

**YEDİTEPE UNIVERSITY  
FACULTY OF MEDICINE  
PHASE II  
ACADEMIC PROGRAM BOOK  
2022 – 2023**

**Student's;**  
**Name** : .....  
**Number** : .....

# YEDİTEPE UNIVERSITY

## FACULTY OF MEDICINE

### PHASE II

<b>CONTENTS</b>	<b>Page</b>
COORDINATION COMMITTEE .....	3
ACADEMIC CALENDAR 2022 – 2023.....	4
<b><u>UNDERGRADUATE MEDICAL EDUCATION PROGRAM</u></b>	
AIM OF MEDICAL EDUCATION PROGRAM .....	6
INSTRUCTIONAL DESIGN of PRECLINICAL YEARS.....	8
DESCRIPTION and CONTENT of PHASE II.....	10
AIM and LEARNING OBJECTIVES of BASIC MEDICAL SCIENCES II .....	12
(BMS-II) (MED 203) .....	12
DESCRIPTION of INTRODUCTION to CLINICAL PRACTICE .....	13
(ICP MED 102, 202, 303).....	13
AIM and LEARNING OBJECTIVES of INTRODUCTION to .....	14
CLINICAL PRACTICE II (ICP-II) (MED 202) .....	14
AIM and LEARNING OBJECTIVES of .....	21
SCIENTIFIC RESEARCH and PROJECT – II.....	21
ASSESSMENT PROCEDURE .....	22
EXAM RULES.....	25
FREE ELECTIVE COURSES .....	26
A SHORT GUIDE for STUDENTS to PROBLEM-BASED LEARNING (PBL).....	35
PBL STUDENT ASSESSMENT FORM* .....	37
SPECIFIC SESSIONS / PANELS.....	38
Committee Evaluation Session.....	39
Program Improvement Session.....	40
INDEPENDENT LEARNING .....	41
WEEKLY COURSE SCHEDULE and LOCATIONS* (MED 203, MED 202).....	42
RECOMMENDED TEXTBOOKS .....	44
COMMITTEE I - CARDIOVASCULAR SYSTEM.....	45
COMMITTEE II - RESPIRATORY SYSTEM .....	56
COMMITTEE III - GASTROINTESTINAL SYSTEM and METABOLISM.....	66
COMMITTEE IV - NERVOUS SYSTEM DISTRIBUTION of LECTURE HOURS.....	78
COMMITTEE V - UROGENITAL and ENDOCRINE SYSTEMS .....	91
STUDENT COUNSELING .....	105
CONTACT INFORMATION .....	110

## **COORDINATION COMMITTEE**

### **(TEACHING YEAR 2022 – 2023)**

Burcu GEMİCİ BAŞOL, PhD Assoc. Prof. (Coordinator)

Alev CUMBUL, PhD Assist. Prof. (Co-Coordinator)

Edibe BİLİŞLİ KARA, DVM Lecturer (Co-Coordinator)

Müge KOPUZ ALVAREZ NOVAL, PhD Assist. Prof. (Co-Coordinator)

Deniz KIRAÇ, PhD Assoc. Prof. (Co-Coordinator)

Soner DOĞAN, PhD Prof. (Co-Coordinator)

## **ICP-II COORDINATION COMMITTEE**

Özlem TANRIÖVER, MD MPH Prof.

A. Arzu AKALIN, MD MSc Assist. Prof. (Co-Coordinator)

## **ELECTIVE COURSES COORDINATION COMMITTEE**

A. Arzu AKALIN, MD MSc Assist. Prof. (Coordinator)

Seda GÜLEÇ, PhD Assoc. Prof. (Co-Coordinator)

## **PBL COORDINATION COMMITTEE**

Serdar ÖZDEMİR, MD PhD Assist. Prof. (Coordinator)

Deniz KIRAÇ, PhD Assoc. Prof. (Co-Coordinator)

Güldal İZBIRAK, Prof. (Co-Coordinator)

## ACADEMIC CALENDAR 2022 – 2023

### MED 203 BASIC MEDICAL SCIENCES II

#### **COMMITTEE I CARDIOVASCULAR SYSTEM (6 Weeks)**

Beginning of Committee: September 12, 2022 Monday  
End of Committee: October 21, 2022 Friday  
Committee Exam: October 17-21, 2022 (Theoretical and Practical Exams)  
Committee Exam Discussion: October 21, 2022 Friday

#### **COMMITTEE II RESPIRATORY SYSTEM (6 Weeks)**

Beginning of Committee: October 24, 2022 Monday  
End of Committee: December 2, 2022 Friday  
Committee Exam: November 28-December 2, 2022 (Theoretical and Practical Exams)  
Committee Exam Discussion: December 2, 2022 Friday  
**National Holiday: October: 29, 2022 Saturday**  
**Commemoration of Atatürk: November 10, 2022**

#### **COMMITTEE III GASTROINTESTINAL SYSTEM (7 Weeks)**

Beginning of Committee: December 5, 2022 Monday  
End of Committee: January 20, 2023 Friday  
Committee Exam: January 16-20, 2023 (Theoretical and Practical Exams)  
Committee Exam Discussion: January 20, 2023  
**New Year: January 1, 2023 Sunday**

### **MIDTERM BREAK: JANUARY 23- FEBRUARY 3, 2023**

#### **COMMITTEE IV NERVOUS SYSTEM (8 Weeks)**

Beginning of Committee: February 6, 2023 Monday  
End of Committee: March 31, 2023 Friday  
Committee Exam: March 27-31, 2023 (Theoretical and Practical Exams)  
Committee Exam Discussion: March 31, 2023 Friday  
**Physicians' Day: March 14, 2023, Tuesday**

#### **COMMITTEE V ENDOCRINE and UROGENITAL SYSTEMS (9 Weeks)**

Beginning of Committee: April 3, 2023 Monday  
End of Committee: June 2, 2023 Friday  
Committee Exam: May 29-June 6, 2023 (Theoretical and Practical Exams)  
Committee Exam Discussion: June 2, 2023 Friday  
**Feast of Ramadan: April 20-23, 2023**  
**National Holiday: April 23, 2023, Sunday**  
**Labor's Day: May 1, 2023 Monday**  
**National Holiday: May 19, 2023 Friday**

Make-up Exam: June 7-9, 2023 Monday-Wednesday  
Final Exam: June 20, 2023 Tuesday  
Incomplete Exam: July 20, 2023 Tuesday

### **ELECTIVE COURSES-Spring 2022-2023**

Introduction to Elective Courses	December 7, 2022	Wednesday
Beginning of Elective Courses	February 10, 2023	Friday
Midterm Exam	March 24, 2023	Friday
Make-up Exam	May 29-June 2, 2023	Monday-Friday
Final Exam	June 12-23, 2023	Monday-Friday
Incomplete Exam	July 3-14, 2023	Monday-Tuesday

### **MED 202 INTRODUCTION to CLINICAL PRACTICE II (ICP-II)**

Midterm Exam:	January 11-12, 2023	Wednesday-Thursday
Make-up Exam:	May 24, 2023	Wednesday
Final Exam:	June 5-7, 2023	Monday-Wednesday
Incomplete Exam:	July 21, 2023	Friday

**THE COORDINATION COMMITTEE MEETINGS**

1 <sup>st</sup> Coordination Committee Meeting:	October 20, 2022	Thursday
2 <sup>nd</sup> Coordination Committee Meeting: (With student participation)	January 10, 2023	Tuesday
3 <sup>rd</sup> Coordination Committee Meeting: (With student participation)	May 23, 2023	Thursday
4 <sup>th</sup> Coordination Committee Meeting:	July 11, 2023	Tuesday

# YEDİTEPE UNIVERSITY FACULTY OF MEDICINE

## AIM OF MEDICAL EDUCATION PROGRAM

\*“Consensus Commission Report” based on draft compiled at “*Workshop for Revision of Aim and Outcomes of Medical Education Program at Yeditepe University Faculty of Medicine*”

\*\*© 2011, Yeditepe University Faculty of Medicine

### AIM

The aim of medical education program ***is to graduate physicians*** who

- 1.0 **are aware of** the local and global health issues
- 2.0 **have acquired competence** in knowledge, skills and attitudes to manage and provide primary health care service
- 3.0 **know, apply** and **care** for ethical principles of the medical profession
- 4.0 **keep up with** current knowledge at national and international level
- 5.0 **are capable of** systematical thinking
- 6.0 **are** investigative and questioning
- 7.0 continually **renovate** and **improve** themselves
- 8.0 **are capable of** teamwork
- 9.0 **use** technology competently in medicine and related areas
- 10.0 **have** effective communication skills
- 11.0 **have** community leadership qualifications

## **YEDİTEPE UNIVERSITY FACULTY OF MEDICINE**

### **PROGRAM OUTCOMES OF MEDICAL EDUCATION**

YUTF - Undergraduate Medical Education Program was designed to provide our graduates with the competencies that are specified in the National Competencies List of medical graduates (UYYB)\*.

UYYB is a national document that indicates the expected/required competencies of the students who are at the stage of graduating from Medical Schools in Turkey.

You can find UYYB from the link: [https://www.yok.gov.tr/Documents/Kurumsal/egitim\\_ogretim\\_dairesi/Ulusal-cekirdek-egitimi-programlari/mezuniyet-oncesi-tip-egitimi-cekirdek-egitimi-programi.pdf](https://www.yok.gov.tr/Documents/Kurumsal/egitim_ogretim_dairesi/Ulusal-cekirdek-egitimi-programlari/mezuniyet-oncesi-tip-egitimi-cekirdek-egitimi-programi.pdf)

## **INSTRUCTIONAL DESIGN of PRECLINICAL YEARS**

In Phase I, II and III, the formation of committees is based on a thematic structure. This structure corresponds to organizational levels of human body such that macromolecule, organelle, cell, tissue, organ systems and finally introduction to pathogenesis.

- Phase I: Normal structure and function of human body at molecular, cellular, tissue and organ level.
- Phase II: Normal structure and function of human body at system and multi-system level, and introduction to pathogenesis.
- Phase III: Physiopathological and pathological processes in human body.

Besides this thematic structure, there is a continuous clinical skills education in Phase I, II and III, as “Introduction to Clinical Practice -I, -II and -III” courses.

Therefore, the core medical courses are;

- Phase I: MED 104 Basic Medical Sciences I, MED 102 Introduction to Clinical Practice I, MED 103 Anatomical Drawing,
- Phase II: MED 203 Basic Medical Sciences II, MED 202 Introduction to Clinical Practice II,
- Phase III: MED 302 Introduction to Clinical Sciences, MED 303 Introduction to Clinical Practice III.

The learning objectives of the phase include learning objectives of core courses. The learning objectives of committees include learning objectives of core courses’ components for the committee.

Phase II consists of five committees:

COMMITTEE I Cardiovascular System (6 weeks)  
COMMITTEE II Respiratory System (6 weeks)  
COMMITTEE III Gastrointestinal System (7 weeks)  
COMMITTEE IV Nervous System (8 weeks)  
COMMITTEE V Endocrine and Urogenital Systems (9 weeks)



## 2022-2023 CURRICULUM OF PHASE II

### YEDİTEPE UNIVERSITY FACULTY OF MEDICINE

CODE		SECOND YEAR	W	T	A	L	Y	E
MED	203	Basic Medical Sciences II	37	599		129		53
MED	202	Introduction to Clinical Practice II	34	5	12	18		5
MED	XXX	Free Elective Course <sup>1</sup> (SS)	14	28				2
Total Credits								60

The curriculum applies to 2021-2022 educational term. The duration of educational term for each year is shown in the table as total number of weeks. ECTS credits are the university credits of the courses in Yeditepe University Faculty of Medicine Undergraduate Medical Education Program. 1 ECTS=30 hours of workload including independent study hours per average student. GPA and cGPA calculations are based on ECTS credits.

<sup>1</sup>Free Elective Courses. At least one free elective course offered by the Faculty of Medicine or other faculties must be selected in an academic year. Free elective courses provided by Faculty of Medicine in the first three years: MED 611 Medical Anthropology, MED 612 Creative Drama I, MED 613 Medical Humanities, MED 614 Personal Trademark Development, MED 615 Innovation Management, MED 616 Medical Management and New Services Design Skills, MED 619 Entrepreneurship and Storytelling Techniques for Business Purposes, MED 620 Art, Culture and Life Styles, MED 621 Epidemiological Research and Evidence-Based Medicine, MED 622 Applications of Economics in Health Care, MED 623 Visual Presentation in Medicine, MED 627 Presentation of Medicine on Media, MED 628 Healthy Living, MED 629 Music and Medicine, MED 630 Health Law, MED 631 Creative Drama II, MED 632 Music Appreciation, MED 633 Communication with Hearing Impaired Patients in Turkish Sign Language, MED 634 Case Based Forensic Science, MED 635 Advanced Level Communication with Hearing Impaired Patients in Turkish Sign Language.

<sup>2</sup>Common Courses. These courses are obligatory in all programs of the university. The university credit values of the common courses are as stated by the University Senate. Except for HUM 103, these courses are not to be included in the GPA and cGPA calculations. Courses on Turkish Language and Culture for Foreigners (AFYA). Based on the result of Turkish Language Proficiency Exam, instead of TKL 201 (FS) and TKL 202 (SS) courses, international students will be requested to take the required ones from the AFYA 101 (FS), AFYA 102 (SS), AFYA 201 (FS) and AFYA 202 (SS) courses, designed for them. Each of these courses have credits as Y=3 and E=5. These courses are not to be included in the GPA and cGPA calculations.

T: Theoretical, A: Application, L: Laboratory, Y: Yeditepe University Credit, E: ECTS Credit	<b>Minimum Degree Requirements</b>	
NC: Non-Credit Course, FS: Fall Semester, SS: Spring Semester, W: Weeks.	<b>ECTS</b>	<b>360</b>
<b>Approval Date:</b>	<b>Number of courses</b>	<b>53</b>

\* Please see \* Please see [https://med.yeditepe.edu.tr/sites/default/files/curriculum\\_2022-23\\_ytf\\_tr.docx](https://med.yeditepe.edu.tr/sites/default/files/curriculum_2022-23_ytf_tr.docx) for total curriculum of Med Faculty.

## **DESCRIPTION and CONTENT of PHASE II**

Normal structure and function at system and multi-system level, introduction to pathology.

