

# MARMARA UNIVERSITY EASTERN MEDITERRANEAN UNIVERSITY INTERNATIONAL MEDICAL SCHOOL





### CELL AND TISSUE INJURY - I YEAR 2 COURSE 1

Sep 02<sup>nd</sup>, 2024 – October 17<sup>th</sup> , 2024

#### **Year 2 Coordinators**

Prof. Özgür Kasımay ÇAKIR & Assoc. Prof. M. Burak AKSU & Assoc. Prof. Mümtaz GÜRAN			
Coordinators of Multidiciplinary Students' Lab.			
Assoc. Prof. M. Burak AKSU & Assoc. Prof. Ergül Mutlu ALTUNDAĞ			
Coordinators of ICS Res. Lab.			
Prof. Pemra ÜNALAN & Assist. Prof. İlke AKÇAY			
Vice-Chief Coordinators			
Students' Affairs			
Asisst. Prof. Can ERZİK			
Coordinator of Medical Education Program			
Evaluation and Development Commission			
Prof. Harika ALPAY			
he Joint Program			
eyman ŞEHİRLİ			
Dean (MU)			
Prof. Ümit Süleyman ŞEHİRLİ			

#### **LEARNING OUTCOMES / COMPETENCIES**

#### A. Clinical Care: Qualified patient care and community-oriented health care

- 1. Basic clinical skills
- 2. The organization and management of the patient and the patient care
- 3. The organization and the management of health care delivery services / system
- 4. Health promotion and disease prevention

#### B. Medical Knowledge and Evidence-Based Medicine

- 5. Appropriate information retrieval and management skills
- 6. The integration of knowledge, critical thinking and evidence-based decision making
- 7. Scientific methods and basic research skills

#### C. Professional Attitudes and Values

- 8. Communication skills and effective communication with patients / patient relatives
- 9. Interpersonal relationships and team working
- 10. Ethical and professional values, responsibilities
- 11. Individual, social and cultural values and responsibilities
- 12. Reflective practice and continuing development
- 13. Healthcare delivery systems, management and community-oriented health care
- 14. Education and counseling

#### **PHASE-1 LEARNING OBJECTIVES**

- 1. 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.

### 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, Course4: Growth, Development, Mental Health and Related Disorders

Year 3, Course 5: Urinary and Reproductive System and Related Disorders

#### **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 the course and performance during the module

**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
- Family Medicine
- Immunology
- Medical Genetics

- Microbiology
- Nuclear Medicine
- Pathology
- Pharmacology
- Physiology

#### **LECTURERS / TUTORS**

Ahmet Arman, Prof., Medical Genetics
Ahmet İlter Güney, Assoc. Prof., Medical Genetics
Alper Yıldırım, Prof., Physiology
Arzu Akşit İlki, Prof., Medical Microbiology
Banu Aydın Omay, Assoc. Prof., Biophysics
Çiğdem Ataizi Çelikel, Prof., Medical Pathology
Ergül Mutlu Altundağ, Assoc., Prof., Medical Biochemistry
Emine Özerinç, Instructor of Turkish Language
Goncagül Haklar, Prof., Biochemistry
Halil Eren Sakallı, Assist. Prof., Pharmacology
Halil Turgut Turoğlu, Prof., Nuclear Medicine
Handan Kaya, Prof., Medical Pathology
Hasan Toper, Assist. Prof., Pathology

Mehmet Burak Aksu, Assoc. Prof., Medical Microbiology
Mümtaz Güran, Assoc. Prof., Microbiology
Pınar Ata, Prof., Medical Genetics
Pınar Mega Tiber, Assoc. Prof., Biophysics
Pemra Cöbek Ünalan, Prof., Family Medicine
Rezzan Gülhan, Prof., Pharmacology
Salih Özgüven, , Assoc., Prof., Nuclear Medicine
Saliha Serap Çifçili, Assoc. Professor of Family Medicine
Süheyla Bozkurt, Prof., Pathology
Tunç Akkoç, Prof., Immunology
Ufuk Hasdemir, Prof., Microbiology
Zafer Gören, Prof., Pharmacology

Hızır Kurtel, Prof., Physiology
Hülya Cabadak, Prof., Biophysics
İlke Akçay, Assist. Prof., Biostatistics
İpek Erbarut, Assoc. Prof., Pathology

#### **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)

"Course programs may change during committee by International Joint Medicine Program administration if deemed necessary."

