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| **C:\Users\Namariel\Downloads\TıpF (1)\TıpF\TıpF-2.png**  **MARMARA UNIVERSITY SCHOOL of MEDICINE** | | | |
| CELL AND TISSUE INJURY - I  YEAR 2 COURSE 1  September 07 – October 16, 2020 | | | |
| **Coordinator of the Course 2.1**  Prof., Pelin BAĞCI | | | |
| **Year 2 Coordinators**  Assoc. Prof., Özgür Kasımay ÇAKIR & Assist. Prof.,M.Burak AKSU | | | |
| **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 | |
| **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 Süleyman ŞEHİRLİ | | **Dean**  Prof., Hakan GÜNDÜZ | |

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

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| CELL AND TISSUE INJURY - I | |
| AIM and LEARNING OBJECTIVES of COURSE  **Aim:** At the end of this course, second year students will be able to broaden their basic science knowledge to include the understanding of how certain alterations in bodily processes may manifest as disease and gain fundamental knowledge about the processes underlying human diseases, as the scientific foundation for developing clinical skills.  **Learning Objectives:** At the end of this course, second year students will,   * describe using proper nomenclature, the etiology, pathogenesis, structural and functional changes at cellular and tissue level; * describe in detail what happens to cells and tissues in response to abnormal stimuli; * explain the basic principles of human immune system as it relates to defense against disease (innate, humoral, cell mediated); * describe the principles of classifying infectious microorganisms and their pathogenic properties; * gain knowledge about viruses and viral pathogenesis; * gain knowledge about parasites and pathogenesis of parasitic diseases; * identify major drug classes and prototype drug(s) for each class. | |
| **ASSESSMENT SYSTEM**  Module examination: Written exam at the end of module (10 % of final score)  Practical examination: Practical exams at the end of course  Course 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-2.1 | |
| * Biochemistry * Biophysics * Child Health and Diseases * Family Medicine * Immunology * Medical Genetics | * Microbiology * Nuclear Medicine * Pathology * Pharmacology * Physiology |

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| LECTURERS / TUTORS | |
| Tunç AKKOÇ, Professor of Immunology  Mehmet Burak AKSU, Assist. Professor of Microbiology  Yaşar İnci ALİCAN, Professor of Physiology  Ahmet ARMAN, Professor of Medical Genetics  Pınar ATA, Professor of Medical Genetics  Çiğdem ATAİZİ ÇELİKEL, Professor of Pathology  Pelin BAĞCI, Professor of Pathology  Süheyla BOZKURT, Professor of Pathology  Hülya CABADAK, Professor of Biophysics  Nilgün ÇERİKÇİOĞLU, Professor of Microbiology  Saliha Serap ÇİFÇİLİ, Professor of Family Medicine  Elif DAĞLI, Professor of Child Health and Diseases  Rafi Haner DİRESKENELİ, Professor of Internal Medicine  İpek ERBARUT, Assist. Professor of Pathology  Şirin Funda EREN, Professor of Pathology  Deniz FİLİNTE, Assoc. Professor Pathology  Günseli Ayşe GARİP İNHAN, Assoc. Professor of Biophysics  Zafer GÖREN, Professor of Pharmacology | Medine GÜLÇEBİ İDRİZ OĞLU, Assoc. Professor of Pharmacology  Rezzan GÜLHAN, Professor of Pharmacology  Ahmet İlter GÜNEY, Assoc. Professor of Medical Genetics  Goncagül HAKLAR, Professor of Biochemistry  Ufuk HASDEMİR, Professor of Microbiology  