciech Pawlina, 5th ed. Lippincott Williams & Wilkins, 2006 • Histoloji ve Hücre Biyolojisi; Abraham L.Kierzenbaum; Çeviri editorü: Ramazan Demir, Palme Yayıncılık - Ankara, 2006 • Human Histology: Alan Stevens, James Lowe, 3rd ed., Elsevier Health Sciences, 2004 • M.F. Baer, Connors & Paradiso; Neuroscience 2nd ed.  |

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| SUMMARY OF THE COURSE  |
| **Discipline** | **Lecture & Group Discussion** | **Multidisciplinary Lab. & Clinical Skills Lab. Practice** | Total |
| Anatomy | 31 | 9 | 40 |
| Anesthesiology | 1 |  | 1 |
| Biophysics | 1 | 1 | 2 |
| Pediatrics | 2 |  | 2 |
| Family Medicine | 3 |  | 3 |
| Histology and Embryology | 2 | 1 | 3 |
| Infectious Diseases | 1 |  | 1 |
| Genetics | 1 |  | 1 |
| Microbiology | 4 |  | 4 |
| Neurology | 16 |  | 16 |
| Neurosurgery | 3 |  | 3 |
| Pathology | 11 | 1 | 12 |
| Pharmacology | 10 |  | 10 |
| Physical Medicine and Rehabilitation | 2 |  | 2 |
| Physiology | 12 |  | 12 |
| Public Health | 3 |  | 3 |
| Radiology | 2 |  | 2 |
| Subtotal | 105 | 12 | 117 |
| PBL Module | 8 |  | 8 |
| TOTAL | 113 | 12 | 125 |
| ICP-3: Basic Medical Practices, Clinical Skills Lab., (Students’ Research Activity) |  | 24 | 24 |
| **TOTAL** | **113** | **36** | **149** |

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| **EIGHT WEEK PROGRAM** |
|  | **THEORETICAL AND PRACTICAL SESSIONS** | **LECTURER(S)/TUTOR(S)** |
| **Week – 1 (04 January - 08 January 2021)** |
| **Monday** | **04 January** |  |
| 09:00-09:50 |  |  |
| 10:00-10:50 |  |  |
| 11:00-11:50 | Introduction to the course | Dr. Sinem Yıldız İnanıcı |
|  |  |  |
| 13:00-13:50 | Elective course |  |
| 14:00-14:50 | Elective course |  |
| 15:00-15:50 |  |  |
| 16:00-16:50 |  |  |
| 17:00-17:50 |  |  |
| 18:00-18-50 |  |  |
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| **Tuesday** | **05 January** |  |
| 09:00-09:50 |  |  |
| 10:00-10:50 |  |  |
| 11:00-11:50 |  |  |
|  |  |  |
| 13:00-13:50 | General structure of the spinal cord | Dr. Necmettin Ömer Özdoğmuş |
| 14:00-14:50 | General structure of the spinal cord | Dr. Necmettin Ömer Özdoğmuş |
| 15:00-15:50 |  |  |
| 16:00-16:50 |  |  |
| 17:00-17:50 |  |  |
| 18:00-18-50 |  |  |
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| **Wednesday** | **06 January** |  |
| 09:00-09:50 | Genetic basis of neurological diseases | Dr. Pınar Ata |
| 10:00-10:50 | Cerebral cortex: functional areas & general topography | Dr. Ümit Süleyman Şehirli |
| 11:00-11:50 | Cerebral cortex: functional areas & general topography | Dr. Ümit Süleyman Şehirli |
|  |  |  |
| 13:00-13:50 | Anatomy LAB: Meninges & dural sinuses of the brain | Anatomy Lab. |
| 14:00-14:50 | Descending pathways | Dr. Necmettin Ömer Özdoğmuş |
| 15:00-15:50 | Ascending pathways | Dr. Necmettin Ömer Özdoğmuş |
| 16:00-16:50 | Ascending pathways | Dr. Necmettin Ömer Özdoğmuş |
| 17:00-17:50 |  |  |
| 18:00-18-50 |  |  |
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| **Thursday** | **07 January** |  |
| 09:00-09:50 | ICP-BMP-Advanced Communication Skills | Dr. Özlem Sarıkaya |
| 10:00-10:50 | ICP-BMP-Advanced Communication Skills | Dr. Özlem Sarıkaya |
| 11:00-11:50 | ICP-BMP-Advanced Communication Skills | Dr. Özlem Sarıkaya |
|  | ICP-BMP-Advanced Communication Skills | Dr. Özlem Sarıkaya |
| 13:00-13:50 |  |  |
| 14:00-14:50 | ICP-BMP-Advanced Communication Skills | Dr. Özlem Sarıkaya |