Discipline	Lecture & Group Discussion	Multidisciplinary Lab. & Clinical Skills Lab. Practice	Total
Biochemistry	4		4
Biophysics	12		12
Family Medicine	2		2
Immunology	12		12
Microbiology	25	6	31
Nuclear Medicine	2		2
Pathology	17		17
Pharmacology	16	3	19
Physiology	5		5
Medical Genetics	7		7
Subtotal	102	9	111
ICS-2: Research Proposal Workshop and Student Research Activity			
ICS-2: Basic Clinical Skills & Introduction to First Aid course			
Turkish for Medical Students-III	24		24
Turkish for Medical Students-III (Interactive session)	8		8
Total	134	9	143

	THEORETICAL AND PRACTICAL SESSIONS	LECTURER/TUTOR	
	Week - 1 (02-06 September, 2024)		
	Calendar Days	Instructor Name	Lecture Platform
Monday	02 September		
08:40-09:30	Turkish For Medical Students-III (Foreign Students)	Inst. Emine Özerinç	IN CLASS
09:40-10:30	Turkish For Medical Students-III (Foreign Students)	Inst. Emine Özerinç	IN CLASS
10:40-11:30	Turkish For Medical Students-III (Foreign Students)	Inst. Emine Özerinç	IN CLASS
11:40-12:30	Turkish For Medical Students-III (Foreign Students)	Inst. Emine Özerinç	IN CLASS
13:40-14:30	STUDY TIME		
14:40-15:30	STUDY TIME		
15:40-16-30	STUDY TIME		
16:40-17-30	STUDY TIME		
Tuesday	03 September		
08:40-09:30	STUDY TIME		
09:40-10:30	Introduction to the course and opening lecture	Dr. Mümtaz Güran	IN CLASS
10:40-11:30	Microbiology of water, milk and air	Dr. Mümtaz Güran	IN CLASS
11:40-12:30	Eicosanoids and related compounds	Dr. Ergül Mutlu Altundağ	IN CLASS
13:40-14:30	Eicosanoids and related compounds	Dr. Ergül Mutlu Altundağ	IN CLASS
14:40-15:30	STUDY TIME	-	
15:40-16-30	STUDY TIME		
16:40-17-30	STUDY TIME		
Wednesday	04 September		
08:40-09:30	Molecular mechanisms of necrosis and apoptosis	Dr. Ahmet Arman	MS TEAMS
09:40-10:30	Signal transduction of inflammation	Dr. Ahmet Arman	MS TEAMS
10:40-11:30	Biochemical aspect of cell death	Dr. Goncagül Haklar	MS TEAMS
11:40-12:30	Biochemical aspect of cell death	Dr. Goncagül Haklar	MS TEAMS

	Week - 2 (09-13 September, Calendar Days	2024) Instructor Name	Lecture Platform
16:40-17-30	STUDY TIME		
15:40-16:30	STUDY TIME		
14:40-15:30	Bioterrorism: a global threat	Dr. Mümtaz Güran	IN CLASS
13:40-14:30	Blood and tissue protozoa	Dr. Mümtaz Güran	IN CLASS
11:40-12:30	Basic principles of drug toxicity	Dr. Halil Eren Sakallı	IN CLASS
10:40-11:30	Introduction to ICS-2	Dr. İlke Akçay	IN CLASS
09:40-10:30	Turkish For Medical Students-III (Interactive Session)	Inst. Emine Özerinç  Dr. Bülent Sezgin	IN CLASS
08:40-09:30	Turkish For Medical Students-III (Interactive Session)	Inst. Emine Özerinç	IN CLASS
Friday	06 September		
16:40-17-30	STUDY TIME		
15:40-16-30	STUDY TIME		
14:40-15:30	Introduction to innate immune system	Dr. Tunç Akkoç	IN CLASS
13:40-14:30	Chemokines, neutrophils and monocytes in innate immunity, immunoglobulins: Structure and function, antigen & antibody interactions	Dr. Tunç Akkoç	IN CLASS
11:40-12:30	immunity, immunoglobulins: Structure and function, antigen & antibody interactions	Dr. Tunç Akkoç	IN CLASS
10:40-11:30	Turkish For Medical Students-III (Interactive Session)  Chemokines, neutrophils and monocytes in innate	Inst. Emine Özerinç	IN CLASS
09:40-10:30	Turkish For Medical Students-III (Interactive Session)	Inst. Emine Özerinç	IN CLASS
08:40-09:30	STUDY TIME		
Thursday	05 September		
16:40-17-30	STUDY TIME	-	
15:40-16-30	Turkish For Medical Students-III (Interactive Session)	Inst. Emine Özerinç	IN CLASS
14:40-15:30	Turkish For Medical Students-III (Interactive Session)	Inst. Emine Özerinç	IN CLASS