Zeynep Arzu İLKİ, Professor of Microbiology  Atila KARAALP, Professor of Pharmacology  Ayşegül KARAHASAN, Professor of Microbiology  Handan KAYA, Professor of Pathology  Hızır KURTEL, Professor of Physiology  Pınar MEGA TİBER, Assoc. Professor of Biophysics  Salih ÖZGÜVEN Assist. Professor of Nuclear Medicine  Ahmet Erdi SÖZEN, Lecturer of Biochemistry  Halil Turgut TUROĞLU, Professor of Nuclear Medicine  Nurver ÜLGER, Professor of Microbiology  Gülru Pemra CÖBEK ÜNALAN, Professor of Family Medicine  Hasan Raci YANANLI, Assoc. Professor of Pharmacology  Alper YILDIRIM, Assoc. Professor of Physiology |
| LABORATORY TUTORS  MICROBIOLOGY: G.Söyledir, M.U.Hasdemir, N.Çerikçioğlu, A.Karahasan, N.Ulger, Z.A.İlki, M.B.Aksu  PATHOLOGY: P.Bağcı | |
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| READING / STUDYING MATERIALS   * Basics and Clinical Pharmacology (Bertram G Katzung). * Clinical Pharmacology (Laurence DR, Bennet PN). * Pharmacological Basis of Therapeutics (Goddman & Gilman’s). * Radiation protection, Ch.5 (Mary Alice Statkiewicz) * Radiobiology for the radiologist (Eric J.Hall) * Physics of Life Sciences (Alan H.Cromer) * Clinical Biophysics (Anbar) * Radiologic Science for Technologist (S.C.Bushong) * Textbook of Physiology (Guyton AC). * Basic Pathology (Stanley L. Robbins, Marcia Angel, Vinay Kumar). * Histology and Cell Biology: an Introduction to Pathology (Abraham L. Kierszenbaum). * Review Medical Microbiology (Ernest Jawetz et al.). * Medical Microbiology (Cedric Mims et al.). * Review of Medical Microbiology (Patric R. Murray, Ken S. Rosenthal). * Cellular and Molecular Immunology 5th Edition (Abbas, Lichtman). * Kuby Immunology 4th Edition (Goldsby, Kindt, Osborne). * Immunobiology 6th Edition (Janeway, Travers, Walport, Schlomchik). * Immunology, Infection and Immunity (Pier, Lyczak, Wetzler) | |

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| SUMMARY OF THE COURSE | | | |
| **Discipline** | **Lecture & Group Discussion** | **Multidisciplinary Lab. & Clinical Skills Lab. Practice** | Total |
| Biochemistry | 4 |  | 4 |
| Biophysics | 12 |  | 12 |
| Child Health and Diseases | 2 |  | 2 |
| Family Medicine | 2 |  | 2 |
| Immunology | 12 |  | 12 |
| Microbiology | 25 | 6 | 31 |
| Nuclear Medicine | 2 |  | 2 |
| Pathology | 17 | 4 | 21 |
| Pharmacology | 17 |  | 17 |
| Physiology | 5 |  | 5 |
| Medical Genetics | 7 |  | 7 |
| **SUBTOTAL** | 105 | 10 | 115 |
| ICP-2: Basic Clinical Skills, Human in Medicine, Students Research Activity | 20 | 20 | 40 |
| **TOTAL** | **125** | **30** | **155** |

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| **SEVEN WEEK PROGRAM** | | |
|  | **THEORETICAL AND PRACTICAL SESSIONS** | **LECTURER(S)/TUTOR(S)** |
| **Week-1 (07 September - 11 September 2019)** | | |
| **Monday** | **07 September** |  |
| 09:00 - 09:50 |  |  |
| 10:00- 10:50 | Introduction to the course and opening lecture | Dr. Pelin Bağcı |
| 11:00- 11:50 | Introduction to pharmacology | Dr. Atila Karaalp |
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| 13:00-13:50 | Routes of drug administration | Dr. Atila Karaalp |
| 14:00-14:50 |  |  |
| 15:00-15:50 |  |  |
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| **Tuesday** | **08 September** |  |
| 09:00-09:50 |  |  |
| 10:00-10:50 | Radioactivity: the decay law; physical half-life, biological halflife | Dr. Pınar Mega Tiber |