| 15:00-15:50 | ICP-BMP-Advanced Communication Skills | Dr. Özlem Sarıkaya |
| 16:00-16:50 | ICP-BMP-Advanced Communication Skills | Dr. Özlem Sarıkaya |
| 17:00-17:50 | ICP-BMP-Advanced Communication Skills | Dr. Özlem Sarıkaya |
| 18:00-18-50 |  |  |
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| **Friday** | **08 January** |  |
| 09:00-09:50 | Brain stem | Dr. Necmettin Ömer Özdoğmuş |
| 10:00-10:50 | Brain stem | Dr. Necmettin Ömer Özdoğmuş |
| 11:00-11:50 | Brain stem | Dr. Necmettin Ömer Özdoğmuş |
|  |  |  |
| 13:00-13:50 | Anatomy LAB: Spinal cord | Anatomy Lab. |
| 14:00-14:50 | Meninges & dural sinuses of the brain | Dr. Ümit Süleyman Şehirli |
| 15:00-15:50 | Meninges & dural sinuses of the brain | Dr. Ümit Süleyman Şehirli |
| 16:00-16:50 |  |  |
| 17:00-17:50 |  |  |
| 18:00-18-50 |  |  |
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| **Week – 2 (11 January - 15 January 2021)** |
| **Monday** | **11 January** |  |
| 09:00-09:50 |  |  |
| 10:00-10:50 |  |  |
| 11:00-11:50 |  |  |
|  |  |  |
| 13:00-13:50 | Elective course |  |
| 14:00-14:50 | Elective course |  |
| 15:00-15:50 |  |  |
| 16:00-16:50 |  |  |
| 17:00-17:50 |  |  |
| 18:00-18-50 |  |  |
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| **Tuesday** | **12 January** |  |
| 09:00-09:50 | Thalamus | Dr. Ümit Süleyman Şehirli |
| 10:00-10:50 | White matter of cerebrum | Dr. Ümit Süleyman Şehirli |
| 11:00-11:50 |  |  |
|  |  |  |
| 13:00-13:50 | Cerebellum | Dr. Ural Verimli |
| 14:00-14:50 | Anatomy LAB: Cerebral cortex: functional areas & general topography | Anatomy Lab. |
| 15:00-15:50 |  |  |
| 16:00-16:50 |  |  |
| 17:00-17:50 |  |  |
| 18:00-18-50 |  |  |
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| **Wednesday** | **13 January** |  |
| 09:00-09:50 |  |  |
| 10:00-10:50 | Organization of the cortex; motor cortex and corticospinal system | Dr. Yaşar İnci Alican |
| 11:00-11:50 | Organization of the cortex; motor cortex and corticospinal system | Dr. Yaşar İnci Alican |
|  |  |  |
| 13:00-13:50 | Cranial nerves | Dr. Ümit Süleyman Şehirli |
| 14:00-14:50 | Cranial nerves | Dr. Ümit Süleyman Şehirli |
| 15:00-15:50 | Limbic system and pineal gland | Dr. Ural Verimli |
| 16:00-16:50 | Hypothalamus and pituitary gland | Dr. Ural Verimli |
| 17:00-17:50 | Anatomy LAB: Cerebellum | Anatomy Lab. |
| 18:00-18-50 |  |  |
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| **Thursday** | **14 January** |  |
| 09:00-09:50 | Cerebellum | Dr. Yaşar İnci Alican |
| 10:00-10:50 | Cerebellum | Dr. Yaşar İnci Alican |
| 11:00-11:50 |  |  |
|  |  |  |
| 13:00-13:50 | Voluntary CSL Practice/Self-study | ICP Lab. |
| 14:00-14:50 | Voluntary CSL Practice/Self-study | ICP Lab. |
| 15:00-15:50 | Voluntary CSL Practice/Self-study | ICP Lab. |
| 16:00-16:50 | Voluntary CSL Practice/Self-study | ICP Lab. |
| 17:00-17:50 |  |  |
| 18:00-18-50 |  |  |
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| **Friday** | **15 January** |  |
| 09:00-09:50 | Basal ganglia subthalamus | Dr. Ümit Süleyman Şehirli |
| 10:00-10:50 | Basal ganglia subthalamus | Dr. Ümit Süleyman Şehirli |
| 11:00-11:50 | The basal nuclei | Dr. Yaşar İnci Alican |
|  |  |  |
| 13:00-13:50 |  |  |
| 14:00-14:50 | Cerebrum, cerebellum and spinal cord | Dr. Serap Şirvancı |
| 15:00-15:50 |  |  |
| 16:00-16:50 |  |  |
| 17:00-17:50 |  |  |
| 18:00-18-50 |  |  |