Monday	09 September		
08:40-09:30	Turkish For Medical Students-III (Foreign Students)	Inst. Emine Özerinç	IN CLASS
09:40-10:30	Turkish For Medical Students-III (Foreign Students)	Inst. Emine Özerinç	IN CLASS
10:40-11:30	Turkish For Medical Students-III (Foreign Students)	Inst. Emine Özerinç	IN CLASS
11:40-12:30	Turkish For Medical Students-III (Foreign Students)	Inst. Emine Özerinç	IN CLASS
13:40-14:30	STUDY TIME		
14:40-15:30	STUDY TIME		
15:40-16-30	STUDY TIME		
16:40-17-30	STUDY TIME		
Tuesday	10 September		
08:40-09:30	STUDY TIME		
09:40-10:30	Intestinal and tissue nematodes	Dr. Mümtaz Güran	IN CLASS
10:40-11:30	Intestinal and tissue nematodes	Dr. Mümtaz Güran	IN CLASS
11:40-12:30	Introduction to pathology	Dr. Süheyla Bozkurt	IN CLASS
13:40-14:30	Pathology of hypersensitivity reactions	Dr. Süheyla Bozkurt	IN CLASS
14:40-15:30	Basic principles of immunopathology	Dr. Süheyla Bozkurt	IN CLASS
15:40-16-30	Pathology of autoimmune disorders	Dr. Süheyla Bozkurt	IN CLASS
16:40-17-30	STUDY TIME		
Wednesday	11 September		
08:40-09:30	Introduction to Family Medicine	Dr. Pemra Cöbek Ünalan	MS TEAMS
09:40-10:30	Effects of the electromagnetic waves on human health	Dr. Banu Aydın Omay	MS TEAMS
10:40-11:30	STUDY TIME		
11:40-12:30	STUDY TIME		
13:40-14:30	Turkish For Medical Students-III (Interactive Session)	Inst. Emine Özerinç	IN CLASS
14:40-15:30	Turkish For Medical Students-III (Interactive Session)	Inst. Emine Özerinç	IN CLASS
15:40-16-30	Mechanism of viral pathogenesis	Dr. Ufuk Hasdemir	IN CLASS
16:40-17-30	DNA viruses: Herpes viruses	Dr. Ufuk Hasdemir	IN CLASS

Thursday	12 September		
08:40-09:30	STUDY TIME		
09:40-10:30	STUDY TIME		
10:40-11:30	Cestodes and trematodes	Dr. Mümtaz Güran	IN CLASS
11:40-12:30	Intestinal and urogenital protozoa	Dr. Mümtaz Güran	IN CLASS
13:40-14:30	RNA viruses: Picornaviruses, Rhabdoviruses and Reoviruses	Dr. Ufuk Hasdemir	IN CLASS
14:40-15:30	RNA viruses: Retroviruses and HIV	Dr. Ufuk Hasdemir	IN CLASS
15:40-16-30	Hepatitis viruses	Dr. Ufuk Hasdemir	IN CLASS
16:40-17-30	STUDY TIME		
Friday	13 September		
08:40-09:30	Introduction to 2nd Year Research: Evaluation of ICS-1 Research Projects	Dr. İlke Akçay	IN CLASS
09:40-10:30	Introduction to 'MEDN263 Evidence Based Medicine' Course Credit, Assessment, Content and Ethical Approval Process	Dr. İlke Akçay	IN CLASS
10:40-11:30	Evidence based medicine	Dr. İlke Akçay	IN CLASS
11:40-12:30	Theme of 2nd year research projects: Health and Community	Dr. İlke Akçay	IN CLASS
13:40-14:30	Cellular aging and death	Dr. Pınar Ata	IN CLASS
14:40-15:30	Immunogenetics of transplantation	Dr. Pınar Ata	IN CLASS
15:40-16-30	Immunogenetics of transplantation	Dr. Pınar Ata	IN CLASS
16:40-17-30	Pharmacotherapy in parasitic infections	Dr. Halil Eren Sakallı	IN CLASS
	Week - 3 (16-20 September, 20	24)	
	Calendar Days	Instructor Name	Lecture Platform
Monday	16 September		
08:40-09:30	Turkish For Medical Students-III (Foreign Students)	Inst. Emine Özerinç	IN CLASS
09:40-10:30	Turkish For Medical Students-III (Foreign Students)	Inst. Emine Özerinç	IN CLASS
10:40-11:30	Turkish For Medical Students-III (Foreign Students)	Inst. Emine Özerinç	IN CLASS