| 11:00-11:50 | Radioactivity: the decay law; physical half-life, biological halflife | Dr. Pınar Mega Tiber |
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| 13:00-13:50 | Biochemical aspect of cell death | Dr. Goncagül Haklar |
| 14:00-14:50 | Biochemical aspect of cell death | Dr. Goncagül Haklar |
| 15:00-15:50 |  |  |
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| **Wednesday** | **09 September** |  |
| 09:00-09:50 |  |  |
| 10:00-10:50 |  |  |
| 11:00-11:50 |  |  |
|  |  |  |
| 13:00-13:50 | General pharmacokinetic principles-1 | Dr. Rezzan Gülhan |
| 14:00-14:50 | General pharmacokinetic principles-2 | Dr. Rezzan Gülhan |
| 15:00-15:50 |  |  |
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| **Thursday** | **10 September** |  |
| 09:00-09:50 | Microbiology of water, milk and air | Dr. Nilgün Çerikçioğlu |
| 10:00-10:50 | Human microbiota | Dr. Nilgün Çerikçioğlu |
| 11:00-11:50 | Pathogenesis of parasitic disease | Dr. Nurver Ülger |
|  |  |  |
| 13:00-13:50 |  |  |
| 14:00-14:50 | Molecular mechanisms of necrosis and apoptosis | Dr. Ahmet Arman |
| 15:00-15:50 |  |  |
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| **Friday** | **11 September** |  |
| 09:00-09:50 |  |  |
| 10:00-10:50 | Types of radiation | Dr. Pınar Mega Tiber |
| 11:00-11:50 | Types of radiation | Dr. Pınar Mega Tiber |
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| 13:00-13:50 |  |  |
| 14:00-14:50 |  |  |
| 15:00-15:50 |  |  |
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| **Week-2 (14 September - 18 September 2020)** | | |
| **Monday** | **14 September** |  |
| 09:00-09:50 |  |  |
| 10:00-10:50 | Molecular and radiobiological behavior | Dr. Hülya Cabadak |
| 11:00-11:50 | Effects of ionizing radiation on the cell and organism | Dr. Hülya Cabadak |
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| 13:00-13:50 | Dosimetry, basic concepts | Dr. Pınar Mega Tiber |
| 14:00-14:50 | Electromagnetic spectrum | Dr. Pınar Mega Tiber |
| 15:00-15:50 | Blood and tissue protozoa | Dr. Nurver Ülger |
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| **Tuesday** | **15 September** |  |
| 09:00-09:50 |  |  |
| 10:00-10:50 | Intestinal and urogenital protozoa | Dr. Nurver Ülger |
| 11:00-11:50 | Cellular aging and death | Dr. Pınar Ata |
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| 13:00-13:50 | Radiation protection | Dr. Hülya Cabadak |
| 14:00-14:50 |  |  |
| 15:00-15:50 |  |  |
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| **Wednesday** | **16 September** |  |
| 09:00-09:50 |  |  |
| 10:00-10:50 | General pharmacokinetic principles-3 | Dr. Rezzan Gülhan |
| 11:00-11:50 | General pharmacokinetic principles- 4 | Dr. Rezzan Gülhan |
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| 13:00-13:50 | Interaction of radiation with matter | Dr. Pınar Mega Tiber |
| 14:00-14:50 | Interaction of radiation with matter | Dr. Pınar Mega Tiber |
| 15:00-15:50 |  |  |
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| **Thursday** | **17 September** |  |
| 09:00-09:50 |  |  |
| 10:00-10:50 | Mechanism of drug action | Dr. Zafer Gören |
| 11:00-11:50 | Mechanism of drug action | Dr. Zafer Gören |
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| 13:00-13:50 | Intestinal and tissue nematodes | Dr. Nurver Ülger |
| 14:00-14:50 | Intestinal and tissue nematodes | Dr. Nurver Ülger |
| 15:00-15:50 |  |  |
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| **Friday** | **18 September** |  |