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| **Week – 3 (18 January - 22 January 2021)** |
| **Monday** | **18 January** |  |
|  |  |  |
| 09:00-09:50 |  |  |
| 10:00-10:50 |  |  |
| 11:00-11:50 |  |  |
|  |  |  |
| 13:00-13:50 | Elective course |  |
| 14:00-14:50 | Elective course |  |
| 15:00-15:50 |  |  |
| 16:00-16:50 |  |  |
| 17:00-17:50 |  |  |
| 18:00-18-50 |  |  |
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| **Tuesday** | **19 January** |  |
| 09:00-09:50 |  |  |
| 10:00-10:50 | Vessels of the central nervous system | Dr. Ümit Süleyman Şehirli |
| 11:00-11:50 | Vessels of the central nervous system | Dr. Ümit Süleyman Şehirli |
|  |  |  |
| 13:00-13:50 | Cranial nerves | Dr. Ümit Süleyman Şehirli |
| 14:00-14:50 | Cranial nerves | Dr. Ümit Süleyman Şehirli |
| 15:00-15:50 | Basic histopathologic neuronal reaction to injury | Dr. Süheyla Bozkurt |
| 16:00-16:50 |  |  |
| 17:00-17:50 | Anatomy LAB: Cranial nerves | Anatomy Lab. |
| 18:00-18-50 |  |  |
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| **Wednesday** | **20 January** |  |
| 09:00-09:50 |  |  |
| 10:00-10:50 |  |  |
| 11:00-11:50 | Epidemiology of neurological diseases | Dr. Nimet Emel Lüleci |
|  |  |  |
| 13:00-13:50 | Epidemiology and control of dementias | Dr. Nadiye Pınar Ay |
| 14:00-14:50 | PBL-1 |  |
| 15:00-15:50 | PBL-1 |  |
| 16:00-16:50 | Anatomy LAB: Hypothalamus, pituitary, limbic system and pineal | Anatomy Lab. |
| 17:00-17:50 |  |  |
| 18:00-18-50 |  |  |
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| **Thursday** | **21 January** |  |
| 09:00-09:50 | ICP-CSL-The essentials of the neurologic examination | Dr. Gülin Sünter |
| 10:00-10:50 | ICP-CSL-The essentials of the neurologic examination | Dr. Gülin Sünter |
| 11:00-11:50 | ICP-CSL- Audio visualization of the neurologic examination: Bates Video | Dr. Çiğdem Apaydın Kaya |
|  |  |  |
| 13:00-13:50 | ICP-Student Research Activity | ICP Lab. |
| 14:00-14:50 | ICP-Student Research Activity | ICP Lab. |
| 15:00-15:50 | ICP-Student Research Activity | ICP Lab. |
| 16:00-16:50 | ICP-Student Research Activity | ICP Lab. |
| 17:00-17:50 | ICP-Student Research Activity | ICP Lab. |
| 18:00-18-50 |  |  |
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| **Friday** | **22 January** |  |
| 09:00-09:50 |  |  |
| 10:00-10:50 |  |  |
| 11:00-11:50 |  |  |
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| 13:00-13:50 |  |  |
| 14:00-14:50 | PBL-2 |  |
| 15:00-15:50 | PBL-2 |  |
| 16:00-16:50 | Signs and symptoms in neurology | Dr. İpek Gürsoy Midi |
| 17:00-17:50 | Signs and symptoms in neurology | Dr. İpek Gürsoy Midi |
| 18:00-18-50 |  |  |
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| **Week – 4 (25 January - 29 January 2021)** |
| **Monday** | **25 January** |  |
| 09:00-09:50 |  |  |
| 10:00-10:50 |  |  |
| 11:00-11:50 |  |  |
|  |  |  |
| 13:00-13:50 | Elective course |  |
| 14:00-14:50 | Elective course |  |
| 15:00-15:50 |  |  |
| 16:00-16:50 |  |  |
| 17:00-17:50 |  |  |
| 18:00-18-50 |  |  |
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| **Tuesday** | **26 January** |  |
| 09:00-09:50 | Epilepsy | Dr. Kadriye Ağan Yıldırım |
| 10:00-10:50 | Epilepsy | Dr. Kadriye Ağan Yıldırım |
| 11:00-11:50 | Sleep and sleep disorders | Dr. Kadriye Ağan Yıldırım |
|  |  |  |
| 13:00-13:50 |  |  |
| 14:00-14:50 |  |  |
| 15:00-15:50 | Extrapyramidal system disorders | Dr. Dilek İnce Günal |