Cardiovascular System, Respiratory System, Gastrointestinal System, Nervous System, Endocrine and Urogenital System, Introduction to Clinical Practice- II (ICP- II), Scientific Research and Project, Problem Based Learning, Elective Courses

Anatomy, Physiology, Biochemistry, Histology & Embryology, Microbiology, Immunology, Biophysics, Medical Biology, Pathology, Pharmacology, Biostatistics, Family Medicine, Medical Education, Elective Courses, Scientific Research and PROJECT-II,

## **AIM and LEARNING OBJECTIVES of PHASE II**

### **AIMS**

**1. to convey** knowledge on biophysical, biological, anatomical, embryological, histological, physiological, biochemical, microbiological and immunological conditions of systems, introductory information on tissue damage and neoplasia related to systems, and basic knowledge at the introductory level for clinics, **to equip with** basic clinical skills (interventional or non-interventional) required for the practice of medical profession, and skills for making scientific research presentation

**2. to convey** complementary educational experiences by improving biopsychosocial approach medical practice

### **LEARNING OBJECTIVES**

At the end of this phase, student should be able to:

#### **KNOWLEDGE**

1.0 explain basic medical knowledge for cardiovascular system, respiratory system, circulation, hemodynamics, urogenital system, gastrointestinal system, nervous system, endocrine system, immune system and immunologic response, biostatistics subjects and elective courses.

2.0 explain the operational principles, interactions and relation of the systems in the body.

3.0 of clinical conditions;

3.1. explain mechanisms of damages formed at molecular, cell, tissue, organ, system and multi-system level,

3.2. describe the structural changes caused,

3.3. list developmental progress in time.

4.0 Among factors that pose risk to individual and community health;

4.1. list biological agents,

4.2. explain their mechanisms of action and outcomes.

5.0 explain basic principles of evidence-based medicine applications.

6.0 know how to discuss scientific articles in the view of literature

7.0 comprehend the biopsychosocial approach in medicine.

8.0 know how to make presentation of a scientific research.

#### **SKILLS**

1.0 apply basic interventional and non-interventional processes for taking individual preventive measures, drug application and diagnosis or treatment.

2.0 apply basic laboratory techniques and use equipment.

3.0 prepare a presentation of a scientific research

## **AIM and LEARNING OBJECTIVES of BASIC MEDICAL SCIENCES II (BMS-II) (MED 203)**

### **AIM**

**To convey** knowledge on biophysical, biological, anatomical, embryological, histological, physiological, biochemical, biostatistics, microbiological and immunological conditions of systems, introductory information on tissue damage and neoplasia related to systems, and basic knowledge at the introductory level for clinics, skills for scientific article presentation

### **LEARNING OBJECTIVES**

At the end of this course, student should be able to:

### **KNOWLEDGE**

- 1.0 explain basic medical knowledge for cardiovascular system, respiratory system, circulation, hemodynamics, urogenital system, gastrointestinal system, nervous system, endocrine system, immune system and immunologic response, biostatistics subjects.
- 2.0 explain the operational principles, interactions and relation of the systems in the body.
- 3.0 of clinical conditions;
  - 3.1. explain mechanisms of damages formed at molecular, cell, tissue, organ, system and multi-system level,
  - 3.2. describe the structural changes caused,
  - 3.3. list developmental progress in time.
- 4.0 Among factors that pose risk to individual and community health;
  - 4.1. list biological agents,
  - 4.2. explain their mechanisms of action and outcomes.
- 5.0 explain basic principles of evidence-based medicine applications.
- 6.0 know how to discuss scientific articles in the view of literature
- 7.0 know how to make presentation of a scientific research.
- 8.0 comprehend the biopsychosocial approach in medicine.

### **SKILLS**

- 1.0. apply basic laboratory techniques and basic medical examination.
- 2.0 prepare a presentation of a scientific research

## **DESCRIPTION of INTRODUCTION to CLINICAL PRACTICE I, II and III (ICP-I,-II,-III) (MED 102, MED 202, MED 303)**

### **AIM of ICP PROGRAM**

The aim of Introduction to Clinical Practice Program is to equip the students with basic medical skills and attitudes, in areas such as history taking regarding to systems and in general, physical and mental examination in simulated environments in pre-clinical period and to give the students opportunity to develop skills by applying non –invasive or invasive procedures on the mannequins before encountering with real patients.

### **Description**

ICP is a three year longitudinal course that aims to introduce students to the concepts and main elements of medical practice. It will also be an introduction to the medical profession as a whole and will provide a foundation for clinical practice. The course provides knowledge, cognitive and motor skills and experience in fundamental processes and aspects of medical practice. It involves the application of scientific theory, quality assurance and evidence-based best practice protocols.

### **Credit Facility**

This course has 5 ECTS credits for each of the first three years and all of the students are required to pass this course in order to pass the year.

### **Content of the ICP I-II-III**

First year medical students gain knowledge on First Aid approaches, Basic Knowledge on Infection Control and Standard Precautions, develop skills in Basic Life Support, Patient/Casualty Transportation and Bandaging Techniques regarding to First Aid and handwashing, wearing sterile gloves, wearing masks, assessing vital signs. They also acquire basic knowledge on communication and experience patient-doctor encounter with simulated patients (SP's)\*.

The second year's ICP Program consist of modules like nasogastric intubation; bladder catheterization; intramuscular, subcutaneous, intradermal and intravenous injections; intravenous catheterization as well as intraarterial blood sampling.

In the third year medical students practice with SP's clinical skills like history taking and physical examination focused on body systems and in general and also mental examination. They also gain clinical skills such as suturing techniques and Advanced Cardiac Life Support.

### **Clinical Skills Laboratory**

The Clinical Skills Laboratory is designed for teaching and assessing students at undergraduate level (during the preclinical period from first-year to third year). The lab provides learners with the ideal setting to practice the clinical skills of history taking, physical examination, communication, and gives opportunities to practice invasive and non invasive procedural skills on mannequins.

Each OSCE room is equipped with video cameras and microphones to record the encounter. An observation area at the center of the lab allows faculty and students to observe the encounters live or view digital recordings for subsequent analysis.

### **\*Simulated Patients (SPs)**

The simulated patient encounters facilitate transfer of the gained theoretical knowledge to practice in simulated environments. SPs are usually, but not necessarily, lay people who are trained to portray a patient with a specific condition in a realistic way, sometimes in a standardized way (where they give a consistent presentation which does not vary from student to student). SPs are used for teaching and assessment of consultation and clinical/physical examination skills, in simulated teaching environments or in situ. (Cleland JA, Abe K, Rethans JJ. *The use of simulated patients in medical education: AMEE Guide No 42. Med Teach. 2009 Jun;31(6):477-86. doi: 10.1080/01421590903002821. PMID: 19811162.*)

### **Assessment**

The Assessment procedure of ICP is given in the Assessment Table in this booklet.

### **Rules for Attendance of the Students**

Students are grouped into 4 or 5 and group lists are announced to the class and also displayed in the ICP Lab announcement board at the beginning of the year. Any changes to practical groups on a week by week basis, will only be considered in exceptional situations such as a medical one. Any changes must be requested by a petition along with relevant documentation to the deanary. Any change in sessions will only be accepted interchangeably with another student in another group based on availability of work spaces and course coordinator's discretion (based on evidence provided).

Students are required to follow the rules of professional ethics in the laboratory at any time.

## **Program Evaluation**

Each Semester students are required to fill out a feedback form according the ICP Program. When an OSCE is conducted both students and faculty members complete a written evaluation of the event for the improvement of the course and OSCE.

## **AIM and LEARNING OBJECTIVES of INTRODUCTION to CLINICAL PRACTICE II (ICP-II) (MED 202)**

### **AIM**

1. **To equip with** basic interventional skills (nasogastric tube and urinary catheter application; intramuscular, intradermal and subcutaneous injection, intravenous cannulation, intraarterial Blood Sampling).

### **LEARNING OBJECTIVES**

**At the end of this phase, student should be able to:**

### **KNOWLEDGE**

1. **count** nasogastric tube types, application indications, contraindications and the steps in application procedure.
2. **count** urinary catheter types, application indications, contraindications and the steps in application.
3. **count** application indications, contraindications and the steps in application procedure of intramuscular, intradermal and subcutaneous injections.
4. **count** application indications, contraindications and the steps in application procedure of intravenous injections and intravenous cannulation.
5. **count** application indications, contraindications and the steps in application procedure of intraarterial blood sampling

### **SKILLS**

1. **perform** nasogastric tube application on an adult model in accordance with the skill procedure.
2. **perform** urinary catheter application in an adult female and male model in accordance with the skill procedure.
3. **perform** intramuscular, intradermal, subcutaneous and intravenous injection as well as intravenous cannulation applications in an adult model in accordance with the skill procedure.
4. **perform** intramuscular, intradermal, subcutaneous and intravenous injection in an adult model in accordance with the skill procedure.
5. **perform** intravenous injection and intravenous cannulation applications in an adult model in accordance with the skill procedure.
6. **perform** intraarterial blood sampling in an adult model in accordance with the skill procedure.
7. **describe** the process to be carried out to the patient before any intervention.

### **ATTITUDE**

1. **value** the importance of informed consent
2. **pay** attention to patient privacy
3. **value** the importance of not exceeding the limits of his/her own competency level.
4. **pay** attention to follow laboratory rules
5. **pay** attention to keep patient records regularly and properly
6. **apply** hand hygiene before and after each procedure
7. **apply** standard precaution before, during and after each procedure

## EARLY CLINICAL EXPOSURE

### **Description:**

The training program includes Phase II students' learning activities in clinical settings including primary care during the Spring semester.

### **Aim:**

The aim of "Early Clinical Exposure" Educational Program is the observation of doctor-patient communication on the job in the clinical settings as well as in primary care by Phase II students, and after interviewing a patient.

### **Learning Environment:**

1. Yeditepe University Hospital (Kozyatağı)
  - a. Outpatient Clinic
  - b. Inpatient Clinic
  - c. Emergency Department
2. Yeditepe University Hospital (Koşuyolu)
  - a. Outpatient Clinic
  - b. Inpatient Clinic
  - c. Emergency Department
3. Family Health Center (FHC)

### **Duration:**

The education program is spread over a total of 5 weeks.

### **Objectives of the Training:**

Students who complete the training program will be able to;

#### **Knowledge:**

- explain the steps of the patient-doctor interview.
- explain the history taking steps from the patients.
- explain the examination of vital signs and systemic examination.
- explain the role of clinical settings in daily functioning and health personnel, including primary care.
- list the administrative units in hospitals (consultant, hospital director, nursing director, quality management, patient safety unit) and function.
- explain the components of medical records.

#### **Skills:**

- start the interview with the patient.
- ask the patient's socio-demographic characteristics and record.
- question the main complaint and records.
- take a medical history from the patient.
- keep medical records on patients' files.
- inform the patient about the basic steps of patient-physician interview.

#### **Attitude:**

- develop awareness to act respectful and attentive to patients, their relatives and healthcare providers.

#### **Content:**

- Meeting with the patient, learning problems, giving information about the process
- Observing the history taking and physical examination
- Observing the planning of tests for diagnosis
- Observing the planning stages of treatment
- Observing the process of admission to the hospital
- Observing the Clinical process
- Observing the work area of health care workers in the hospital
- Observing certain units and functions on-site in the hospital

### **Instructional Methods:**

Living an Experience -Field Trip– Clinical Setting (each student should encounter at least four patients in being presence twice in the clinical setting)

### **Educational Materials:**

Checklists for the patient-physician interview (to be used during student observation)

### **Assessment**

These assessments are made by the Coordinators of Early Clinical Experience.

**The effect of ECE educational program will be considered as 10% of the ICP score.**

**Organization of Student Groups:**

The student cycle of Phase II will be in synchronization with the ICP program.

Phase II coordinator will send the student list for the scheduled hours of training a week before the training to ECE coordinators.

Students should be in the clinical setting on the day of training during the ICP II Program.

	Group A	Group B	Group C	Group D	Group E
16.Mar.2023	ICP	SRPC	FHC	Yeditepe University Hospital, Koşuyolu	Yeditepe University Hospital, Kozyatağı
23.Mar.2023	SRPC	ICP	Yeditepe University Hospital, Koşuyolu	Yeditepe University Hospital, Kozyatağı	FHC
06.Apr.2023	FHC	Yeditepe University Hospital, Kozyatağı	ICP	SRPC	Yeditepe University Hospital, Koşuyolu
13.Apr.2023	Yeditepe University Hospital, Koşuyolu	FHC	Yeditepe University Hospital, Kozyatağı	ICP	SRPC
03.May.2023	Yeditepe University Hospital, Kozyatağı	Yeditepe University Hospital, Koşuyolu	SRPC	FHC	ICP



MED 202 ICP-II			
DAY	HOUR	SUBJECT	LECTURER
15-SEP-2022 THURSDAY	14:00-17:50	CSL: Intramuscular Injection / Intradermal / Subcutan Injection Group D	Özlem Tanrıöver / Arzu Akalın/ Özkan Eraslan
22-SEP-2022 THURSDAY	14:00-17:50	CSL: Intramuscular Injection / Intradermal / Subcutan Injection Group E	Özlem Tanrıöver / Arzu Akalın/ Gökhan Gencer
29-SEP-2022 THURSDAY	14:00-17:50	CSL: Intramuscular Injection / Intradermal / Subcutan Injection Group A	Özlem Tanrıöver / Arzu Akalın/ Özkan Eraslan
06-OCT-2022 THURSDAY	14:00-17:50	CSL: Intramuscular Injection / Intradermal / Subcutan Injection Group B	Özlem Tanrıöver / Arzu Akalın/ Pinar Tura
13-OCT-2022 THURSDAY	14:00-17:50	CSL: Intramuscular Injection / Intradermal / Subcutan Injection Group C	Özlem Tanrıöver / Arzu Akalın/ Pinar Tura
27-OCT-2022 THURSDAY	14.00-17.50	Intravenous Cannulation Group E	Özlem Tanrıöver/ Arzu Akalın/ Gökhan Gencer
03-NOV-2022 THURSDAY	14.00-17.50	Intravenous Cannulation Group A	Özlem Tanrıöver/ Arzu Akalın/ Erman Uygun