| 09:00-09:50 | Microbial pathogenicity and virulence | Dr. Zeynep Arzu İlki |
| 10:00-10:50 | Basic principles of drug toxicity | Dr. Hasan Raci Yananlı |
| 11:00-11:50 | Introduction to pathology | Dr. Süheyla Bozkurt |
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| 13:00-13:50 |  |  |
| 14:00-14:50 |  |  |
| 15:00-15:50 |  |  |
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| **Week-3 (21 September - 25 September 2020)** | | |
| **Monday** | **21 September** |  |
| 09:00-09:50 | Signal transduction of inflammation | Dr. Ahmet Arman |
| 10:00-10:50 | Cestodes and trematodes | Dr. Nurver Ülger |
| 11:00-11:50 | Antiseptics and disenfectants | Dr. Hasan Raci Yananlı |
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| 13:00-13:50 | Cell injury and cell death | Dr. Handan Kaya |
| 14:00-14:50 | Cell injury and cell death | Dr. Handan Kaya |
| 15:00-15:50 |  |  |
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| **Tuesday** | **22 September** |  |
| 09:00-09:50 | Microbial toxins | Dr. Mehmet Burak Aksu |
| 10:00-10:50 | Cultivation and identification of bacteria | Dr. Zeynep Arzu İlki |
| 11:00-11:50 |  |  |
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| 13:00-13:50 | Adaptive cell reactions and abnormal accumulations | Dr. İpek Erbarut |
| 14:00-14:50 | Introduction to chemotherapeutics | Dr. Rezzan Gülhan |
| 15:00-15:50 | Effects of the electromagnetic waves on human healt | Dr. Günseli Ayşe Garip İlhan |
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| **Wednesday** | **23 September** |  |
| 09:00-09:50 | Acute inflammatory response | Dr. Deniz Filinte |
| 10:00-10:50 | Acute inflammatory response | Dr. Deniz Filinte |
| 11:00-11:50 | Tissue renewal and repair: regeneration, healing and fibrosis | Dr. Pelin Bağcı |
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| 13:00-13:50 | Chemokines, neutrophils and monocytes in innate immunity, immunoglobulins: Structure and function, antigen & antibody interactions | Dr. Tunç Akkoç |
| 14:00-14:50 | Chemokines, neutrophils and monocytes in innate immunity, immunoglobulins: Structure and function, antigen & antibody interactions | Dr. Tunç Akkoç |
| 15:00-15:50 |  |  |
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| **Thursday** | **24 September** |  |
| 09:00-09:50 | Major histocompatibility complex (MHC) molecules, antigen processing and presentation | Dr. Tunç Akkoç |
| 10:00-10:50 | Pharmacogenetics | Dr. Ahmet İlter Güney |
| 11:00-11:50 | Pharmacogenetics | Dr. Ahmet İlter Güney |
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| 13:00-13:50 | Basic principles of immunopathology | Dr. Süheyla Bozkurt |
| 14:00-14:50 |  |  |
| 15:00-15:50 | Tissue and organ response to radiation and genetic effects of radiation | Dr. Salih Özgüven |
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| **Friday** | **25 September** |  |
| 09:00-09:50 | Cytokines | Dr. Tunç Akkoç |
| 10:00-10:50 | Cytokines | Dr. Tunç Akkoç |
| 11:00-11:50 | Chronic inflammatory response | Dr. Handan Kaya |
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| 13:00-13:50 |  |  |
| 14:00-14:50 | Pathology of hypersensitivity reactions | Dr. Süheyla Bozkurt |
| 15:00-15:50 |  |  |
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| **Week-4 (28 September - 02 October 2020)** | | |
| **Monday** | **28 September** |  |