| 16:00-16:50 | Demyelinating disorders | Dr. Dilek İnce Günal |
| 17:00-17:50 |  |  |
| 18:00-18-50 |  |  |
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| **Wednesday** | **27 January** |  |
| 09:00-09:50 |  |  |
| 10:00-10:50 | Headache in primary care | Dr. Arzu Uzuner |
| 11:00-11:50 | Headache in primary care | Dr. Gülru Pemra Ünalan |
|  |  |  |
| 13:00-13:50 |  |  |
| 14:00-14:50 | PBL-3 |  |
| 15:00-15:50 | PBL-3 |  |
| 16:00-16:50 | Anatomy LAB: Basal ganglia, thalamus, subthalamus  | Anatomy Lab. |
| 17:00-17:50 |  |  |
| 18:00-18-50 |  |  |
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| **Thursday** | **28 January** |  |
| 09:00-09:50 |  |  |
| 10:00-10:50 |  |  |
| 11:00-11:50 | Brain ventricles and subarachnoid spaces | Dr. Ural Verimli |
|  |  |  |
| 13:00-13:50 | Neurodegenerative diseases & dementia | Dr. Süheyla Bozkurt |
| 14:00-14:50 | Pathology of demyelinating diseases | Dr. Süheyla Bozkurt |
| 15:00-15:50 | Poliomyelitis | Dr. Ayşegül Karahasan |
| 16:00-16:50 | Cognitive and emotional functions | Dr. Alper Yıldırım |
| 17:00-17:50 | Cognitive and emotional functions | Dr. Alper Yıldırım |
| 18:00-18-50 |  |  |
|  |  |  |
| **Friday** | **29 January** |  |
| 09:00-09:50 |  |  |
| 10:00-10:50 | Vestibular system and auditory pathway | Dr. Ural Verimli |
| 11:00-11:50 | Vestibular system and auditory pathway | Dr. Ural Verimli |
|  |  |  |
| 13:00-13:50 |  |  |
| 14:00-14:50 | PBL-4 |  |
| 15:00-15:50 | PBL-4 |  |
| 16:00-16:50 |  |  |
| 17:00-17:50 |  |  |
| 18:00-18-50 |  |  |
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| **Week – 5 (15 February - 19 February 2021)** |
| **Monday** | **15 February** |  |
|  |  |  |
| 09:00-09:50 |  |  |
| 10:00-10:50 |  |  |
| 11:00-11:50 |  |  |
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| 13:00-13:50 |  |  |
| 14:00-14:50 |  |  |
| 15:00-15:50 |  |  |
| 16:00-16:50 |  |  |
| 17:00-17:50 |  |  |
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| **Tuesday** | **16 February** |  |
| 09:00-09:50 |  |  |
| 10:00-10:50 | Local and general anesthetics | Dr. Ahmet Akıcı |
| 11:00-11:50 | Local and general anesthetics | Dr. Ahmet Akıcı |
|  |  |  |
| 13:00-13:50 | Anatomy LAB: Brain ventricles and subarachnoid spaces  | Anatomy Lab. |
| 14:00-14:50 | Nervous system malformations | Dr. Rengin Asiye Ahıskalı |
| 15:00-15:50 |  |  |
| 16:00-16:50 |  |  |
| 17:00-17:50 |  |  |
|  |  |  |
| **Wednesday** | **17 February** |  |
| 09:00-09:50 |  |  |
| 10:00-10:50 | Brain stem review | Dr. Alper Yıldırım |
| 11:00-11:50 | Epidemiology and prevention of occupational neurological disorders | Dr. Ahmet Topuzoğlu |
|  |  |  |
| 13:00-13:50 | Cerebrovascular disease | Dr. İpek Gürsoy Midi |
| 14:00-14:50 | Cerebrovascular disease | Dr. İpek Gürsoy Midi |
| 15:00-15:50 | Tetanus | Dr. Nurver Ülger |
| 16:00-16:50 | Anatomy LAB: Vessels of the central nervous system  | Anatomy Lab. |
| 17:00-17:50 |  |  |
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| **Thursday** | **18 February** |  |
| 09:00-09:50 | Biophysics LAB: Principles of EEG | Dr. Pınar Mega Tiber |
| 10:00-10:50 |  |  |
| 11:00-11:50 | Pharmacotherapy of cognitive disorders | Dr. Zafer Gören |
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| 13:00-13:50 | Pathology of central nervous system infections | Dr. Rengin Asiye Ahıskalı |
| 14:00-14:50 | Pathology of central nervous system infections | Dr. Rengin Asiye Ahıskalı |