<b>10-NOV-2022 THURSDAY</b>	14.00-17.50	<b>Intravenous Cannulation Group B</b>	Özlem Tanrıöver/ Arzu Akalın/ Alp Kayıran
<b>17-NOV-2022 THURSDAY</b>	14.00-17.50	<b>Intravenous Cannulation Group C</b>	Özlem Tanrıöver/ Arzu Akalın/ Alp Kayıran
<b>24-NOV-2022 THURSDAY</b>	14.00-17.50	<b>Intravenous Cannulation Group D</b>	Özlem Tanrıöver/ Arzu Akalın/ Abuzer Kekeç
<b>08-DEC-2022 THURSDAY</b>	14.00-17.50	<b>CSL: Nasogastric Administration Group C</b>	Özlem Tanrıöver/ Arzu Akalın/ Özkan Eraslan
<b>15-DEC-2022 THURSDAY</b>	14.00-17.50	<b>CSL: Nasogastric Administration Group D</b>	Özlem Tanrıöver/ Arzu Akalın/ Özkan Eraslan
<b>22-DEC-2022 THURSDAY</b>	14.00-17.50	<b>CSL: Nasogastric Administration Group E</b>	Özlem Tanrıöver/ Arzu Akalın/ Hande Candemir
<b>29-DEC-2022 THURSDAY</b>	14.00-17.50	<b>CSL: Nasogastric Administration Group A</b>	Özlem Tanrıöver / Arzu Akalın/ Cem Şimşek
<b>03-JAN-23 TUESDAY</b>	14.00-14.50	<b>REVIEW GROUP A</b>	Özlem Tanrıöver / Arzu Akalın
	15.00-15.50	<b>REVIEW GROUP E</b>	Özlem Tanrıöver / Arzu Akalın
	16.00-16.50	<b>REVIEW GROUP C</b>	Erman Uygun / Alp Kayıran
	17.00-17.50	<b>REVIEW GROUP D</b>	Erman Uygun / Alp Kayıran
<b>09-JAN-23 MONDAY</b>	10.00-10.50	<b>REVIEW GROUP B</b>	Cem Şimşek/Pınar Tura

<b>05-JAN-2023 THURSDAY</b>	14.00-17.50	<b>CSL: Nasogastric Administration Group B</b>	Özlem Tanrıöver/ Arzu Akalın/ Cem Şimşek
<b>11-12-JAN-2023</b>	09:00-17:50	<b>OSCE-I MIDTERM</b>	
<b>09-FEB-2023 THURSDAY</b>	14:0-17:50	<b>Intraarterial Blood Sampling Group D</b>	Mehmet Akif Öztürk/Tijen Alkan Bozkaya/ Seha Akduman
<b>16-FEB-2023 THURSDAY</b>	14:00-17:50	<b>Intraarterial Blood Sampling Group E</b>	Mehmet Akif Öztürk/Tijen Alkan Bozkaya/ Seha Akduman
<b>23.FEB.2023 THURSDAY</b>	14:00-17:50	<b>Intraarterial Blood Sampling Group A</b>	Mehmet Akif Öztürk/Seha Akduman/Özlem Durmuş Arın
<b>2.MAR.2023 THURSDAY</b>	14:00-17:50	<b>Intraarterial Blood Sampling Group B</b>	Mehmet Akif Öztürk/ Seha Akduman/Özlem Durmuş Arın
<b>09-Mar-23 THURSDAY</b>	14:00-17:50	<b>Intraarterial Blood Sampling Group C</b>	Mehmet Akif Öztürk/ Seha Akduman/Özlem Durmuş Arın
<b>16-Mar-23 THURSDAY</b>	14:00-17:50	<b>Bladder Catheterization Group A</b>	ArzuAkalın/Erman Uygun / Abuzer Kekeç
<b>23-Mar-23 THURSDAY</b>	14:00-17:50	<b>Bladder Catheterization Group B</b>	ArzuAkalın/Erman Uygun / Abuzer Kekeç

<b>06-APR-2023 THURSDAY</b>	14:00-17:50	<b>Bladder Catheterization Group C</b>	Arzu Akalın/Pınar Tura/Mustafa Yüksel
<b>13.APR.2023 THURSDAY</b>	14:00-17:50	<b>Bladder Catheterization Group D</b>	Arzu Akalın/Hande Candemir/Mustafa Yüksel
<b>03.May.2023 WEDNESDAY</b>	14:00-17:50	<b>Bladder Catheterization Group E</b>	Arzu Akalın/Hande Candemir/Gökhan Gencer
<b>04-May-23 THURSDAY</b>	14:00-15:50	<b>ICP REVIEW Group A</b>	Hande Candemir
<b>04.May.2023 THURSDAY</b>	16:00-17:50	<b>ICP REVIEW Group B</b>	Gökhan Gencer
<b>08-May-23 MONDAY</b>	14:00-15:50	<b>ICP REVIEW Group E</b>	Özlem Tanrıöver
<b>09-May-23 TUESDAY</b>	14:00-15:50	<b>ICP REVIEW Group C</b>	Arzu Akalın
<b>11-May-23 THURSDAY</b>	16:00-17:50	<b>ICP REVIEW Group D</b>	Abuzer Kekec
<b>Midterm Exam: January 11-12, 2023 Wednesday-Thursday</b> <b>Make-up Exam: May 24, 2023 Wednesday</b> <b>Final Exam: June 5-7, 2023 Monday-Wednesday</b> <b>Incomplete Exam: July 21, 2023 Friday</b>			

## **AIM and LEARNING OBJECTIVES of SCIENTIFIC RESEARCH and PROJECT – II**

### **AIM**

The aim of Scientific Research and PROJECT – II, is to equip second year medical students to discuss scientific articles in the view of literature and to make presentation of a scientific research.

### **ASSESSMENT PROCEDURE:**

For the assessments of the medical students for the scientific research and PROJECT - II, it is calculated out of 100 points; 25 points will be graded from abstract presentations, 62.5 points will be graded from whole article presentations and 12.5 points will be graded from your Small Group Study (SGS) performances.

The constraints of the small review assignment will be discussed in Small Group Study hours.

Scientific Research and PROJECT-II course has 3% contribution to Term Score (TS).

The student list for small group studies will be announced during the first week of educational year. Please note that it is mandatory to attend to Small Group Study hours in the assigned group hours.

## **ASSESSMENT PROCEDURE**

The Assessment Procedure of the Phase II covers exams and scores and their abbreviations that shown below.

### 1.0. Exams:

- Committee Exam (CE)
- Mid-term Exam (MTE)
- Final Exam (FE)
- Incomplete Exam (ICE)
- Make-up Exam (MUE)

### 2.0. Scores\*:

- Committee Score (CS)
- Committees Mean Score (CMS)
- Introduction to Clinical Practice Score (ICPS)
- Anatomical Drawing Score (ADS)
- Common Compulsary Course Score (CCCSs)
- Elective Course Score (ECSs)
- Scientific Research and PROJECT Score (SRPCS)
- Final Exam Score (FES)
- Incomplete Exam Score (ICES)
- Term Score (TS)

\* All scores have a range of 0-100 points.

Assessment approaches, assessment methods and assessment tools, that related with the exam and score types, are shown below table.

Assessment Approaches	Assessment Methods	Question Types / Assessment Tools	Exams	Derived Scores
Knowledge-based Assessment	WE: Written Examination	MCQ: Multiple Choice Questions	CE, MTE, FE, ICE	CS, ICPS, FES, ICES, ECSs, SRPCS
		SbMCQ: Scenario-based MCQs	CE, MTE, FE, ICE	CS, ICPS, FES, ICES
		FSAQ: Fill-in-the-Blank Short Answer Questions	MUE	CS
Competency-based Assessment	OSCE: Objective Structured Clinical Examination	OSCE Checklist		ICPS
	OSPE: Objective Structured Practical Examination	OSPE Checklist		CS
	LPE: Laboratory Practical Exam	LPE Checklist FSAQ: Fill-in-the-Blank Short Answer Questions* MCQ: Multiple Choice Questions* SEQ: Short Essay Questions*		CS
Performance-based Assessment	PWPE: Review Writing and Presenting Evaluation	PWPE Checklist		ECSs
	AID: Anatomical Images Drawing			ADS
	PBL-P: Evaluation of PBL Student's Performance	PBL Student Evaluation Form		CS

Exams Information (MED 202, MED 203)	
<b>CE</b>	For the proportional correspondence of individual learning objectives, please see the committee's assessment matrix table/page.
<b>MTE<sub>ICP</sub></b>	MTE <sub>ICP</sub> consists of MCQs to assess the theoretical part of the ICP program.
<b>FE</b>	FE consists of 200 MCQs. For the proportional contribution of each committee, please see the committee's question distribution table/page.
<b>ICE</b>	ICE consists of 200 MCQs. For the proportional contribution of each committee, please see the committee's question distribution table/page.
<b>MUE<sub>IBS</sub></b>	MUE will be held only twice in a term. MUE consists of FSAQs. The number of FSAQs is half of the relevant exam. MUE content will be developed by the coordination committees.

Scores Information (MED 202, MED 203, MED 103, HUM 103, TKL 201, TKL 202, HTR 301, HTR 302, Elective Courses)	
<b>CS</b>	The committee score is based on various question types/numbers and/or assessment tools (MCQ, SbMCQ or Checklists). Please see the committee's assessment matrix table/page for the specifications. The contribution of students' performance during PBL sessions to CSs of Committee II, III, IV and V is <b>5%</b> .
<b>CMS</b>	= Average of CSs
<b>ICPS</b>	= 10% ECE+45% MT OSCE + 45% Final OSCE
<b>ADS</b>	= (70% AID <sub>AD</sub> ) + (30% FE <sub>AD</sub> )
<b>CCCSs</b>	= Score information will be announced by Course Coordinator.
<b>ECSs</b>	= Score information is shown on pages of Elective Courses in the APB.
<b>SRPCS</b>	= Score information is shown on the assessment page of Scientific Research and Projects
<b>FES</b>	= Final Exam Score
<b>ICES</b>	= Incomplete Exam Score
<b>TS</b> for students, <u>who are exempted from FE</u>	= 97% of CMS + 3% of SRPCS
<b>TS</b> for students, <u>who are not exempted from FE</u>	= 97% of (60% of CMS + 40% of FES or ICES) + 3% of SRPCS

Pass or Fail Calculations of the Courses
<b>Basic Medical Sciences II (MED 203)</b>
<b>Pass;</b> $TS \geq 60$
<b>Fail;</b> $FES < 50$ ( <u>barrier point</u> ), $ICES < 50$ ( <u>barrier point</u> ), or/and $TS < 60$
The student is <u>exempted from FE</u> , if the CMS is $\geq 80$ and all CSs are $\geq 60$
The FE and ICE <u>barrier point</u> is <u>not applied</u> to the students whose all CSs are $\geq 60$
<b>Introduction to Clinical Practice II (MED 202)</b>
<b>Pass;</b> $ICPS \geq 60$
<b>Fail;</b> $ICPS < 60$
<b>Anatomical Drawing (MED 103)</b>
<b>Pass;</b> $ADS \geq 60$
<b>Fail;</b> $ADS < 60$
<b>Common Compulsory Courses (HUM 103, TKL 201, TKL 202, HTR 301, HTR 302, AFYA 101, AFYA 102)</b>
<b>Pass;</b> $CCCSs \geq 50$
<b>Fail;</b> $CCCSs < 50$

**Elective Courses**

(MED 611, MED 612, MED 613, MED 614, MED 615, MED 616, MED 619, MED 620, MED 621, MED 622, MED 623, MED 627, MED 628, MED 629, MED 630, MED 631, MED 632, MED 633, MED 634, MED635)

*The Assessment Procedure of the Phase II will be announced and explained in the introductory session at the beginning of the academic year*

**Definitions of the Assessment Methods and Question Types**

**MCQ** consists of a question, followed by five plausible alternative responses from which the student has to select the correct one.

**SbMCQ** is a kind of multiple-choice questions. That they test knowledge in a far more applied, in-depth, sense. SbMCQ is based on a clinical, research or daily life scenario.

**SEQ** is a written examination that requires an answer in a sentence, paragraph, or short composition.

**FSAQ**, Fill-in-the-Blank Short Answer Questions are typically composed of a brief prompt that demands a written answer that varies in length from one or two words to a sentence.

**OE** is a practice in many schools of medicine and disciplines, where an examiner poses questions to the student in spoken form. The student has to answer the question in such a way as to demonstrate sufficient knowledge of the subject to pass the exam.

**OSCE** describes a form of competency-based assessment used to measure a student's clinical competence. During an OSCE, students are observed and evaluated as they go through a series of stations in which they perform professional skills on mannequins or interview, examine and treat simulated patients who present with some type of medical problem.

**OSPE** is used as an objective instrument for the assessment of laboratory exercises in preclinical sciences. It was adapted from the objective structured clinical examination (OSCE). OSPE has implemented in similarly conditions with OSCE.

**LPE** is included as it has been a traditional assessment format in many schools of medicine – particularly in disciplines such as anatomy, physiology, pathology and biology. Various local terms are used to describe this Assessment method including 'Spot', 'Steeplechase', 'Timed stations' or 'Bellringer'.

**Grades**

A letter grade is given to the students as a success grade, from the numerical values of the grades given by the relevant teaching staff for each course they take, taking into account the practice, laboratory and similar studies in the semester and examinations and academic activities.

Grades and Letter grades are shown for MED-coded courses\* in the following table:

Grades	Letter Grades
90-100	AA
80-89	BA
70-79	BB
65-69	CB
60-64	CC
59 or less	FF (Fail in the context of "Pass or Fail Calculations of the Courses" table pp.31)
0	FA (Fail due to nonattendance to the courses)

\* Please see <https://med.yeditepe.edu.tr/tr/mezuniyet-oncesi-tip-egitimi> for more information.



## EXAM RULES

- **Seating-** Students will be seated by the exam observers or proctors. Students are not allowed to change their seats without permission.
- **Electronics** – During examinations or tests, students are prohibited from using electronic devices or any other means of communication and recording that have not been approved beforehand. All electronic devices are prohibited. Anyone who fails to comply with these regulations may be charged with academic fraud.
- **Absence** – No additional time will be given to students who are absent for part of the exam, regardless of the reason for their absence.
- **Scratch Paper** – Students are not allowed to bring scratch paper into the exam room.
- **Meaning of Questions** – Students may not consult the supervisor as to the meaning of any question.
- **Signature** – Students must sign their multiple-choice answer sheets and/or written-answer sheets.
- **Other activities requiring disciplinary action-**
  - Students must not give or receive assistance of any kind during the exam.
  - Gaining access to exam questions before the exam.
  - Using an unauthorized calculator or other mechanical aid that is not permitted.
  - Looking in the exam book before the signal to begin is given.
  - Marking or otherwise writing on the exam book or answer sheet before the signal to begin is given.
  - Making any changes, additions, deletions or other marking, erasing or writing on the exam book or answer sheet after the time for the exam has expired.
  - Having access to or consulting notes or books during the exam.
  - Looking at or copying from another student's paper.
  - Enabling another student to copy from one's paper.
  - Talking or otherwise communicating with another student during the exam or during the read through period.
  - Disturbing other students during the exam.
  - Consulting other persons or resources outside the exam room during the exam.
  - Copying questions or answers either on paper or with an electronic device to take from the exam room.
  - Taking an exam book or other exam materials from the exam room.
  - Taking an exam in place of another student.
  - Arranging to have another person take an exam for the student.
  - Disobeying to the conduct of supervisor during the exam.
  - Disclosing the contents of an exam to any other person.
  - Failing to remain in the exam room for a given period of time by the supervisors.
  - Failing to follow other exam instructions.