| 09:00-09:50 | Introduction to ICP-2 | Dr. Serap Çifçili, Dr. Pemra Ünalan |
| 10:00-10:50 | HxPhx: From communication skills to history taking |  |
| 11:00-11:50 | HxPhx: Active listening/ Observation, feedback practice. Online practice with each other (3 students-case study) |  |
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| 13:00-13:50 | EBM: Introduction to survey methods | Dr. Nadiye Pınar Ay |
| 14:00-14:50 | EBM: Experimental studies | Dr. Nadiye Pınar Ay |
| 15:00-15:50 | EBM: Cohort studies | Dr. Nadiye Pınar Ay |
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| **Tuesday** | **29 September** |  |
| 09:00-09:50 | EBM: Case-control studies | Dr. Nilüfer Özaydın |
| 10:00-10:50 | EBM: Case-control studies | Dr. Nilüfer Özaydın |
| 11:00-11:50 | EBM: Cross-sectional studies | Dr. Nilüfer Özaydın |
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| 13:00-13:50 | Group A-B Social Concepts | Dr. Mehmet Ali Gülpınar |
|  | Group C-D HxPhx: Complete medical History | Dr. Serap Çifçili, Dr. Pemra Ünalan |
| 14:00-14:50 | Group A-B and EMU students Social Concepts | Dr. Mehmet Ali Gülpınar |
|  | Group C-D HxPhx: Complete medical History | Dr. Serap Çifçili, Dr. Pemra Ünalan |
| 15:00-15:50 | Group A-B and EMU students Social Concepts | Dr. Mehmet Ali Gülpınar |
|  | Group C-D HxPhx: Complete medical History | Dr. Serap Çifçili, Dr. Pemra Ünalan |
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| **Wednesday** | **30 September** |  |
| 09:00-09:50 | EBM: Objectives | Dr. Nimet Emel Lüleci |
| 10:00-10:50 | EBM: Study population and sampling | Dr. Nimet Emel Lüleci |
| 11:00-11:50 | EBM: Variables | Dr. Nimet Emel Lüleci |
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| 13:00-13:50 | Study time for Social Concepts and History Taking Readings |  |
| 14:00-14:50 | Study time for Social Concepts and History Taking Readings |  |
| 15:00-15:50 | Study time for Social Concepts and History Taking Readings |  |
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| **Thursday** | **01 October** |  |
| 09:00-09:50 | EBM: Data collection methods | Dr. Seyhan Hıdıroğlu |
| 10:00-10:50 | EBM: Preparing the study proposal and ethical comittee application form | Dr. Seyhan Hıdıroğlu |
| 11:00-11:50 | EBM: Introduction of mentors | Dr. Seyhan Hıdıroğlu |
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| 13:00-13:50 | Group A-B Social Concepts | Dr. Mehmet Ali Gülpınar |
|  | Group C-D History taking assignments | Dr. Serap Çifçili, Dr. Pemra Ünalan |
| 14:00-14:50 | Group A-B Social Concepts | Dr. Mehmet Ali Gülpınar |
|  | Group C-D History taking assignments | Dr. Serap Çifçili, Dr. Pemra Ünalan |
| 15:00-15:50 | Group A-B Social Concepts | Dr. Mehmet Ali Gülpınar |
|  | Group C-D History taking assignments | Dr. Serap Çifçili, Dr. Pemra Ünalan |
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| **Friday** | **02 October** |  |
| 09:00-09:50 | EBM: Qualitative research methods | Dr. Seyhan Hıdıroğlu |
| 10:00-10:50 | EBM: Meta-analysis-1 | Dr. Ahmet Topuzoğlu |
| 11:00-11:50 | EBM: Meta-analysis-2 | Dr. Ahmet Topuzoğlu |
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| 13:00-13:50 | Group A-B Social Concepts | Dr. Mehmet Ali Gülpınar |
|  | Group C-D Study time for assignments | Dr. Serap Çifçili, Dr. Pemra Ünalan |
| 14:00-14:50 | Group A-B Social Concepts | Dr. Mehmet Ali Gülpınar |
|  | Group C-D Study time for assignments | Dr. Serap Çifçili, Dr. Pemra Ünalan |