11:40-12:30	Turkish For Medical Students-III (Foreign Students)	Inst. Emine Özerinç	IN CLASS
13:40-14:30	RNA viruses: Orthomyxoviruses and Paramyxoviruses	Dr. Mümtaz Güran	IN CLASS
14:40-15:30	RNA viruses: Togaviruses, Bunyaviruses, Flaviviruses and other RNA viruses	Dr. Mümtaz Güran	IN CLASS
15:40-16-30	STUDY TIME		
16:40-17-30	STUDY TIME		
Tuesday	17 September		
08:40-09:30	STUDY TIME		
09:40-10:30	Molecular and radiobiological behavior	Dr. Hülya Cabadak	IN CLASS
10:40-11:30	Effects of ionizing radiation on the cell and organism	Dr. Hülya Cabadak	IN CLASS
11:40-12:30	Radiation protection	Dr. Hülya Cabadak	IN CLASS
13:40-14:30	Major histocompatibility complex (MHC) molecules, antigen processing and presentation	Dr. Tunç Akkoç	IN CLASS
14:40-15:30	Bridging innate and adaptive immunity dendritic cells, NK cells, NKT cells and other innate-like T and B lineages	Dr. Tunç Akkoç	IN CLASS
15:40-16-30	Immune responses to extracellular and intracellular infections	Dr. Tunç Akkoç	IN CLASS
16:40-17-30	STUDY TIME		
Wednesday	18 September		
08:40-09:30	Radioactivity: the decay law; physical half-life, biological halflife	Dr. Pınar Mega Tiber	IN CLASS
09:40-10:30	Radioactivity: the decay law; physical half-life, biological halflife	Dr. Pınar Mega Tiber	IN CLASS
10:40-11:30	Types of radiation	Dr. Pınar Mega Tiber	IN CLASS
11:40-12:30	Types of radiation	Dr. Pınar Mega Tiber	IN CLASS
13:40-14:30	Immune responses to extracellular and intracellular infections	Dr. Tunç Akkoç	IN CLASS
14:40-15:30	Structure and function of complement system	Dr. Tunç Akkoç	IN CLASS
15:40-16-30	Antiseptics and disenfectants	Dr. Halil Eren Sakallı	IN CLASS

16:40-17-30	STUDY TIME		
Thursday	19 September		
08:40-09:30	Dosimetry, basic concepts	Dr. Pınar Mega Tiber	IN CLASS
09:40-10:30	Electromagnetic spectrum	Dr. Pınar Mega Tiber	IN CLASS
10:40-11:30	Interaction of radiation with matter	Dr. Pınar Mega Tiber	IN CLASS
11:40-12:30	Interaction of radiation with matter	Dr. Pınar Mega Tiber	IN CLASS
13:40-14:30	Cell injury and cell death	Dr. Handan Kaya	MS TEAMS
14:40-15:30	Cell injury and cell death	Dr. Handan Kaya	MS TEAMS
15:40-16-30	Microbial pathogenicity and virulence	Dr. Arzu Akşit İlki	MS TEAMS
16:40-17-30	STUDY TIME		
Friday	20 September		
08:40-09:30	Cultivation and identification of bacteria	Dr. Arzu Akşit İlki	MS TEAMS
09:40-10:30	Chronic inflammatory response	Dr. Handan Kaya	MS TEAMS
10:40-11:30	Transplantation pathology	Dr. Handan Kaya	MS TEAMS
11:40-12:30	Amyloidosis	Dr. Handan Kaya	MS TEAMS
13:40-14:30	Research Proposal Workshop (RPW) – Type of Research Studies Descriptive Studies (Case-reports, surveillance, literature reviews)	Dr. İlke Akçay	IN CLASS
14:40-15:30	Research Proposal Workshop (RPW) – Type of Research Studies Cross-sectional studies	Dr. İlke Akçay	IN CLASS
15:40-16-30	Research Proposal Workshop (RPW) – Type of Research Studies Case-control and Cohort studies	Dr. İlke Akçay	IN CLASS
16:40-17-30	Research Proposal Workshop (RPW) – Type of Research Studies Experimental studies, Systematic reviews and Meta- analyses	Dr. İlke Akçay	IN CLASS
	Week – 4 (23-27 September, 20	024)	
	Calendar Days	Instructor Name	Lecture Platform