Those students found to have committed academic misconduct will face administrative sanctions imposed by the administration of Yeditepe University Faculty of Medicine according to the disciplinary rules and regulations of the Turkish Higher Education Council (YÖK) for students (published in the Official Journal on August 18th, 2012). The standard administrative sanctions include, the creation of a disciplinary record which will be checked by graduate and professional life, result in grade "F" on the assignment, exams or tests or in the class. Students may face suspension and dismissal from the Yeditepe University **for up to one school year**. In addition, student may lose any academic and nonacademic scholarships given by the Yeditepe University **for up to four years**. The appropriate sanctions are determined by the Yeditepe University administration according to egregiousness of the Policy violation.

## AIM and LEARNING OBJECTIVES OF FREE ELECTIVE COURSES

Elective courses aim to add complementary educational experiences to the medical school curriculum in order to improve comprehension of biopsychosocial approach of medical students, besides offering an opportunity to extend knowledge of interest in specific domains.

The following courses (2 ECTS credits each) will be offered in spring semester. Each student has to choose one of these elective courses. The selection and enrollment procedure will be announced by the phase coordinator.

Code	Subject		
<b>MED 611</b>	<b>Medical Anthropology</b>		
<b>Goals</b>	This course aims to provide, different perspectives of medical issues according to anthropological holistic approach for medical students. To present how social science interprets concepts of health, sickness, illness and disease. To show how culture bound symptoms can vary from culture to culture. To discuss all health problems are universal or cultural and how anthropology describes medical phenomenon by theoretically and methodologically.		
<b>Content</b>	To explain that what is anthropology? What is medical anthropology? What is the relationships between social science and medical? Why we need to be explain some concepts according to perspectives of medical anthropology? The meaning of symptoms: cultural bound symptoms, the personal and social meaning of illness, the stigma and shame of illness, What is the positioning of medical doctors for patients and caregivers; Doctor-Patient relations, patients associations, Biological Citizenship, Medicalized Selves, Biopolitics.		
<b>Course Learning Outcomes</b>	At the end of this course, the student should be able to <ul style="list-style-type: none"> <li>• emphasize cultural patterns of health,</li> <li>• investigate how human behavior that lives in a society is affected by own cultural health patterns,</li> <li>• discuss case studies about how cultural phenomenon affects human and public health,</li> <li>• understand importance of health that is constructed within culture structure by human society,</li> <li>• examine universal definition of health "state of complete physical, mental and social well-being" culturally,</li> <li>• realize interaction between items of cultural system and health system basically; get into the level of knowledge, skills and attitudes</li> </ul>		
<b>Assessment</b>		<b>NUMBER</b>	<b>PERCENTAGE</b>
	Assignments	1	100
	<b>Total</b>	<b>1</b>	<b>100</b>

Code	Subject		
<b>MED 612</b>	<b>Creative Drama</b>		
<b>Goals</b>	The aim of this course is the development of independence, creativity, self-control and problem-solving potential and the development of communication skills of medical students by using drama and creativity through improvisation of exercises		
<b>Content</b>	Discovering, learning and teaching approaches that are student-centered in a curiosity focused setting with various cognitive and active learning styles.		
<b>Course Learning Outcomes</b>	At the end of this course, the student should be able to <ul style="list-style-type: none"> <li>• show drama skills in vocational areas benefiting from access to creativity, collaboration and empathy which are the ways of learning through play and improvisation.</li> </ul>		
<b>Assessment</b>		<b>NUMBER</b>	<b>PERCENTAGE</b>
	Assignments	1	50
	Final Examination	1	50
	<b>Total</b>		<b>100</b>

Code	Subject		
<b>MED 613</b>	<b>Medical Humanities</b>		
<b>Goals</b>	This course aims to offer a wide variety of subjects related with art, history, cultural values, social movements, philosophy and many other areas. Main targets of this course are to improve Professionalism and Communication Skills and to support the students to develop an understanding about human and his interaction with universe.		
<b>Content</b>	Main concepts of professionalism such as altruism, accountability, excellence, duty, honor and integrity, respect for others and communication skills will be covered through the lectures of history of medicine in an anthropological concept, medicine in literature and visual arts, and cinemeducation.		

<b>Course Learning Outcomes</b>	At the end of this course, the student should be able to <ul style="list-style-type: none"> <li>• gain an understanding of the history of medicine as one of social and cultural transformation in the conception of professionalism, disease and what constitutes illness and health through the centuries,</li> <li>• develop the skills to write an essay using primary source documents in the context of the history of medicine,</li> <li>• gain view of different reflections of medicine in literature and visual arts,</li> <li>• develop a point of view to use literature and visual arts as an imagination instrument of compassion, to tolerate ambiguity, to dwell in paradox, to consider multiple points of view,</li> <li>• develop better observational and interpretive skills, by using the power of visual arts to elicit an emotional response in the observer,</li> <li>• gain understanding about the main values and various dimensions of professionalism.</li> <li>• gain insight about his/her own values and develop humanistic values,</li> <li>• develop a deeper understanding of human being in various contexts,</li> <li>• gain understanding about the various factors which influence health in individual and community level,</li> <li>• gain understanding to use films as a comprehensive guide in medical practice,</li> <li>• reflect through films to improve their cognitive and emotional awareness.</li> </ul>		
<b>Assessment</b>		<b>NUMBER</b>	<b>PERCENTAGE</b>
	Assignments	1	50
	Final Examination	1	50
	<b>Total</b>		<b>100</b>

<b>Code</b>	<b>Subject</b>		
<b>MED 614</b>	<b>Personal Trademark Development</b>		
<b>Goals</b>	The aim of this course is to equip the students with skills in creating personal image for successful business life and with appropriate behavior in social platforms.		
<b>Content</b>	Business Etiquette creation techniques and personal image methodologies with case studies.		
<b>Course Learning Outcomes</b>	At the end of this course, the student should be able to <ul style="list-style-type: none"> <li>• create personal brand for successful business life,</li> <li>• use behavioral codes for business etiquette.</li> </ul>		
<b>Assessment</b>		<b>NUMBER</b>	<b>PERCENTAGE</b>
	Midterm Exam (MCQ, Fill in the Blanks, T/F Questions, mostly based on case studies)	1	25
	Presentations and Reports (Interactive Team Work, Social Skills Development, based on subjects studied during classes and applications of them on MED areas & discussions after each presentation)	1	25
	Attendance (Showing interest to classes, performance during discussion times, performance during pair works, attending classes etc.)		5
	Quiz ((Short quizzes to keep students updated about lectures, prepare them to midterm & final, based on subjects studied in the class, Essay or MCQ)	3	5
	Final Exam (MCQ, Fill in the Blanks, T/F Questions, mostly based on case studies)	1	40
	<b>Total</b>		<b>100</b>

<b>Code</b>	<b>Subject</b>		
<b>MED 615</b>	<b>Innovation Management</b>		
<b>Goals</b>	The aim of this course is to convey to the students knowledge on innovative approaches for visionary life, describe the philosophy of futurism.		
<b>Content</b>	Strategies for futurism and applied case studies for personal innovation.		
<b>Course Learning Outcomes</b>	At the end of this course, the student should be able to <ul style="list-style-type: none"> <li>• use futuristic strategies to create innovative approaches,</li> <li>• use innovative and creative thinking techniques in professional life.</li> </ul>		
<b>Assessment</b>		<b>NUMBER</b>	<b>PERCENTAGE</b>
	Midterm Exam (MCQ, Fill in the Blanks, T/F Questions, mostly based on case studies)	1	25

	Presentations and Reports (Interactive Team Work, Social Skills Development, based on subjects studied during classes and applications of them on MED areas & discussions after each presentation)	1	25
	Attendance (Showing interest to classes, performance during discussion times, performance during pair works, attending classes etc.)		5
	Quiz ((Short quizzes to keep students updated about lectures, prepare them to midterm & final, based on subjects studied in the class, Essay or MCQ)	5	5
	Final Exam (MCQ, Fill in the Blanks, T/F Questions, mostly based on case studies)	1	40
	<b>Total</b>	<b>8</b>	<b>100</b>

Code	Subject		
<b>MED 616</b>	<b>Medical Management and New Services Design Skills</b>		
<b>Goals</b>	The aim of this course is to develop leadership skills to manage a team and organizational skills in the case of emergency and lack of crew. Moreover, empathy skills will be developed to create better relationship with the patients, coworkers and customers.		
<b>Content</b>	Leadership Styles, Skills needed in Med, Strategies for New Generation Leadership, Empathy Techniques, Problem Solving with Empathy, and Conciliation with Empathy.		
<b>Course Learning Outcomes</b>	At the end of this course, the student should be able to <ul style="list-style-type: none"> <li>develop leadership skills to manage teams,</li> <li>use empathy techniques for conciliation with their patients and co-workers.</li> </ul>		
<b>Assessment</b>		<b>NUMBER</b>	<b>PERCENTAGE</b>
	Midterm Exam (MCQ, Fill in the Blanks, T/F Questions, mostly based on case studies)	1	25
	Presentations and Reports (Interactive Team Work, Social Skills Development, based on subjects studied during classes and applications of them on MED areas & discussions after each presentation)	1	25
	Attendance (Showing interest to classes, performance during discussion times, performance during pair works, attending classes etc.)		5
	Quiz ((Short quizzes to keep students updated about lectures, prepare them to midterm & final, based on subjects studied in the class, Essay or MCQ)	4	5
	Final Exam (MCQ, Fill in the Blanks, T/F Questions, mostly based on case studies)	1	40
	<b>Total</b>		<b>100</b>

Code	Subject		
<b>MED 619</b>	<b>Entrepreneurship and Storytelling Techniques for Business Purposes</b>		
<b>Goals</b>	This course aims to equip students with storytelling techniques to make smart decisions, communicate better, think creatively and use this modern technique to manage their professional relations.		
<b>Content</b>	Strategies for storytelling techniques and applications.		
<b>Course Learning Outcomes</b>	At the end of this course, the student should be able to <ul style="list-style-type: none"> <li>use storytelling techniques in workplace to make decisions, communicate better and think creatively.</li> </ul>		
<b>Assessment</b>		<b>NUMBER</b>	<b>PERCENTAGE</b>
	Midterm Exam (MCQ, Fill in the Blanks, T/F Questions, mostly based on case studies)	1	25
	Presentations and Reports (Interactive Team Work, Social Skills Development, based on subjects studied during classes and applications of them on MED areas & discussions after each presentation)	1	25
	Attendance (Showing interest to classes, performance during discussion times, performance during pair works, attending classes etc.)		5

	Quiz ((Short quizzes to keep students updated about lectures, prepare them to midterm & final, based on subjects studied in the class, Essay or MCQ)	5	5
	Final Exam (MCQ, Fill in the Blanks, T/F Questions, mostly based on case studies)	1	40
	<b>Total</b>		100

Code	Subject		
<b>MED 620</b>	<b>Art, Culture and Life Styles</b>		
<b>Goals</b>	Healthcare members will have high level social status for their business life; and will join several international conferences. This course aims to develop their social and intellectual skills to make them global citizens with art, culture, fashion and life style knowledge.		
<b>Content</b>	Life Style Coaching for participants, Cultural Festivals Through Europe, Art Exhibitions and Movements, Sportive Life Coaching.		
<b>Course Learning Outcomes</b>	At the end of this course, the student should be able to <ul style="list-style-type: none"> <li>• develop intellectual wealth and cultural knowledge,</li> <li>• change their life styles for better perspective,</li> <li>• increase quality of life,</li> <li>• establish work-life balance.</li> </ul>		
<b>Assessment</b>		<b>NUMBER</b>	<b>PERCENTAGE</b>
	Midterm Exam	1	25
	Assignments (Homework)	1	25
	Evaluation of Group Presentations	1	5
	Final Exam	1	45
	<b>Total</b>		<b>100</b>

Code	Subject		
<b>MED 621</b>	<b>Epidemiological Research and Evidence Based Medicine</b>		
<b>Goals</b>	The aim is to provide understanding of epidemiological language and terminology by reading, examining and discussing various types of epidemiological research papers and to develop the desire and enthusiasm for epidemiological studies.		
<b>Content</b>	Different sessions for each type of epidemiological research will be held. The selected research types are case report, cross-sectional, case- control, cohort study, and randomized controlled trial.		
<b>Course Learning Outcomes</b>	At the end of this course, the student should be able to <ul style="list-style-type: none"> <li>• comprehend various types of epidemiological research,</li> <li>• explain basic epidemiological terminology.</li> </ul>		
<b>Assessment</b>		<b>NUMBER</b>	<b>PERCENTAGE</b>
	Group work performance		50
	Presentations		50
	<b>Total</b>		<b>100</b>

Code	Subject		
<b>MED 622</b>	<b>Application of Economics in Health Care</b>		
<b>Goals</b>	This course aims to teach the essentials of economics and its' core concepts' relevance with health-care.		
<b>Content</b>	Tools and concepts of traditional Microeconomics Theory, health production function, cost & benefit analysis, demand for health insurance and health care markets.		
<b>Course Learning Outcomes</b>	At the end of this course, the student should be able to <ul style="list-style-type: none"> <li>• explain the applications of micro-economic theories in health related areas,</li> <li>• discuss the causes of market failure,</li> <li>• list the factors effecting the demand for health,</li> <li>• explain health insurance supply and demand,</li> <li>• analyse how health care market operates.</li> </ul>		
<b>Assessment</b>		<b>NUMBER</b>	<b>PERCENTAGE</b>
	Mid-terms	1	80
	Quizzes, Homeworks	5	5

Attendance	14	15
	Total	100
Contribution of Final Examination to Overall Grade		45
Contribution of In-Term Studies to Overall Grade		55
	Total	100