| 15:00-15:50 | Group A-B Social Concepts | Dr. Mehmet Ali Gülpınar |
|  | Group C-D Study time for assignments | Dr. Serap Çifçili, Dr. Pemra Ünalan |
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| **Week-5 (05 October - 09 October 2020)** | | |
| **Monday** | **05 October** |  |
| 09:00-09:50 | Development of T cells, T lymphocyte signaling mechanisms and activation | Dr. Tunç Akkoç |
| 10:00-10:50 | DNA viruses: Herpes viruses | Dr. Ufuk Hasdemir |
| 11:00-11:50 | RNA viruses: Retroviruses and HIV | Dr. Ufuk Hasdemir |
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| 13:00-13:50 | Host parasite interactions | Dr. Mehmet Burak Aksu |
| 14:00-14:50 | Host parasite interactions | Dr. Mehmet Burak Aksu |
| 15:00-15:50 | Blood and tissue protozoa-MAKE-UP | Dr. Nurver Ülger |
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| **Tuesday** | **06 October** |  |
| 09:00-09:50 | B Lymphocyte: Development and biology | Dr. Tunç Akkoç |
| 10:00-10:50 | Eicosanoids and related compounds | Dr. Erdi Sözen |
| 11:00-11:50 | Eicosanoids and related compounds | Dr. Erdi Sözen |
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| 13:00-13:50 | DNA viruses: Adenoviruses, Parvoviruses, Papavoviruses, and Poxviruses | Dr. Ayşegül Karahasan |
| 14:00-14:50 | RNA viruses: Orthomyxoviruses and Paramyxoviruses | Dr. Ayşegül Karahasan |
| 15:00-15:50 |  |  |
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| **Wednesday** | **07 October** |  |
| 09:00-09:50 | Structure and function of complement system | Dr. Tunç Akkoç |
| 10:00-10:50 | Immunogenetics of transplantation | Dr. Pınar Ata |
| 11:00-11:50 | Immunogenetics of transplantation | Dr. Pınar Ata |
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| 13:00-13:50 | RNA viruses: Picornaviruses, Rhabdoviruses and Reoviruses | Dr. Ufuk Hasdemir |
| 14:00-14:50 | Hepatitis viruses | Dr. Ufuk Hasdemir |
| 15:00-15:50 |  |  |
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| **Thursday** | **08 October** |  |
| 09:00-09:50 | Introduction to innate immune system | Dr. Rafi Haner Direskeneli |
| 10:00-10:50 | Bridging innate and adaptive immunity dendritic cells, NK cells, NKT cells and other innate-like T and B lineages | Dr. Rafi Haner Direskeneli |
| 11:00-11:50 | Drug-induced immune response and antiallergic treatment | Dr. Hasan Raci Yananlı |
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| 13:00-13:50 | RNA viruses: Togaviruses, Bunyaviruses, Flaviviruses and other RNA viruses | Dr. Ayşegül Karahasan |
| 14:00-14:50 | Bioterrorism: a global threat | Dr. Ayşegül Karahasan |
| 15:00-15:50 |  |  |
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| **Friday** | **09 October** |  |
| 09:00-09:50 | Immune responses to extracellular and intracellular infections | Dr. Tunç Akkoç |
| 10:00-10:50 | Immune responses to extracellular and intracellular infections | Dr. Tunç Akkoç |
| 11:00-11:50 | Pathology LAB: General principals of macroscopic evaluation (slide lecture) | Dr. Şirin Funda Eren |
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| 13:00-13:50 | Microbiology LAB: Examination of protozoa | Microbiology |
| 14:00-14:50 | Microbiology LAB: Examination of protozoa | Microbiology |
| 15:00-15:50 | Microbiology LAB: Examination of helminths and medically important arthropods | Microbiology |
| 16:00-16:50 | Microbiology LAB: Examination of helminths and medically important arthropods | Microbiology |