Monday	23 September		
08:40-09:30	Turkish For Medical Students-III (Foreign Students)	Inst. Emine Özerinç	IN CLASS
09:40-10:30	Turkish For Medical Students-III (Foreign Students)	Inst. Emine Özerinç	IN CLASS
10:40-11:30	Turkish For Medical Students-III (Foreign Students)	Inst. Emine Özerinç	IN CLASS
11:40-12:30	Turkish For Medical Students-III (Foreign Students)	Inst. Emine Özerinç	IN CLASS
13:40-14:30	STUDY TIME		
14:40-15:30	STUDY TIME		
15:40-16-30	STUDY TIME		
16:40-17-30	STUDY TIME		
Tuesday	24 September		
08:40-09:30	Pharmacogenetics	Dr. Ahmet İlter Güney	MS TEAMS
09:40-10:30	Pharmacogenetics	Dr. Ahmet İlter Güney	MS TEAMS
10:40-11:30	Adaptive cell reactions and abnormal accumulations	Dr. İpek Erbarut	MS TEAMS
11:40-12:30	Pathology LAB: General principals of macroscopic evaluation (slide lecture)	Dr. İpek Erbarut	MS TEAMS
13:40-14:30	Introduction to pharmacology	Dr. Rezzan Gülhan	IN CLASS
14:40-15:30	General pharmacokinetic principles-1Absorption of drugs	Dr. Rezzan Gülhan	IN CLASS
15:40-16:30	General pharmacokinetic principles-2Distribution of drugs	Dr. Rezzan Gülhan	IN CLASS
16:40-17-30	DNA viruses adenoviruses, parvoviruses, papavoviruses and poxviruses	Dr. Mümtaz Güran	IN CLASS
Wednesday	25 September		
08:40-09:30	General pharmacokinetic principles-3Metabolism and elimination of drugs	Dr. Rezzan Gülhan	IN CLASS
09:40-10:30	General pharmacokinetic principles-4Kinetics of drug movement in body	Dr. Rezzan Gülhan	IN CLASS
10:40-11:30	Mechanism of drug action	Dr. Zafer Gören	IN CLASS
11:40-12:30	Mechanism of drug action	Dr. Zafer Gören	IN CLASS
13:40-14:30	Miscellaneous viruses; Coronavirus, Flavivirus, Calicivirus	Dr. Mehmet Burak Aksu	IN CLASS

14:40-15:30	Human microbiota	Dr. Mehmet Burak Aksu	IN CLASS
15:40-16-30	Microbiology LAB: Human microbiota-A	Dr. Mehmet Burak Aksu- Dr.Mümtaz Güran	Multidisciplinary Lab.
16:40-17-30	Microbiology LAB: Human microbiota-B	Dr. Mehmet Burak Aksu- Dr.Mümtaz Güran	Multidisciplinary Lab.
Thursday	26 September		
08:40-09:30	Host parasite interactions	Dr. Mehmet Burak Aksu	IN CLASS
09:40-10:30	Host parasite interactions	Dr. Mehmet Burak Aksu	IN CLASS
10:40-11:30	Microbiology LAB: Human microbiota-B	Dr. Mehmet Burak Aksu Dr.Mümtaz Güran	Multidisciplinary Lab.
11:40-12:30	Microbiology LAB: Human microbiota-A	Dr. Mehmet Burak Aksu Dr.Mümtaz Güran	Multidisciplinary Lab.
13:40-14:30	Microbial toxins	Dr. Mehmet Burak Aksu	IN CLASS
14:40-15:30	Autocoids	Dr. Zafer Gören	IN CLASS
15:40-16-30	Autocoids	Dr. Zafer Gören	IN CLASS
16:40-17-30	Autocoids	Dr. Zafer Gören	IN CLASS
Friday	27 September		
08:40-09:30	RPW – Introduction part of a Research Proposal Topic, title, literature review	Dr. İlke Akçay	IN CLASS
09:40-10:30	RPW – Introduction part of a Research Proposal How to specify research question(s), objective(s) and hypotheses of a research study?	Dr. İlke Akçay	IN CLASS
10:40-11:30	Group formation and Warm-up activities	Dr. İlke Akçay	IN CLASS
11:40-12:30	Practical session: Group study to discuss about candidate topics	Dr. İlke Akçay	IN CLASS
13:40-14:30	Practical session: Group study to discuss about candidate topics	Dr. İlke Akçay	IN CLASS
14:40-15:30	Laboratory diagnosis of viral infections	Dr. Mehmet Burak Aksu	IN CLASS
15:40-16-30	Laboratory diagnosis of viral infections	Dr. Mehmet Burak Aksu	IN CLASS
16:40-17-30	STUDY TIME		