Code	Subject		
<b>MED 623</b>	<b>Visual Presentation in Medicine</b>		
<b>Goals</b>	This course aims to teach to design visual aids that are to be used in medical case presentations in computerized systems with Adobe CS Photoshop and Powerpoint programs.		
<b>Content</b>	Understanding of verbal & technological presentation methods/tools to be used in medical case presentations. Computerized design tools like Adobe CS Photoshop and PowerPoint will be taught in computer labs to participants.		
<b>Course Learning Outcomes</b>	At the end of this course, the student should be able to <ul style="list-style-type: none"> <li>• recognize and applies main design principles,</li> <li>• design visual materials,</li> <li>• use Adobe CS Photoshop and PowerPoint in basic level,</li> <li>• manage the presentation program PowerPoint,</li> <li>• perform visual designs and presents projects using these programs,</li> <li>• criticize the images used in the media.</li> </ul>		
<b>Assessment</b>		<b>NUMBER</b>	<b>PERCENTAGE</b>
	Midterm Exam	1	20
	Presentation	2	40
	Project	1	40
	Final EXAM		
		Total	100
	Contribution of Final Examination to Overall Grade		60
	Contribution of In-Term Studies to Overall Grade		40
		Total	100

Code	Subject		
<b>MED 627</b>	<b>Presentation of Medicine on Media</b>		
<b>Goals</b>	This course aims to teach deep understanding to approaches & visual methods/tools available as community communication media in conveying medical knowledge. To analyze technical features and to develop an understanding of aesthetics behind. To develop skills in conveying messages presented via media tools.		
<b>Content</b>	Sensual and perceptual theories of visual communication. Analysis and reading the meaning of the images presented in the media as a PR tool.		
<b>Course Learning Outcomes</b>	At the end of this course, the student should be able to <ul style="list-style-type: none"> <li>• recognize the meaning of the visual literacy as intellectual property,</li> <li>• describe the physical features of the light and theory of vision,</li> <li>• analyze the images with the help of sensual and perceptual theories such as Gestalt, Constructivism, Semiology and Cognitive Approach,</li> <li>• recognize the differences between advertising, journalism and public relations,</li> <li>• describe the historical and cultural stereotypes used in the media,</li> <li>• interpret images in the media (such as typography, graphic design, infographics, photography, TV, computer, internet) in technical, historical, cultural, ethical and critical aspects.</li> </ul>		
<b>Assessment</b>		<b>NUMBER</b>	<b>PERCENTAGE</b>
	Midterm Exam	1	70

	Homework	1	30
		Total	100
	Contribution of Final Examination to Overall Grade		60
	Contribution of In-Term Studies to Overall Grade		40
		Total	100

Code	Subject		
<b>MED 628</b>	<b>Healthy Living: The Milestones of the Life for Performance Management</b>		
<b>Goals</b>	This course aims to support fitness practices & dietary habits of healthy life style for medical students. To introduce techniques for reducing stress with healthy living habits. To highlight the importance of superior physical and mental health status for a better job performance.		
<b>Content</b>	In the content of this course; understanding physiology of the physical activities, risks and benefits of the regular physical activities, using fitness training as a treatment technique, effects of physical activities to reduce stress, the relation between dietary habits and health will have quite importance.		
<b>Course Learning Outcomes</b>	At the end of this course, the student should be able to <ul style="list-style-type: none"> <li>• explain main exercise physiology,</li> <li>• define main fitness terms,</li> <li>• analyze main risks and benefits of exercising,</li> <li>• relate health and eating habits,</li> <li>• perform main fitness training techniques,</li> <li>• manage the basic exercises necessary for healthy life,</li> <li>• perform physical techniques which are frequently used in stress management,</li> <li>• explain the relationship between health and nutrition,</li> <li>• describe the principles of healthy eating,</li> <li>• recognize exercise as a treatment method for common diseases in the community.</li> </ul>		
<b>Assessment</b>		<b>NUMBER</b>	<b>PERCENTAGE</b>
	Midterm Project	1	25
	Homework	1	25
	Final Project	1	50
		Total	100
	Contribution of Final Examination to Overall Grade		50
	Contribution of In-Term Studies to Overall Grade		50
		Total	100

Code	Subject		
<b>MED 629</b>	<b>Music and Medicine</b>		
<b>Goals</b>	This course aims to convey the past and current uses and utilities of music in medicine.		
<b>Content</b>	The connection of music and medicine throughout the historical development of antiquity and Middle Ages up until today. The place of music in medical practice after the transformations in the Age of Enlightenment and beyond.		
<b>Course Learning Outcomes</b>	At the end of this course, the student should be able to <ul style="list-style-type: none"> <li>• explain the uses of medicine in the past and present,</li> <li>• describe the uses of music in clinical conditions, and before and after surgical treatment,</li> <li>• explain the effects of music before and after surgery,</li> <li>• describe the types of music used in music therapy.</li> </ul>		
<b>Assessment</b>		<b>NUMBER</b>	<b>PERCENTAGE</b>
	Midterm	1	25
	Assignments (Homework)	1	25

	Final Exam		50
		Total	100
	Contribution of Final Examination to Overall Grade		50
	Contribution of In-Term Studies to Overall Grade		50
		Total	100

Code	Subject		
MED 630	Health Law		
Goals	The aim of the course is that students obtain a legal rationale, take ethical decisions from a legal perspective, act in a respectful way to patients' rights, legal risks and responsibilities.		
Content	The basic concepts of law will be introduced with a view towards health law. The legal nature of medical interventions, concepts of malpractice and complication will be explained. The fundamentals and consequences of legal and criminal liability will be emphasized and medical interventions showing ethical, and legal characteristics will be evaluated from a legal point of view.		
Course Learning Outcomes	At the end of this course, the student should be able to <ul style="list-style-type: none"> <li>• analyze legislature and by-laws related to health law,</li> <li>• distinguish branches and consequences of legal responsibility,</li> <li>• in taking decisions about patients, help them to make their own decisions in a proper way by respecting their right to self-determination and their privacy,</li> <li>• take ethical decisions from a perspective of patients' rights and legal responsibility,</li> <li>• identify legal risks in the developing areas of health law.</li> </ul>		
Assessment		<b>NUMBER</b>	<b>PERCENTAGE</b>
	Assignment / presentation	1	50
	Final EXAM	1	50
		Total	100
	Contribution of Final Examination to Overall Grade		50
	Contribution of In-Term Studies to Overall Grade		50
		Total	100

Code	Subject		
MED 631	Creative Drama II		
Goals	This course aims the development of body awareness, improvement of communication skills of students by creating an atmosphere where the students can explore the potential of their emotional intelligence.		
Content	In this class, the students will be searching for their abilities for self-representation and being visible in society and going into an active learning process by experiencing image theatre, invisible theatre, newspaper theatre and forum theatre techniques		
Course Learning Outcomes	At the end of this course, the student should be able to <ul style="list-style-type: none"> <li>• build supportive relationships in group by improving personal cooperating skills,</li> <li>• recognize personal awareness,</li> <li>• explain and review the schemes of personal attitude, thought and feeling by playing games and different roles,</li> <li>• improve critical and creative ways of thinking skills, also improve skills for life-long learning which will be useful for professional life as well as personal life,</li> <li>• explore being visible and expressing oneself in front of spectators using games and storytelling techniques.</li> </ul>		
Assessment		<b>NUMBER</b>	<b>PERCENTAGE</b>
	Midterm	1	25
	Performance evaluation	5	25
	Final EXAM		50



		Total	100
	Contribution of Final Examination to Overall Grade		50
	Contribution of In-Term Studies to Overall Grade		50
		Total	100

Code	Subject		
<b>MED 632</b>	<b>Music Appreciation</b>		
<b>Goals</b>	This course aims to clarify the structures underlying western classical music in order to understand and appreciate it consciously while considering a historical perspective. Furthermore it will enable the student to understand that it is the foundation of every genre (pop, rap, rock etc.) in western music culture.		
<b>Content</b>	The evolution of music starting as of medieval times, the birth of new musical rules and genres in the Renaissance and the Age of Enlightenment which in turn redefines the different usages of music and lies the foundation of modern compositional rules. The reflection of those in music genres of today.		
<b>Course Learning Outcomes</b>	At the end of this course, the student should be able to <ul style="list-style-type: none"> <li>• define music's founding elements,</li> <li>• explain the structural evolution of music within time,</li> <li>• explain what the brain perceives under different conditions.</li> </ul>		
<b>Assessment</b>		<b>NUMBER</b>	<b>PERCENTAGE</b>
	Midterm	1	25
	Assignments	1	25
	Final Examination	1	50
	<b>Total</b>		<b>100</b>

Code	Subject		
<b>MED 633</b>	<b>Communication with Hearing Impaired Patients in Turkish Sign Language</b>		
<b>Goals</b>	The aim of this course is to convey to the students sign language skills and basic vocabulary in order to enable them to communicate with hearing impaired patients.		
<b>Content</b>	Short history of sign language, basic vocabulary, words, terminology and simple sentence building skills regarding patient doctor interview.		
<b>Course Learning Outcomes</b>	At the end of this course, the student should be able to <ul style="list-style-type: none"> <li>• tell the history of sign language,</li> <li>• show the basic words in sign language,</li> <li>• conduct patient doctor interview in sign language,</li> <li>• understand the health problem of the hearing impaired patient,</li> <li>• give information about the treatment in sign language,</li> <li>• build sentences using basic vocabulary in sign language,</li> <li>• develop personal characteristics such as compassion, tolerance for diversity and open mindedness,</li> <li>• improve body language,</li> <li>• gain understanding about the various factors which influence health in individual and community level.</li> </ul>		
<b>Assessment</b>		<b>NUMBER</b>	<b>PERCENTAGE</b>
	Midterm	1	40
	Final Examination	1	60
	<b>Total</b>		<b>100</b>

Code	Subject		
<b>MED 634</b>	<b>Case Based Forensic Sciences</b>		
<b>Goals</b>	This course aims to increase the awareness of students about forensic cases by presenting them as real case presentations through forensic sciences, where some of the patients that they will examine routinely in their professional lives are forensic cases.		
<b>Content</b>	In each lecture, brief introduction information about one of the basic forensic sciences will be given, and with the help of this forensic science, how the case is elucidated and how the process is managed, will be explained in the lectures.		

<b>Course Learning Outcomes</b>	At the end of this course, the student should be able to <ul style="list-style-type: none"> <li>• give preliminary information about what the forensic sciences are, and their relationship with medicine and each other,</li> <li>• give examples an idea about the types of forensic cases they may encounter in their professional routine,</li> <li>• gain the awareness that every patient that they examine can turn into a forensic case,</li> <li>• explain the liability of healthcare professionals against forensic cases and what kind of problems both patients and healthcare professionals may encounter if they are omitted,</li> <li>• give preliminary information about the management process of the forensic case,</li> <li>• explain the importance of the holistic approach in the management of forensic cases,</li> <li>• explain the importance of professionalization and coordination in forensic science.</li> </ul>		
<b>Assessment</b>		<b>NUMBER</b>	<b>PERCENTAGE</b>
	Assignments	1	50
	Final EXAM	1	50
		Total	100
	Contribution of Final Examination to Overall Grade		50
	Contribution of In-Term Studies to Overall Grade		50
		Total	100

Code	Subject		
MED 635	Advanced Level Communication with Hearing Impaired Patients in Turkish Sign Language		
Goals	The aim of this course is to teach the students medical vocabulary in sign language and enable them to make connected sentences; to understand the complaints of hearing-impaired patients and to explain the treatment methods to the patients.		
Content	Vocabulary related to medical terms; Practices in making connected, long sentences; investigating the complaints of the hearing impaired patient; basic patient doctor interview skills with hearing impaired patient; explaining the treatment to the patient.		
Course Learning Outcomes	At the end of this course, the student should be able to <ul style="list-style-type: none"><li>• tell the sign language equivalents of health terms,</li><li>• show the sign language equivalents of the names of the diseases,</li><li>• investigate the patient's complaint in detail during patient doctor interview using sign language,</li><li>• understand the details of patient's complaint in sign language,</li><li>• explain the treatment for the health problem of hearing impaired patient in more detail,</li><li>• list the names of the departments at the hospital,</li><li>• make advanced connected sentences in sign language,</li><li>• be more beneficial to people with disabilities by bringing their sensitivity to a professional level,</li><li>• translate the patient's problem in sign language to other doctors,</li><li>• be equipped professionally when they want to conduct medical studies with hearing impaired participants.</li></ul>		
Assessment		NUMBER	PERCENTAGE
	Midterm	1	40
	Final Examination	1	60
	Total		100

## A SHORT GUIDE for STUDENTS to PROBLEM-BASED LEARNING (PBL)

In Phase II besides the lectures, Problem Based Learning Sessions are implemented in the education program.

The principal idea behind PBL is that the starting point for learning should be a problem, a query, or a puzzle that the learner wishes to solve.

PBL is a learning method where students perceive their knowledge gaps, decide on learning issues and achieve these, while working in small groups on a case to solve a patient's problems.

So, PBL starts by a clinical case of a patient. While working on the patient's problems you will identify your learning needs and study these. During this whole process you will work with a group of 8-12 students and a tutor.

### How it works?

You will be presented a patient case (scenario) that has some problems and will be asked to proceed according to the information and instructions that you will receive. You will not be informed about the topic of the case in advance but will face the problem when given to you in your first session- *just like a doctor does not know what patients he/she will see when starting the day.*

Scenarios will be given to you one page at a time. When you finish discussing a page you will be given the following page with additional information about the patient.

Each PBL case will be discussed over 3 sessions, 2 hours each. You will work in a group of 8-12 students with a tutor. One student elected by the group will work as the "scribe" (person who will write the discussed topics on the board). The scribe may change at every session, by group decision.

Each group will be given the same scenario but will work independently from each other.

The tutor working with you will NOT TEACH you but will only guide to on this exciting trip. He/she will ask you questions to guide you to the problems to be solved.

Your aim will be to find out the reasons, and in some cases, the solutions of the problems presented.

It is clear (and we know) that you do not have enough knowledge to understand and solve all the problems presented to you.

Here comes the aim of PBL: **you will thus recognize WHAT YOU DO NOT KNOW and WHAT YOU SHOULD LEARN.** In other words **you will identify your knowledge gaps and try to learn them.** These are called "**learning objectives**".

In order to facilitate and direct discussions and learning process all relevant points should be written on the board by the scribe. The board should be used as below (with examples):

Problems	Hypotheses	Additional (Required) information	Learning issues (Learning objectives)
<i>Example</i>	<i>Example</i>	<i>Example</i>	<i>Example</i>
Fever Cough Pallor	Throat infection Pneumonia Anemia	Throat examination Chest examination Chest X-ray Blood count	Causes of fever How is body temperature controlled? Anatomy of the throat Anatomy of lungs What is anemia?

The patient's problems will be listed under "**Problems**" column.