| 15:00-15:50 | Histology LAB: Cerebrum, cerebellum and spinal cord | Dr. Serap Şirvancı |
| 16:00-16:50 |  |  |
| 17:00-17:50 |  |  |
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| **Friday** | **19 February** |  |
| 09:00-09:50 | Myopathies and myasthenia gravis | Dr. Pınar Kahraman Koytak |
| 10:00-10:50 | Spinal reflexes | Dr. Özgür Kasımay Çakır |
| 11:00-11:50 | Spinal reflexes | Dr. Özgür Kasımay Çakır |
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| 13:00-13:50 |  |  |
| 14:00-14:50 |  |  |
| 15:00-15:50 | Cerebrospinal circulation | Dr. Alper Yıldırım |
| 16:00-16:50 | Visual pathway | Dr. Ümit Süleyman Şehirli |
| 17:00-17:50 |  |  |
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| **Week – 6 (22 February - 26 February 2021)** |
| **Monday** | **22 February** |  |
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| 09:00-09:50 |  |  |
| 10:00-10:50 |  |  |
| 11:00-11:50 |  |  |
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| 13:00-13:50 | Elective course |  |
| 14:00-14:50 | Elective course |  |
| 15:00-15:50 |  |  |
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| **Tuesday** | **23 February** |  |
| 09:00-09:50 | Head trauma and increased intracranial pressure | Dr. Fatih Bayraklı |
| 10:00-10:50 | Pathology of cerebrovascular disease | Dr. Süheyla Bozkurt |
| 11:00-11:50 | Pathology of cerebrovascular disease | Dr. Süheyla Bozkurt |
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| 13:00-13:50 | Slow virus infections and prion diseases | Dr. Ufuk Hasdemir |
| 14:00-14:50 | Rabies | Dr. Ufuk Hasdemir |
| 15:00-15:50 | Introduction to pathology of muscle diseases and peripheral nerve | Dr. Rengin Asiye Ahıskalı |
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| **Wednesday** | **24 February** |  |
| 09:00-09:50 | Nervous system tumors | Dr. Süheyla Bozkurt |
| 10:00-10:50 | Nervous system tumors | Dr. Süheyla Bozkurt |
| 11:00-11:50 | Headache in the emergency room | Dr. Tülin Tanrıdağ |
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| 13:00-13:50 | Neurological emergencies | Dr. Tülin Tanrıdağ |
| 14:00-14:50 | Pharmacotherapy in epilepsy | Dr. Filiz Onat |
| 15:00-15:50 | Clinical pharmacology of opioids | Dr. Filiz Onat |
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| **Thursday** | **25 February** |  |
| 09:00-09:50 | Adult patient with paresthesia, arthralgia and lethargia | Dr. Mehmet Akman |
| 10:00-10:50 | Autonomic nervous system | Dr. Ural Verimli |
| 11:00-11:50 | Autonomic nervous system | Dr. Ural Verimli |
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| 13:00-13:50 | Anesthetic premedication | Dr. Atila Karaalp |
| 14:00-14:50 | Skeletal muscle relaxants | Dr. Atila Karaalp |
| 15:00-15:50 | Spinal trauma and degenerative diseases | Dr. Ferhat Harman |
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| **Friday** | **26 February** |  |
| 09:00-09:50 | Introduction to neuroradiology | Dr. Onur Buğdaycı |
| 10:00-10:50 | Introduction to neuroradiology | Dr. Onur Buğdaycı |
| 11:00-11:50 | Motor neuron disorders | Dr. Barış İşak |
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| 13:00-13:50 |  |  |
| 14:00-14:50 | Pathology LAB: Pathology of central nervous system | Dr. Süheyla Bozkurt |
| 15:00-15:50 | Bacterial and aseptic meningitis | Dr. Buket Ertürk Şengel |
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| **Week – 7 (01 March - 05 March 2021)** |