	Calendar Days	Instructor Name	Lecture Platform
Monday	30 September		
08:40-09:30	Turkish For Medical Students-III (Foreign Students)	Inst. Emine Özerinç	IN CLASS
09:40-10:30	Turkish For Medical Students-III (Foreign Students)	Inst. Emine Özerinç	IN CLASS
10:40-11:30	Turkish For Medical Students-III (Foreign Students)	Inst. Emine Özerinç	IN CLASS
11:40-12:30	Turkish For Medical Students-III (Foreign Students)	Inst. Emine Özerinç	IN CLASS
13:40-14:30	STUDY TIME		
14:40-15:30	STUDY TIME		
15:40-16-30	STUDY TIME		
16:40-17-30	STUDY TIME		
Tuesday	01 October		
08:40-09:30	Physiology of pain	Dr. Alper Yıldırım	MS TEAMS
09:40-10:30	Patient with fever and rash	Dr. Saliha Serap Çifçili	MS TEAMS
10:40-11:30	Tissue and organ response to radiation and genetic effects of radiation	Dr. Salih Özgüven	MS TEAMS
11:40-12:30	Application of nuclear medicine and radiotherapy	Dr. Halil Turgut Turoğlu	MS TEAMS
13:40-14:30	Acute inflammatory response	Dr. Hasan Toper	IN CLASS
14:40-15:30	Acute inflammatory response	Dr. Hasan Toper	IN CLASS
15:40-16-30	Tissue renewal and repair: regeneration, healing and fibrosis	Dr. Hasan Toper	IN CLASS
16:40-17-30	STUDY TIME		
Wednesday	2 October		
08:40-09:30	STUDY TIME		
09:40-10:30	<b>Pathology LAB</b> : Cell response to injury and adaptive cell reactions and changes in the size, consistency, colour, and composition of organs -A	Dr. Hasan Toper	Multidisciplinary Lab.
10:40-11:30	<b>Pathology LAB</b> : Cell response to injury and adaptive cell reactions and changes in the size, consistency, colour, and composition of organs -A	Dr. Hasan Toper	Multidisciplinary Lab.

11:40-12:30	<b>Pathology LAB</b> : Cell response to injury and adaptive cell reactions and changes in the size, consistency, colour, and composition of organs -A	Dr. Hasan Toper	Multidisciplinary Lab.
13:40-14:30	<b>Pathology LAB</b> : Cell response to injury and adaptive cell reactions and changes in the size, consistency, colour, and composition of organs -B	Dr. Hasan Toper	Multidisciplinary Lab.
14:40-15:30	Pathology LAB: Cell response to injury and adaptive cell reactions and changes in the size, consistency, colour, and composition of organs -B	Dr. Hasan Toper	Multidisciplinary Lab.
15:40-16-30	Pathology LAB: Cell response to injury and adaptive cell reactions and changes in the size, consistency, colour, and composition of organs -B	Dr. Hasan Toper	Multidisciplinary Lab.
16:40-17-30	STUDY TIME		
Thursday	3 October		
08:40-09:30	Cytokines	Dr. Tunç Akkoç	IN CLASS
09:40-10:30	Cytokines	Dr. Tunç Akkoç	IN CLASS
10:40-11:30	Microbiology LAB: Examination of protozoa -A	Dr. Mümtaz Güran	Multidisciplinary Lab.
11:40-12:30	Microbiology LAB: Examination of protozoa -A	Dr. Mümtaz Güran	Multidisciplinary Lab.
13:40-14:30	Microbiology LAB: Examination of protozoa -B	Dr. Mümtaz Güran	Multidisciplinary Lab.
14:40-15:30	Microbiology LAB: Examination of protozoa -B	Dr. Mümtaz Güran	Multidisciplinary Lab.
15:40-16-30	STUDY TIME		
16:40-17-30	STUDY TIME		
Friday	4 October		
08:40-09:30	Drug-induced immune response and antiallergic treatment	Dr. Halil Eren Sakallı	IN CLASS
09:40-10:30	Development of T cells, T lymphocyte signaling mechanisms and activation	Dr. Tunç Akkoç	IN CLASS
10:40-11:30	B Lymphocyte: Development and biology	Dr. Tunç Akkoç	IN CLASS