The possible causes/reasons/mechanisms of the patient's problems will be listed under "**Hypotheses**". You can suggest and write anything that comes to your mind- you will then try to find any facts or information that can support these hypotheses. Do not be shy to suggest anything. You will not be judged for those things that you suggest.

As you will not be provided with all information about the patient you will need more information (such as, the patient's fever, physical examination findings, laboratory data, etc.). You will thus ask the scribe to write down these on the board under "**Required Information**" heading. This means information that you want to learn about this particular patient.

During the course of these discussions you will recognize that you do not know and thus need to study and learn some topics/issues, which are called "**learning objectives**". The learning objectives will be written on the fourth column under this heading. These are the topics that you will study until the next session and present by then.

This will lead you to the second stage of PBL: learning the facts that **you** have decided to. You will have to **find and reach the required learning resources** (textbooks, journal articles, reliable internet sources, etc.) and **study** these in your **independent study time**. You will be given a list of possible learning resources for every discipline but you can find other sources in addition to them. However, make sure that these are reliable sources- especially web sources need cautiousness.

When you meet with your group and tutor in your second (and third) session, you will be asked to summarize the previous session, list the learning objectives and then present the knowledge that you had learned.

In this way every group member (students) will study and learn the objectives and these will be discussed during the session. There may be disagreements among students for some information reached. The group will discuss and come to a conclusion about it. The tutor will guide and moderate the group through this process- BUT WILL NOT TEACH. **The tutor will not be a resource person but a faculty member who will facilitate your search for correct knowledge. It is YOU who will reach and learn the required topics-** the topics that you have identified as your learning objectives or knowledge gaps.

**The ultimate aim of a PBL case is NOT to diagnose the patient but to learn the topics that you discover that you do not know.** Although the case is a clinical problem, at this stage of your studies, you will have to focus on basic sciences. In other words, you will need/want to learn basic science topics (anatomy, physiology, biochemistry, microbiology, etc.) related to the patient's problems. **So you will learn basic sciences starting from a clinical case and thus appreciate why and where basic sciences are necessary and relevant.**

Other benefits of PBL that you gain are to:

- learn "how to learn"
- develop lifelong learning skills
- improve your communications skills

- state and defend positions with evidence and sound argument
- become more flexible in processing information and meeting obligations
- practice skills that you will need after your education
- improve your information literacy

**Assessment:** Your participation and contributions to the sessions will be assessed by your tutor. This will NOT be assessment of your knowledge but your participation in the sessions, taking part in discussions, suggesting hypotheses, contributions by making presentations, etc. The assessment form is given below. This will comprise 5 % of that committee score.

<b>PBL First Session Flow</b>	
A.	Introducing activity <i>(For the first session of the term)</i>
B.	Determination of group rules <i>(For the first session of the term)</i> <i>(Group rules will be written on the Flipchart.)</i>
C.	Introducing the PBL Student Assessment Form to students <i>(For the first session of the term)</i> <i>(This form will be filled in electronically via EYS by the tutors after the second session of the scenario.)</i>
1.1.	Review of the Group Rules <i>(The group rules created in the first session of the term will be remembered.)</i>
1.2.	Warmup game
1.3.	Selecting the reader and writer <i>(The reader's task is to read the scenario step by step, together with the questions on the box, to the group.)</i> <i>(The writer's task is to write the answers to all the questions in the scenario, especially! hypotheses and learning objectives on the flipchart.)</i>
1.4.	Reading the scenario step by step <i>(The tutors will distribute the student copies of the scenario that came out of the session envelope to the students.)</i> <i>(The next page will not be passed until the students have finished reading a page and answering the related questions.)</i>
1.5.	Using Dorland's Medical Dictionary for unknown medical terms. <i>(Printed Dorland's Medical Dictionary will be in the PBL room.)</i> <i>(Also, Electronic Dorland's Medical Dictionary can be accessed as; Yeditepe University Website → Academic Drop-Down Menu → Information Center Tab → Electronic Library Drop-Down Menu → Off-Campus Access Tab → OBS user Login with username and password → Finding Dorland's Medical Dictionary among resources)</i> <i>(Direct link → <a href="https://login.lproxy.yeditepe.edu.tr/login">https://login.lproxy.yeditepe.edu.tr/login</a> )</i>
1.6.	Discussion <i>(Writing the hypotheses on the Flipchart, bringing the prior knowledge into the learning environment, reviewing the hypotheses, etc.)</i>
1.7.	The tutor asks questions that lead students to learning objectives during the discussion
1.8.	Determination of learning objectives by students <i>(The learning objectives determined by the student group will be written on the Flipchart by the writer.)</i>
1.9.	Feedback <i>(Each group member's thoughts on him/herself, the group, the scenario, the tutor, the PBL flow, the environment, etc.)</i>
1.10.	Attendance <i>(Students will sign the student list on the session envelope.)</i>
<b>PBL Second Session Flow</b>	
2.1.	Warmup game
2.2.	Discussion of the learning objectives obtained in the previous session <i>(Reading the learning objectives on the Flipchart they were written in the previous session → putting the objectives in order for discussion → in-depth discussion of all objectives by the student group.)</i> <i>(Important note: The second session of the scenario will not proceed until the following requirements are met. For each learning objective; it should be discussed in depth, the students' work should be shared, these discussions should be supported by the flowcharts drawn on the flipchart, the discussion of the learning objectives should not be superficial.)</i>
2.3.	Selecting the reader <i>(The reader's task is to read the scenario step by step, together with the questions on the box, to the group.)</i>
2.4.	Reading the scenario of the second session <i>(The tutors will distribute the student copies of the scenario from the session envelope to the students.)</i>
2.5.	Discussing the psychosocial dimension of the scenario
2.6.	Feedback <i>(Each group member's thoughts on him/herself, the group, the scenario, the tutor, the PBL flow, the environment, etc.)</i>
2.7.	Attendance <i>(Students will sign the student list on the session envelope.)</i>
2.8.	After the session, the Tutor Evaluation Form is filled by the students on the EYS.

## PBL STUDENT ASSESSMENT FORM\*

<b>Student Name</b>							
<b>Phase/Committee</b>							
<b>PBL Scenario Name</b>							
<b>Tutor Name</b>							
<b>INTERACTION WITH GROUP / PARTICIPATION TO GROUP</b>	<b>Not observed</b>	<b>Poor</b>	<b>Fair</b>	<b>Average</b>	<b>Good</b>	<b>Excellent</b>	<b>Total Point of the Part</b>
	<b>0</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	
1. Starts discussion							
2. Contributes with valid questions and ideas							
3. Balances listening and speaking roles							
4. Communicates effectively in group work							
<b>GAINING KNOWLEDGE</b>	<b>Not observed</b>	<b>Poor</b>	<b>Fair</b>	<b>Average</b>	<b>Good</b>	<b>Excellent</b>	<b>Total Point of the Part</b>
	<b>0</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	
5. Determines valid learning issues							
6. Finds valid sources							
7. Makes independent research on learning issues							
8. Shows understanding of the concepts and relationships							
<b>COMMUNICATION/SHARING KNOWLEDGE</b>	<b>Not observed</b>	<b>Poor</b>	<b>Fair</b>	<b>Average</b>	<b>Good</b>	<b>Excellent</b>	<b>Total Point of the Part</b>
	<b>0</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	
9. Selects data valid for discussion and presentation							
10. Expresses ideas and knowledge clearly and in an understandable way							
11. Draws figures, diagrams clearly and in an understandable way							
12. Has always some additional information or data to present whenever needed							
<b>PROBLEM SOLVING AND CRITICAL THINKING</b>	<b>Not observed</b>	<b>Poor</b>	<b>Fair</b>	<b>Average</b>	<b>Good</b>	<b>Excellent</b>	<b>Total Point of the Part</b>
	<b>0</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	
13. Generates hypotheses independently							
14. Reviews hypotheses critically							
15. Integrates basic science and clinical concepts							
16. Describes the difference between normal and pathological conditions							
<b>PROFESSIONAL ATTITUDE</b>	<b>Not observed</b>	<b>Poor</b>	<b>Fair</b>	<b>Average</b>	<b>Good</b>	<b>Excellent</b>	<b>Total Point of the Part</b>
	<b>0</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	
17. Is sensitive to psychosocial factors affecting patients							
18. Treats all group members as colleagues							
19. Accepts feedback properly							
20. Provides proper feedback to group members							
<b>Total Score of the Student →</b>							

Student's attendance status for PBL sessions	Session 1	Session 2	Session 3
	Attend ( ) / Not attend ( )	Attend ( ) / Not attend ( )	Attend ( ) / Not attend ( )

If you have any other interpretation, or thought about the student's performance in PBL sessions that you want to say PBL Coordinators, please write here. ☐	
--	--

Signature of the tutor	
------------------------	--

\*Assessment form should be filled in at the end of scenario (i.e. following the completion of two consecutive sessions).

## **SPECIFIC SESSIONS / PANELS**

### **Introductory Session**

#### **Aim of the session:**

The session provides basic information about Yeditepe University Faculty of Medicine Undergraduate Medical Education Program (YUFM/UG-ME) and the educational phase relevant to the students. This session orients the students to the program and the phase.

#### **Objectives of the Session:**

1. To provide basic information about the YUFM/UG-ME.
2. To provide basic information about the phase.
3. To provide essential information on social programs and facilities.

#### **Rules of the Session:**

1. The session will be held in two types, conducted by Phase Coordinator and Committee Coordinator, respectively.
2. The first type will be held once in the first week of the educational phase. The second type will be held at the beginning of each committee/.
3. Students should attend the session.

#### **Implementation of the Session:**

In the first type, Phase Coordinator will present brief information on the following topics:

- Organizational Chart of Yeditepe University Faculty of Medicine Undergraduate Medical Education Program (YUFM/UG-ME), Work Descriptions and Introduction of Committees/s/Members,
- Directives on YUFM/UG-ME,
- YUFM/UG-ME Program Outcomes
- Learning Objectives of the Phase
- Academic Program of the Phase
- Teaching and Learning Methods
- Learning Environments and Sources/Resources
- Attendance
- Elective Courses
- Assessment Procedure
- Grade Point Average, Cumulative Grade Point Average (GPA, cGPA) Calculation
- Pass/Fail Conditions
- Feedback of the Previous Year and Program Improvements
- Social Programs and Facilities

In the second type, Committee / Coordinator will present brief information on the following topics:

- Learning Objectives of the Committee
- Academic Program of the Committee
- Teaching and Learning Methods
- Learning Environments and Sources / Resources, References
- Attendance
- Assessment Methods and Question Distribution Table
- Committee / Score Calculation Method
- Pass / Fail Conditions
- Feedback of the Previous Year and Program Improvements
- Social Programs and Facilities

## **Committee Evaluation Session**

### **Aim of the Session:**

The aim of the session is to evaluate the committee educational program, with all its components, by the students and the committee coordinators. This session will contribute to the improvement of the educational program in general by giving the opportunity to identify the strengths of the committee educational program and revealing the areas which need improvement.

### **Objectives of the Program Evaluation Session** are to;

- establish a platform for oral feedbacks in addition to the systematically written feedback forms
- give the opportunity to the students and the coordinators to discuss the committee period face to face
- allow the students to review the committee exam questions together with faculty members.

### **Process:**

The total duration of the session is 90 minutes and the session consists of two parts. The first part (30 minutes) is dedicated to oral feedback by the students. All of the oral feedback will be recorded and reported by the committee coordination team. In the second part (60 minutes) committee exam questions will be reviewed and discussed by students and faculty.

### **Rules of the Committee/ Evaluation Session:**

1. The **Committee/ Evaluation Session** will be held on the last day of each committee after the committee/ exam.
2. Students are required to attend the session.
3. The Committee/ coordinator will lead the session.
4. The faculty members who had contributed questions in the committee exam should attend the session.
5. Students must comply with the feedback rules while giving verbal feedback and all participants shall abide by rules of professional ethics.

## Program Improvement Session

### **Aim:**

The aim of this session is sharing the program improvements based on the evaluation of the educational program data, with the students and the faculty members.

### **Objectives:**

1. To share the improvements within educational program with the students and the faculty members.
2. To inform the students and the faculty members about the processes of the program improvement
3. To encourage student participation in the program improvement processes.

### **Rules:**

1. Program improvements session will be implemented once a year. The implementation will be performed at the beginning of the spring semester.
2. Students are required to attend the session.
3. The phase coordinator will monitor the session. If necessary the dean, vice deans and heads of the educational boards will attend to the session.
4. All faculty members will be invited to the session.

### **Implementation:**

#### **Before the Session**

1. Phase coordinator will report the results of the improvements of the educational program.
2. The program improvements report has three parts. The first part of the report includes improvements that have been completed, and those that are currently in progress. The second part of the report includes, improvements that are planned in medium term, and the third part of the report includes, improvements that are planned in long term.
3. The program improvements report also includes the program evaluation data (student feedbacks, faculty feedbacks, results of the educational boards meetings etc.) in use of improvements.

#### **During the Session**

4. The phase coordinator will present the program improvements report to the students and the faculty members.
5. Students can ask questions about, and discuss, the results of the program improvement.

**Process:** The total period of session is 30 minutes and has two parts. The first part (15 minutes) covers, presenting of the program improvement report. The second part (15 minutes) covers, students' questions and discussion.

#### **After the Session**

6. The program improvement brief will be published on the website of Yeditepe University Faculty of Medicine (<http://med.yeditepe.edu.tr>).



# INDEPENDENT LEARNING

## Description:

"Independent learning" is a process, a method and a philosophy of education in which a student acquires knowledge by his or her own efforts and develops the ability for inquiry and critical evaluation. It includes freedom of choice in determining one's learning objectives, within the limits of a given project or program and with the aid of a faculty adviser. It requires freedom of process to carry out the objectives, and it places increased educational responsibility on the student for the achieving of objectives and for the value of the goals (1).

## Aim:

The aim of this instructional strategy is to develop the students' ability, to learn individually, so they are prepared for the classroom lessons, lectures, laboratory experiences and clinical practices, exams, professional life and have the abilities needed for lifelong learning.

## Objectives:

*With this instructional strategy, students will develop;*

- the skills that will help them to learn independently.
- self-discipline in their work habits.
- their evidence based research skills by using reliable resources.
- their teamwork skills by studying together.
- their clinical skills as self-directed working in the clinical skills laboratory.

## Rules:

1. All of the students will define independent learning process according to below algorithm.
2. All of the students will be required to fill out a form, which is a self-assessment form for the independent learning (methodology: timing, sources, strategy, etc.).
3. The students' academic performance and independent learning methodology will be analyzed comparatively, and feedback on further improvements will be provided.