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| **Week-6 (12 October - 16 October 2020)** | | |
| **Monday** | **12 October** |  |
| 09:00-09:50 |  |  |
| 10:00-10:50 |  |  |
| 11:00-11:50 |  |  |
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| 13:00-13:50 | Transplantation pathology | Dr. Handan Kaya |
| 14:00-14:50 | Amyloidosis | Dr. Handan Kaya |
| 15:00-15:50 |  |  |
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| **Tuesday** | **13 October** |  |
| 09:00-09:50 | Physiology of microcirculation and edema formation | Dr. Hızır Kurtel |
| 10:00-10:50 | Physiology of microcirculation and edema formation | Dr. Hızır Kurtel |
| 11:00-11:50 | Pathology of autoimmune disorders | Dr. Süheyla Bozkurt |
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| 13:00-13:50 | Autocoids | Dr. Zafer Gören |
| 14:00-14:50 | Autocoids | Dr. Zafer Gören |
| 15:00-15:50 | Autocoids | Dr. Zafer Gören |
| 16:00-16:50 | Laboratory diagnosis of viral infections | Dr. Mehmet Burak Aksu |
| 17:00-17:50 | Laboratory diagnosis of viral infections | Dr. Mehmet Burak Aksu |
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| **Wednesday** | **14 October** |  |
| 09:00-09:50 | Pharmacotherapy in parasitic infections | Dr. Medine Gülçebi İdriz Oğlu |
| 10:00-10:50 | Introduction to Family Medicine | Dr. Gülru Pemra Cöbek Ünalan |
| 11:00-11:50 | Application of nuclear medicine and radiotherapy | Dr. Halil Turgut Turoğlu |
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| 13:00-13:50 | Pathology LAB: Cell response to injury and adaptive cell reactions and changes in the size, consistency, colour, and composition of organs | Dr. Pelin Bağcı |
| 14:00-14:50 | Pathology LAB: Cell response to injury and adaptive cell reactions and changes in the size, consistency, colour, and composition of organs | Dr. Pelin Bağcı |
| 15:00-15:50 | Pathology LAB: Cell response to injury and adaptive cell reactions and changes in the size, consistency, colour, and composition of organs | Dr. Pelin Bağcı |
| 16:00-16:50 | Pathology LAB: Cell response to injury and adaptive cell reactions and changes in the size, consistency, colour, and composition of organs | Dr. Pelin Bağcı |
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| **Thursday** | **15 October** |  |
| 09:00-09:50 | Haemodynamic disorders | Dr. Çiğdem Ataizi Çelikel |
| 10:00-10:50 | Thromboembolic disease | Dr. Çiğdem Ataizi Çelikel |
| 11:00-11:50 | Thromboembolic disease | Dr. Çiğdem Ataizi Çelikel |
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| 13:00-13:50 | Body temperature and its regulation | Dr. Yaşar İnci Alican |
| 14:00-14:50 | Body temperature and its regulation | Dr. Yaşar İnci Alican |
| 15:00-15:50 | Miscellaneous viruses; Coronavirus, Flavivirus, Calicivirus | Dr. Mehmet Burak Aksu |
| 16:00-16:50 | Mechanism of viral pathogenesis | Dr. Ufuk Hasdemir |
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| **Friday** | **16 October** |  |
| 09:00-09:50 | Pharmacotherapy of viral infections | Dr. Medine Gülçebi İdriz Oğlu |
| 10:00-10:50 | Physiology of pain | Dr. Alper Yıldırım |
| 11:00-11:50 | Patient with fever and rash | Dr. Saliha Serap Çifçili |
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| 13:00-13:50 |  |  |
| 14:00-14:50 |  |  |
| 15:00-15:50 | Health effects of tobacco | Dr. Ela Erdem |
| 16:00-16:50 | Health effects of tobacco | Dr. Ela Erdem |