11:40-12:30	ICS-2 Research: Meeting with mentor*	* Research groups are expected to meet their mentors during these hours. If the mentor's schedule is not available, another suitable time can be arranged.	
13:40-14:30	RPW – Material and Methods part of a Research Proposal Contents of Material and Methods	Dr. İlke Akçay	IN CLASS
14:40-15:30	RPW – Material and Methods part of a Research Proposal Study population, sample and sampling methods	Dr. İlke Akçay	IN CLASS
15:40-16-30	RPW – Material and Methods part of a Research Proposal Important points in choosing the appropriate sampling method	Dr. İlke Akçay	IN CLASS
16:40-17-30	RPW – Material and Methods part of a Research Proposal Source of data (Data collection tools)	Dr. İlke Akçay	IN CLASS
	Week – 6 (07 – 11 October, 202	24)	
	Calendar Days	Instructor Name	Lecture Platform
Monday	07 October		
08:40-09:30	Turkish For Medical Students-III (Foreign Students)	Inst. Emine Özerinç	IN CLASS
09:40-10:30	Turkish For Medical Students-III (Foreign Students)	Inst. Emine Özerinç	IN CLASS
10:40-11:30	Turkish For Medical Students-III (Foreign Students)	Inst. Emine Özerinç	IN CLASS
11:40-12:30	Turkish For Medical Students-III (Foreign Students)	Inst. Emine Özerinç	IN CLASS
13:40-14:30	STUDY TIME		
14:40-15:30	STUDY TIME		
15:40-16-30	STUDY TIME		
16:40-17-30	STUDY TIME		
Tuesday	08 October		
08:40-09:30	Physiology of microcirculation and edema formation	Dr. Hızır Kurtel	IN CLASS
	The state of the s	+	
09:40-10:30	Physiology of microcirculation and edema formation	Dr. Hızır Kurtel	IN CLASS
09:40-10:30 10:40-11:30	Physiology of microcirculation and edema formation  Body temperature and its regulation	Dr. Hızır Kurtel Dr. Hızır Kurtel	IN CLASS IN CLASS

13:40-14:30	Microbiology LAB: Examination of helminths and medically important arthropods-B	Dr. Mümtaz Güran	Multidisciplinary Lab.
14:40-15:30	Microbiology LAB: Examination of helminths and medically important arthropods-B	Dr. Mümtaz Güran	Multidisciplinary Lab.
15:40-16-30	<b>Microbiology LAB</b> : Examination of helminths and medically important arthropods- <b>A</b>	Dr. Mümtaz Güran	Multidisciplinary Lab.
16:40-17-30	<b>Microbiology LAB:</b> Examination of helminths and medically important arthropods- <b>A</b>	Dr. Mümtaz Güran	Multidisciplinary Lab.
Wednesday	09 October		
08:40-09:30	STUDY TIME		
09:40-10:30	STUDY TIME		
10:40-11:30	Thromboembolic disease	Dr. Çiğdem Ataizi Çelikel	IN CLASS
11:40-12:30	Thromboembolic disease	Dr. Çiğdem Ataizi Çelikel	IN CLASS
13:40-14:30	Haemodynamic disorders	Dr. Çiğdem Ataizi Çelikel	IN CLASS
14:40-15:30	Pharmacotherapy of viral infections	Dr. Halil Eren Sakallı	IN CLASS
15:40-16-30	Pharmacotherapy of viral infections	Dr. Halil Eren Sakallı	IN CLASS
16:40-17-30	STUDY TIME		
Thursday	10 October		
08:40-09:30	STUDY TIME		
09:40-10:30	STUDY TIME		
10:40-11:30	RPW – Material and Methods part of a Research Proposal Variables	Dr. İlke Akçay	IN CLASS
11:40-12:30	RPW – Material and Methods part of a Research Proposal Data analysis methods	Dr. İlke Akçay	IN CLASS
13:40-14:30	RPW – Research ethics and Research integrity principles	Dr. İlke Akçay	IN CLASS
14:40-15:30	RPW – Research ethics and Research integrity principles	Dr. İlke Akçay	IN CLASS
15:40-16-30	STUDY TIME		
13.40-10-30			