## What a student should do for learning independently?

1. **Analyzing:** First you will need to analyze carefully, what your problems and weaknesses are. For example, if you are studying anatomy, is your weak area broadly upper limb, lower limb, or what?
2. **Addressing:** Once you've decided your specific problems, you can list them. Which one needs to be addressed urgently? Work out your priorities. Whatever your subject area is, don't be afraid to return to the basics if necessary. It may give you more confidence in the long run to ensure you have a proper understanding of basic concepts and techniques.
3. **Accessing:** If you need reliable information, or if you need to read about a subject and put it into context, a textbook may be the best place to start. However, the Internet may be helpful if you need very up-to-date information, specific facts, or an image or video etc. If you need an academic research article, reports or case studies for your topic, then a database (Pubmed etc.) would be the best option.
4. **Timing:** In the weekly syllabus you will see, a specific time called "independent learning hour" for your independent work. In addition to these hours, the students should also have their own time schedule for their study time at home.
5. **Planning:** Your next step will be to work out a realistic study-plan for your work. What goals could you literally set for yourself? Don't make them too ambitious but set minor goals or targets that you know you will be able to achieve without having to spend a very long time working on them. How many hours will you need to achieve them? How will you know when you've achieved them?
6. **Recording:** When you work independently, it's a good idea to keep a written record of the work you've done. This can help with further planning and also give a sense of achievement as well as provide something to include in a progress file. As time goes by you may surprise yourself with what you've been able to achieve. This could motivate you to keep going, as could increase your confidence, and even improve your results
7. **Reflecting:** Reflecting on what you've done can help you decide whether the activity was really effective, whether an alternative approach might be better on another occasion, whether you spent the right amount of time and whether you have achieved the target you'd set yourself.
8. **Improving:** Once you've achieved the target, the process of planning can start again. Your needs and priorities may have changed, so think about them and then set yourself to another target.

**Reminder:** For further information about the independent learning, please contact the Department of Medical Education.

## Reference:

1. Candy, P. (1991) Self-direction for lifelong learning: a comprehensive guide to theory and practice. San Francisco: Jossey Bass.

## **For further reading useful resources to recommend to students:**

- Burnapp, D. (2009). Getting Ahead as an International Student. London: Open University Press.
- Marshall, L. & Rowland, F. (1998) A Guide to learning independently. London: Open University Press.
- University of Southampton / UKCISA online resource 'Prepare for Success'

### WEEKLY COURSE SCHEDULE and LOCATIONS\* (MED 203, MED 202)

	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY
09:00-09:50	MED 203 (4E03)	MED 203 (4E03)	MED 203 (4E03)	MED 203 (4E03)	MED 203 (4E03)
10:00-10:50	MED 203 (4E03)	MED 203 (4E03)	MED 203 (4E03)	MED 203 (4E03)	MED 203 (4E03)
11:00-11:50	MED 203 (4E03)	MED 203 (4E03)	MED 203 (4E03)	MED 203 (4E03)	MED 203 (4E03)
12:00-12:50	MED 203 (4E03)	MED 203 (4E03)	MED 203 (4E03)	MED 203 (4E03)	MED 203 (4E03)
13:00-13:50	LUNCH				
14:00-14:50	MED 203 (4E03)	MED 203 (4E03)	MED 203 (4E03)	MED 202**** (Ground Floor CSL)	Elective Course (SPRING)
15:00-15:50	MED 203 (4E03)	MED 203 (4E03)	MED 203 (4E03)	MED 202**** (Ground Floor CSL)	Elective Course (SPRING)
16:00-16:50	MED 203 (4E03)	MED 203 (4E03)	MED 203 (4E03)	MED 202**** (Ground Floor CSL)	Elective Course (SPRING)
17:00-17:50	MED 203 (4E03)	MED 203 (4E03)	MED 203 (4E03)	MED 202**** (Ground Floor CSL)	Elective Course (SPRING))

#### COURSE CODES:

MED 203

Basic Medical Sciences II (4E03) or Laboratories\*\*

MED 202

Introduction to Clinical Practice II (CSL)\*\*\* or (4E03)

#### ELECTIVE COURSES CODES:

MED 611 Medical Anthropology

MED 612 Creative Drama

MED 613 Medical Humanities

MED 614 Personal Trademark Development

MED 615 Innovation Management

MED 616 Medical Management and New Services Design Skills

MED 619 Entrepreneurship and Storytelling Techniques for Business Purposes

MED 620 Art, Culture and Life Styles

MED 621 Epidemiological Research and Evidence Based Medicine

MED 622 Application of Economics in Health Care

MED 623 Visual Presentation in Medicine

MED 627 Presentation of Medicine on Media

MED 628 Healthy Living: The Milestones of the Life for Performance Management

MED 629 Music and Medicine

MED 630 Health Law

MED 631 Creative Drama II

MED 632 Music Appreciation

MED 633 Communication with Hearing Impaired Patients in Turkish Sign Language

MED 634 Case Based Forensic Science

MED 635 Advanced Level Communication with Hearing Impaired Patients in Turkish Sign Language.

## **CLASSES**

4E03

Ground Floor

### **Elective Course Classes**

Will be announced later

**\*All these places will be used during the next face to face education process**

**\*\* MED 203 Laboratory sessions will be held at the laboratories of related departments:**

Physiology Laboratory: Room Number 448, Ground Floor, and Room Number: 934, 5th Floor,

Histology and Embryology Laboratory: Room Number 929-930, 5th Floor

Anatomy Laboratory: C0547 and 3108 Cadaver Room, Ground Floor (-1)

Microbiology Laboratory: Room Number: 934, 5th Floor,

Pathology Laboratory: Room Number: 929-930, 5th Floor, Medical Faculty Block

**\*\*\* MED 202 Practical Lectures will be held at Clinical Skills Laboratory (CSL) 442, Ground Floor.**

**\*\*\*\* CSL will be held on Thursday during Fall, and Spring semester.**

## RECOMMENDED TEXTBOOKS

NO	DEPARTMENT	TEXTBOOK	AUTHOR	PUBLISHER
1	ANATOMY	Gray's Anatomy for Students	R.L. Drake et al, 3rd Edition, 2014	Churchill Livingstone
		Last's Anatomy: Regional and Applied	Chummy S. Sinnatamby, 12th Edition	Churchill Livingstone
		A Textbook of Neuroanatomy	Maria Patestas, Leslie P. Gartner, 2nd Edition, 2016	Wiley-Blackwell
		Hollinshead's Textbook of Anatomy	Cornelius Rosse, Penelope Gaddum-Rosse, 5th Edition, 1998	Lippincott Williams & Wilkins
2	BIOCHEMISTRY	Textbook of Biochemistry with Clinical Correlations	Thomas M. Devlin	Wiley-Liss Publishing Company
		Harper's Illustrated Biochemistry	Robert K. Murray et al	Mc-Graw-Hill Companies
		Lehninger Principles of Biochemistry	David L. Nelson, Michael M. Cox	W.H. Freeman Publishing Company
3	BIOPHYSICS	Introductory Biophysics: Perspectives on the Living State	J.R. Claycomb, J.P. Tran	Jones & Bartlett Publishers
4	BIostatISTICS	Primer of Biostatistics	Stanton Glantz	Mc-Graw-Hill Companies
5	HISTOLOGY	Junqueira's Basic Histology: Text and Atlas 13 <sup>th</sup> Ed.	Anthony Mescher	Mc-Graw-Hill Companies
	EMBRYOLOGY	The Developing Human: Clinically Oriented Embryology, 10 <sup>th</sup> Ed.	Keith L. Moore & T. V. N. Persaud	Saunders
6	IMMUNOLOGY	Basic Immunology: Functions and Disorders of the Immune System	Abul K. Abbas, Andrew H. H. Lichtman, Shiv Pillai, 5th edition, 2015	Elsevier
7	MEDICAL BIOLOGY	Molecular Biology of the Cell	Bruce Alberts et al	Garland Science
8	MEDICAL MICROBIOLOGY	Medical Microbiology: with Student Consult	P. R. Murray et al	Saunders
9	PATHOLOGY	Basic Pathology, 10e	Vinay Kumar MBBS MD et al. 2017 (ISBN-13: 978-0323353175)	Elsevier
10	PHARMACOLOGY	Goodman & Gilman's The Pharmacological Basis of Therapeutics	L.L. Brunton ed.	McGraw-Hill, New York,
		Basic and Clinical Pharmacology	B. G. Katzung	McGraw-Hill, New York
		Principles of Pharmacology	Golan, D.E et al	Lippincott Williams & Wilkins
11	PHYSIOLOGY	Guyton and Hall Textbook of Medical Physiology	John E. Hall, 13th Edition, 2016	Saunders
		Medical Physiology	Walter F. Boron, Emile L. Boulpaep 3rd Edition, 2016	Elsevier
		Human Physiology	Stuart Ira Fox, 14th Edition, 2015	McGraw-Hill Education

## COMMITTEE I - CARDIOVASCULAR SYSTEM

### DISTRIBUTION of LECTURE HOURS

September 12 - October 21, 2022

COMMITTEE DURATION: 6 WEEKS

COURSES	BASIC MEDICAL SCIENCES II	THEORETICAL	PRACTICAL	SMALL GROUP DISCUSSION	TOTAL
<b>MED 203</b>	<b>DISCIPLINE / COMPONENTS</b>				
	ANATOMY	15	2GX4H	0	19
	BIOCHEMISTRY	12	4GX2H	0	14
	BIOPHYSICS	8	0	0	8
	BIOSTATISTICS	2	0	0	2
	HISTOLOGY & EMBRYOLOGY	11	2GX4H	0	15
	IMMUNOLOGY	3	0	0	3
	MEDICAL BIOLOGY	4	0	0	4
	MEDICAL MICROBIOLOGY	9	4GX4H	0	13
	PATHOLOGY	7	0	0	7
	PHYSIOLOGY	34	4GX5H	0	39
	SCIENTIFIC RESEARCH and PROJECT -II	2	0	5GX3H	5
	PBL	0	0	6	6
	<b>TOTAL</b>	<b>110</b>	<b>16</b>	<b>9</b>	<b>135</b>
<b>MED 202</b>	<b>INTRODUCTION to CLINICAL PRACTICE- II</b>	5H	5GX3H	<b>0</b>	8

<b>INDEPENDENT LEARNING HOURS</b>	88
-----------------------------------	----

<b>Coordination Committee</b>	<b>Head</b>	Bayram YILMAZ, PhD Prof.
	<b>Secretary</b>	Alev CUMBUL, PhD Assist. Prof.
	<b>Member</b>	Mehtap KAÇAR, MD PhD, Prof.
	<b>Member</b>	Akif MAHARRAMOV, PhD Assist. Prof.

**COMMITTEE I - CARDIOVASCULAR SYSTEM  
LECTURERS**

<b>MED 203 BASIC MEDICAL SCIENCES II</b>	
<b>DISCIPLINE</b>	<b>LECTURERS</b>
ANATOMY	Aikaterini PANTELİ, MD Lecturer LAB: Edibe BİLİŞLİ, DVM LAB: Ahmet SAÇ, MD
BIOCHEMISTRY	İnci ÖZDEN, PhD Prof. LAB: Jale ÇOBAN, MD Prof. LAB: Müge KOPUZ ALVAREZ NOVAL, PhD Assist. Prof.
BIOPHYSICS	Akif MAHARRAMOV, PhD Assist. Prof. Bilge GÜVENÇ TUNA, PhD Assoc. Prof.
BIOSTATISTICS	E. Çiğdem KELEŞ, PhD Assist. Prof.
HISTOLOGY & EMBRYOLOGY	Aylin YABA UÇAR, PhD Assoc. Prof. Alev CUMBUL, PhD Assist. Prof.
IMMUNOLOGY	Gülderen YANIKKAYA DEMİREL, MD PhD Prof.
MEDICAL BIOLOGY	Turgay İSBİR, PhD Prof. Deniz KIRAÇ, PhD Assoc. Prof.
MEDICAL MICROBIOLOGY	Aynur EREN, MD Prof. Güner SÖYLETİR, MD PhD Prof. Pınar ÇIRAGİL, MD Prof. Nilgün ÇERİKÇİOĞLU, MD Prof.
PATHOLOGY	Aydın SAV MD Prof.
PHYSIOLOGY	Bayram YILMAZ, PhD Prof. Mehtap KAÇAR, MD PhD Prof. Burcu GEMİCİ BAŞOL, PhD Assoc. Prof.
SCIENTIFIC RESEARCH AND PROJECT-II	Bayram YILMAZ, PhD Prof. Deniz KIRAÇ, PhD Assoc. Prof.

**OTHER COURSES**

<b>MED 202 INTRODUCTION TO CLINICAL PRACTICE II</b>	
<b>DISCIPLINE</b>	<b>LECTURERS</b>
CLINICAL SKILLS LAB	Özlem TANRIÖVER MD MPH Prof. Arzu AKALIN MD Assist.Prof. Pınar TURA, MD Assist.Prof. Gökhan GENCER MD Assist.Prof. Özkan ERASLAN, MD

**COMMITTEE I - CARDIOVASCULAR SYSTEM**  
**AIM and LEARNING OBJECTIVES**

**AIMS**

1. To convey knowledge about biophysical, biological, anatomical, embryological, histological, physiological and biochemical properties of cardiovascular system,
2. To convey knowledge on hemodynamics of cardiovascular system,
3. To convey information about electrical activity and functional activity of heart by defining all basic parameters,
4. To convey information about cardiovascular system anatomy
5. To convey basic, general knowledge about immunology,
6. To convey basic, general knowledge about microbiology and information about the structural/biological features and pathogenesis of fungi,
7. To convey basic knowledge about biostatistics.