| **Monday** | **01 March** |  |
| 09:00-09:50 |  |  |
| 10:00-10:50 |  |  |
| 11:00-11:50 |  |  |
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| 13:00-13:50 | Elective course |  |
| 14:00-14:50 | Elective course |  |
| 15:00-15:50 |  |  |
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| **Tuesday** | **02 March** |  |
| 09:00-09:50 | Dementia, Alzheimer's disease and related dementias | Dr. Emine Neşe Tuncer Elmacı |
| 10:00-10:50 | Infectious diseases of the nervous system | Dr. Eda Kepenekli |
| 11:00-11:50 | Pharmacotherapy of Parkinson's disease | Dr. Rezzan Gülhan |
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| 13:00-13:50 | Introduction to pediatric neurology: From symptoms to signs | Dr. Olcay Ünver |
| 14:00-14:50 | Peripheral nerve disorders | Dr. Barış İşak |
| 15:00-15:50 | Peripheral nerve disorders | Dr. Barış İşak |
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| **Wednesday** | **03 March** |  |
| 09:00-09:50 | Management of pain | Dr. Beliz Bilgili |
| 10:00-10:50 | Rehabilitation of neurological disorders  | Dr. N. Evrim Karadağ Saygı |
| 11:00-11:50 | Rehabilitation of neurological disorders  | Dr. N. Evrim Karadağ Saygı |
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| 13:00-13:50 | Principles of CT and MRI | Dr. Günseli Ayşe Garip İnhan |
| 14:00-14:50 | Anatomy LAB: Autonomic Nervous System  | Anatomy Lab. |
| 15:00-15:50 | Review: Development of the nervous system | Dr. Dilek Akakın |
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| **Thursday** | **04 March** |  |
| 09:00-09:50 | Introduction to CNS pharmacology | Dr. Filiz Onat |
| 10:00-10:50 | Basic principles of action of drugs affecting neurotransmission | Dr. Filiz Onat |
| 11:00-11:50 | [Pharmacotherapy of Parkinson's disease](https://ues.marmara.edu.tr/Activity/Launch/2BDD6F3ADC19B603BE21E1502567EDC1?eId=&classId=34520BF0CA5E58FC39845675BA699B08)  | Dr. Rezzan Gülhan |
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| 13:00-13:50 |  |  |
| 14:00-14:50 |  |  |
| 15:00-15:50 |  |  |
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| **Friday** | **05 March** |  |
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| 13:00-13:50 |  |  |
| 14:00-14:50 |  |  |
| 15:00-15:50 |  |  |
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| **Week – 8 (08 March - 12 March 2021)** |
| **Monday** | **08 March** |   |
| 09:00-09:50 |  |  |
| 10:00-10:50 |   |   |
| 11:00-11:50 |  |  |
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| 13:00-13:50 | Elective course |  |
| 14:00-14:50 | Elective course |  |
| 15:00-15:50 |  |  |
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| **Tuesday** | **09 March** |  |
| 09:00-09:50 | **PRACTICAL EXAM** |  |
| 10:00-10:50 |  |
| 11:00-11:50 |  |
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| 13:00-13:50 |  |  |
| 14:00-14:50 |  |  |
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| **Wednesday** | **10 March** |  |
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| **Thursday** | **11 March** |  |
| 09:00-09:50 | **Y3C3 THEORETICAL EXAM** |   |
| 10:00-10:50 |   |
| 11:00-11:50 |   |
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| 13:00-13:50 |  |  |
| 14:00-14:50 |  |  |
| 15:00-15:50 |  |  |
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| **Friday** | **12 March** |  |
| 09:00-09:50 |  |  |
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