Friday	11 October		
08:40-09:30	STUDY TIME		
09:40-10:30	STUDY TIME		
10:40-11:30	STUDY TIME		
11:40-12:30	ICS-2 Research: Meeting with mentor*	* Research groups are expected to meet their mentors during these hours. If the mentor's schedule is not available, another suitable time can be arranged.	
12,40,14,20	CTUDY TIME		
13:40-14:30	STUDY TIME		
14:40-15:30	STUDY TIME		
15:40-16-30	STUDY TIME		
16:40-17-30	STUDY TIME		
	Week – 7 (14 – 18 October, 2024)		
			51.6
No. or door	Calendar Days	Instructor Name	Lecture Platform
Monday	Calendar Days  14 October	Instructor Name	Lecture Platform
08:40-09:30		Instructor Name	Lecture Platform
08:40-09:30 09:40-10:30		Instructor Name	Lecture Platform
08:40-09:30 09:40-10:30 10:40-11:30	14 October	Instructor Name	Lecture Platform
08:40-09:30 09:40-10:30	14 October	Instructor Name	Lecture Platform
08:40-09:30 09:40-10:30 10:40-11:30 11:40-12:30	14 October  PRACTICAL EXAM	Instructor Name	Lecture Platform
08:40-09:30 09:40-10:30 10:40-11:30 11:40-12:30	PRACTICAL EXAM  STUDY TIME	Instructor Name	Lecture Platform
08:40-09:30 09:40-10:30 10:40-11:30 11:40-12:30 13:40-14:30 14:40-15:30	PRACTICAL EXAM  STUDY TIME  STUDY TIME	Instructor Name	Lecture Platform
08:40-09:30 09:40-10:30 10:40-11:30 11:40-12:30 13:40-14:30 14:40-15:30 15:40-16-30	PRACTICAL EXAM  STUDY TIME STUDY TIME STUDY TIME	Instructor Name	Lecture Platform
08:40-09:30 09:40-10:30 10:40-11:30 11:40-12:30 13:40-14:30 14:40-15:30	PRACTICAL EXAM  STUDY TIME  STUDY TIME	Instructor Name	Lecture Platform
08:40-09:30 09:40-10:30 10:40-11:30 11:40-12:30 13:40-14:30 14:40-15:30 15:40-16-30 16:40-17-30	PRACTICAL EXAM  STUDY TIME  STUDY TIME  STUDY TIME  STUDY TIME  STUDY TIME	Instructor Name	Lecture Platform
08:40-09:30 09:40-10:30 10:40-11:30 11:40-12:30 13:40-14:30 14:40-15:30 15:40-16-30 16:40-17-30	PRACTICAL EXAM  STUDY TIME STUDY TIME STUDY TIME	Instructor Name	Lecture Platform
08:40-09:30 09:40-10:30 10:40-11:30 11:40-12:30 13:40-14:30 14:40-15:30 15:40-16-30 16:40-17-30 Tuesday 08:40-09:30	PRACTICAL EXAM  STUDY TIME  STUDY TIME  STUDY TIME  STUDY TIME  STUDY TIME  15 October	Instructor Name	Lecture Platform
08:40-09:30 09:40-10:30 10:40-11:30 11:40-12:30 13:40-14:30 14:40-15:30 15:40-16-30 16:40-17-30	PRACTICAL EXAM  STUDY TIME  STUDY TIME  STUDY TIME  STUDY TIME  STUDY TIME	Instructor Name	Lecture Platform

11:40-12:30			
13:40-14:30	STUDY TIME		
14:40-15:30	STUDY TIME		
15:40-16-30	STUDY TIME		
16:40-17-30	STUDY TIME		
Wednesday	16 October		
08:40-09:30			
09:40-10:30	V2C4 COMMUTTEE EVANA		
10:40-11:30	Y3C1 COMMITTEE EXAM		
11:40-12:30			
13:40-14:30	STUDY TIME		
14:40-15:30	STUDY TIME		
15:40-16-30	STUDY TIME		
16:40-17-30	STUDY TIME		
Thursday	17 October		
08:40-09:30			
09:40-10:30	Y2C1 COMMITTEE EXAM		
10:40-11:30			
11:40-12:30			
13:40-14:30	Committee Exam Feedback Session	Dr. Mümtaz Güran Dr. Halil Eren Sakallı	IN CLASS
14:40-15:30			
15:40-16-30			
16:40-17-30			
Friday	18 October		
08:40-09:30			

09:40-10:30		
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