**LEARNING OBJECTIVES**

*At the end of this committee, student should be able to:*

- 1.0 For cardiovascular systems;
  - 1.1. explain biophysical changes,
  - 1.2. associate with the clinical reflections.
  - 1.3. to convey basic knowledge about biostatistics
2. 0. For cardiovascular system;
  - 2.2. explain biological characteristics of the system,
  - 2.3. associate with the clinical reflections.
- 3.0. For cardiovascular system;
  - 3.1. describe their anatomy,
  - 3.2. associate with adjacent tissues and organs,
  - 3.3. explain their functional and clinical reflections.
4. 0. For thorax and diaphragm
  - 4.1. describe their anatomy,
  - 4.2. associate with adjacent tissue and organs,
  - 4.3. explain their functional and clinical reflections.
5. 0. explain the Development of Head; Splanchnocranium, Neurocranium
  - 5.1. Describe of development of Neck and Pharyngeal Archs and Anomalies
- 6.0. explain developmental stages of heart,
  - 6.1. explain developmental stages of arteries, veins and capillaries,
  - 6.2. associate the relation between major birth abnormalities and developmental process.
  - 6.3. explain the histological properties of heart
  - 6.4. explain the histological features of arteries, veins and capillaries
- 7.0. explain the histological properties of Lymph organs
  - 7.1. explain the histological features of Blood
8. 0. explain hemodynamics of cardiovascular system and electrical activity of heart by biophysical mechanisms.
- 9.0. describe the structure, functions, synthesis and degradation of hemoglobin.
- 10.0. describe erythrocyte-specific metabolisms.
- 11.0 describe formation, differentiation and functions of blood cells.
- 12.0 describe physiopathology of diseases, such as anemia, leukemia, hemophilia.
- 13.0. describe heart rhythm, cardiac output and cardiac cycle.
- 14.0. describe nervous (autonomous) control of cardiovascular system.
- 15.0. explain functions of cardiovascular system.
- 16.0 explain functions and dynamics of circulatory system.
- 17.0 explain measurements of hematocrit, blood group analysis, blood pressure and ECG methods.
- 18.0. For immune system;
  - 18.1. explain development and differentiation of immune cells,
  - 18.2. relate changes with diseases,
  - 18.3. describe the properties of immune response.
- 19.0. For hemodynamic changes;
  - 19.1. explain mechanisms of development,
  - 19.2. describe mechanisms for cellular damage,
  - 19.3. describe pathologies occurring due to cell and tissue damage.
- 20.0 describe the factors that determine pathology as a basic science.
- 21.0 explain the factors of tissue damage

- 22.0 describe the pathological consequences and interactions of cellular injury on the cell and tissue morphology with examples.
- 23.0 describe examples of pathological consequences of immune response.
- 24.0 explain the factors that affect the clinical course and outcome of cell injury
- 25.0 list disorders resulting from hemodynamic changes.
- 26.0 describe how to discuss scientific articles in the view of literature
- 27.0 prepare a presentation of scientific research
- 28.0 for statistical decision
  - 28.1. lists the types of the statistical hypothesis.
  - 28.2. lists the types of errors in statistical decision making
  - 28.3. explain the steps of a statistical hypothesis test
- 29.0 For Structure of fungi;
- 30.0 describe the Clinical importance of fungi
- 31.0 explain its relation to clinical conditions.
- 32.0 describe the structural/biological features and pathogenesis of fungi.
- 33.0 explain case scenario related basic medical science topics in a clinical context.



**COMMITTEE I - CARDIOVASCULAR SYSTEM**  
**COMMITTEE I ASSESSMENT MATRIX**

LEARNING OBJECTIVES	DISCIPLINE	LECTURER/ INSTRUCTOR	DISTRUBITION of MCQs			
			CE	FE	IE	TOTAL
3.0-4.0, 33.0	ANATOMY	Dr. A. Panteli	14	5	5	24
8.0-10.0, 33.0	BIOCHEMISTRY	Dr. İ. Özden	11	4	4	19
1.0	BIOPHYSICS	Dr. A. Maharramov	9	4	4	17
28.0	BIOSTATISTICS	Dr. Ç. Keleş	2	1	1	4
	HISTOLOGY & EMBRYOLOGY	Dr. A. Yaba Uçar	6	2	2	10
5.0-7.0, 33.0		Dr. A. Cumbul	4	2	2	8
18.0	IMMUNOLOGY	Dr. G. Yanıkkaya Demirel	3	1	1	5
2.0	MEDICAL BIOLOGY	Dr. T. İsbir	4	1	1	6
		Dr. D. Kırar				
29.0-30.0, 33.0	MEDICAL MICROBIOLOGY	Dr. Güner Söyletir Dr. Nilgün Çerikçioğlu	8	3	3	14
20.0-25.0, 33.0	PATHOLOGY	Dr. A. Sav	6	3	3	12
11.0-19.0, 33.0	PHYSIOLOGY	Dr. B. Yılmaz	32	12	12	56
		Dr. M. Kaçar				
		Dr. B. Gemici Başol				
33.0	PBL		1	0	0	1
TOTAL			100	38/200#	38/200#	176
LEARNING OBJECTIVES	DISCIPLINE	DISTRUBITION of LAB POINTS				
		LPE		QUIZ		
3.0-4.0	ANATOMY	30				
8.0-10.0	BIOCHEMISTRY	5				
5.0-7.0	HISTOLOGY & EMBRYOLOGY	15				
29.0-30.0	MEDICAL MICROBIOLOGY	7,5		2,5		
8.0- 17.0	PHYSIOLOGY	40				
TOTAL		100				

Total number of MCQs are 100, equal to 100 pts. Each question has 1 pt.).

Total value of LPE is equal to 100 points

**Committee Score (CS) = 95% of [90% CE (MCQ and SbMCQ) + 10% (LPE)] + 5% of PBL-P**

**Abbreviations:**

**MCQ:** Multiple Choice Questions

**SbMCQ:** Scienario-based Multiple Choice Questions

**LPE:** Laboratory Practical Exam

**CE:** Committee Exam

**CS:** Committee Score

**FE:** Final Exam

**ICE:** Incomplete Exam

**Pts.:** Points

# In FE and ICE, 38 out of 200 FE and ICE MCQs and SbMCQ will be from Committee I (Each question is 0.5 pt, equal value

**COMMITTEE I - CARDIOVASCULAR SYSTEM**  
**I. WEEK / 12-16 Sep 2022**

	Monday 12-Sep-2022	Tuesday 13-Sep-2022	Wednesday 14-Sep-2022	Thursday 15-Sep-2022	Friday 16-Sep-2022
09.00- 09.50	Independent Learning	Lecture Introduction to Cardiovascular System <i>Aikaterini Panteli</i>	Independent Learning	Independent Learning	Lecture Histology of Circulatory Systems; Gn Spec. Arteries <i>Aylin Yaba Uçar</i>
10.00- 10.50	Introductory Session Introduction to Phase II Phase II Coordination Committee/ Introduction to Committee I Secretary of Committee	Lecture Thoracic Cavity & Mediastinum <i>Aikaterini Panteli</i>	Lecture Functions of Hemoglobin <i>İnci Özden</i>	Lecture Leucocyte Circulation and Migration into Tissue <i>Gülerden Yanıkkaya Demirel</i>	Lecture Histology of Circulatory Systems; Capillaries & Veins <i>Aylin Yaba Uçar</i>
11.00- 11.50	Lecture Introduction to Medical Microbiology <i>Güner Söyletir</i>	Lecture Thoracic Cavity & Mediastinum <i>Aikaterini Panteli</i>	Lecture Functions of Hemoglobin <i>İnci Özden</i>	Lecture Leukocytes & Lymphocytes <i>Burcu Gemici Başol</i>	Lecture Great Vessels of the Heart <i>Aikaterini Panteli</i>
12.00- 12.50	Lecture Sterilization and Disinfection <i>Güner Söyletir</i>	Lecture Functions of Blood <i>Burcu Gemici Başol</i>	Lecture Pericardium and Outer Surface of the Heart <i>Aikaterini Panteli</i>	Lecture Leukocytes & Lymphocytes <i>Burcu Gemici Başol</i>	Lecture Major Vessels of the Body <i>Aikaterini Panteli</i>
13.00- 13.50	Lunch Break				
14.00- 14.50	Lecture Porphin, Porphyrins, Heme, Hemoglobin, Structure of Hemoglobin <i>İnci Özden</i>	Lecture Erythrocyte <i>Burcu Gemici Başol</i>	Lecture Chambers of the Heart <i>Aikaterini Panteli</i>	ICP / CSL: Intramuscular/Intradermal/ Subcutan Injection <i>Özlem Tanrıöver / Arzu Akalın/ Özkan Eraslan Group D</i>	Lecture Synthesis of Hemoglobin, Disorders Concerning Synthesis of Hemoglobin <i>İnci Özden</i>
15.00- 15.50	Lecture Porphin, Porphyrins, Heme, Hemoglobin, Structure of Hemoglobin <i>İnci Özden</i>	Lecture Erythrocyte <i>Burcu Gemici Başol</i>	Lecture Chambers of the Heart <i>Aikaterini Panteli</i>		Lecture Synthesis of Hemoglobin, Disorders Concerning Synthesis of Hemoglobin <i>İnci Özden</i>
16.00- 16.50	Lecture / Scientific Research and PROJECT - II Presentation of Scientific Research <i>Deniz Kırac</i>	Independent Learning	Independent Learning		Independent Learning
17.00-17.50	Lecture / Scientific Research and PROJECT - II Presentation of Scientific Research <i>Deniz Kırac</i>	Independent Learning	Independent Learning		Independent Learning

IL: Independent Learning, CSL: Clinical Skills Learning, Student groups for laboratory/practice sessions will be announced by coordinators.

**COMMITTEE I - CARDIOVASCULAR SYSTEM**  
**II. WEEK / 19– 23 Sep 2022**

	Monday 19-Sep-2022	Tuesday 20-Sep-2022	Wednesday 21-Sep-2022	Thursday 22-Sep-2022	Friday 23-Sep-2022
09.00- 09.50	PBL	Lecture Coronary arteries, Cardiac Veins, and Cardiac Conduction System <i>Aikaterini Panteli</i>	Lecture Regulation of Cardiac Function <i>Bayram Yılmaz</i>	Lecture Biological Basis of Cardiovascular Diseases; Death Begets Failure in the Heart <i>Turgay İsbir</i>	Lecture Congenital Heart Anomalies <i>Alev Cumbul</i>
10.00- 10.50		Lecture Coronary arteries, Cardiac Veins, and Cardiac Conduction System <i>Aikaterini Panteli</i>	Lecture Regulation of Cardiac Function <i>Bayram Yılmaz</i>	Biological Basis of Cardiovascular Diseases; Death Begets Failure in the Heart <i>Turgay İsbir</i>	Lecture Degradation of Hemoglobin <i>İnci Özden</i>
11.00- 11.50		Lecture Development of Circulatory Systems; Endocardial Tube Formation & Looping <i>Alev Cumbul</i>	Lecture Introduction to Lymphatic System <i>Aikaterini Panteli</i>	Lecture Immunology of Heart and Vessels <i>Gülderen Yanıkkaya Demirel</i>	Lecture Degradation of Hemoglobin <i>İnci Özden</i>
12.00- 12.50	Independent Learning	Lecture Development of Circulatory Systems; Septation <i>Alev Cumbul</i>	Lecture Circulation of Lymph <i>Aikaterini Panteli</i>	Lecture Immunology of Heart and Vessels <i>Gülderen Yanıkkaya Demirel</i>	Independent Learning
13.00- 13.50	Lunch Break				
14.00- 14.50	Independent Learning	Lecture Blood Types and Transfusion Reactions <i>Bayram Yılmaz</i>	Lecture Fetal Circulation <i>Aikaterini Panteli</i>	ICP / CSL: Intramuscular/ Intradermal/ Subcutan Injection <i>Özlem Tanrıöver / Arzu Akalın/ Gökhan Gencer Group E</i>	
15.00- 15.50	Laboratory / Anatomy Thoracic wall, Cavity & Mediastinum <i>Aikaterini Panteli Group 1</i>	Lecture Blood Types and Transfusion Reactions <i>Bayram Yılmaz</i>	Lecture Review of Cardiovascular Anatomy <i>Aikaterini Panteli</i>	Group E	Lecture Rhythmical Excitation of the Heart <i>Bayram Yılmaz</i>
16.00- 16.50	Group 2	Laboratory / Anatomy Pericardium, Outer Surface, Chambers of the heart <i>Aikaterini Panteli Group 2</i>	Lecture Platelets and Coagulation <i>Mehtap Kaçar</i>		Laboratory / Anatomy Coronary Arteries and Cardiac Veins/ Great Vessels Of The Heart and Body/ Cardiac conduction system <i>Aikaterini Panteli Group 2</i>
17.00-17.50	Independent Learning	Group 1	Lecture Platelets and Coagulation <i>Mehtap Kaçar</i>		Group 1

IL: Independent Learning, CSL: Clinical Skills Learning, Student groups for laboratory/practice sessions will be announced by coordinators.

**COMMITTEE I - CARDIOVASCULAR SYSTEM**  
**III. WEEK / 26– 30 Sep 2022**

	Monday 26-Sep-2022	Tuesday 27-Sep-2022	Wednesday 28-Sep-2022	Thursday 29-Sep-2022		Friday 30-Sep-2022
09.00- 09.50	PBL	Lecture Cardiac Arrhythmias <i>Bayram Yılmaz</i>	Lecture Microcirculation and the Lymphatic System <i>Bayram Yılmaz</i>	<i>Laboratory / Histology &amp;Embryology Histology of Cardiovascular System Alev Cumbul &amp; Aylin Yaba Uçar Group 1</i>	Laboratory / Microbiology Safety in microbiology laboratory and Use of microscope <i>Güner Söyletir</i> Group D	Lecture Biophysics of Hemodynamics <i>Akif Maharramov</i>
10.00- 10.50		Lecture Cardiac Arrhythmias <i>Bayram Yılmaz</i>	Lecture Capillary Fluid Exchange, Interstitial Fluid, and Lymph Flow <i>Bayram Yılmaz</i>		Group 2	Group B
11.00- 11.50		Lecture Development of Circulatory Systems; Arteries and Anomalies <i>Alev Cumbul</i>	Lecture Sampling, Data Collection and Data Processing <i>E. Çiğdem Keleş</i>	Lecture Histology of Lymph Organs; General Aspects, Thymus and Lymph Node <i>Aylin Yaba Uçar</i>		
12.00- 12.50	Lecture Immunology of Heart and Vessels <i>Gülderen Yanıkkaya Demirel</i>	Lecture Development of Circulatory Systems; Veins and Anomalies <i>Alev Cumbul</i>	Lecture Statistical Decision Theory, Test of Hypothesis and Significance <i>E. Çiğdem Keleş</i>			Lecture Histology of Lymph Organs; Spleen and MALT (Tonsils) <i>Aylin Yaba Uçar</i>
13.00- 13.50	Lunch Break					
14.00- 14.50	Lecture Principles of Electrocardiography <i>Bayram Yılmaz</i>	Lecture Introduction to Pathology <i>Aydın Sav</i>	Lecture Hemorheology <i>Akif Maharramov</i>	ICP / CSL Intramuscular/Intradermal/ Subcutan Injection <i>ÖzlemTanrıöver / Arzu Akalın/ Özkan Eraslan</i> Group A		Independent Learning
15.00- 15.50	Lecture Electrocardiographic Interpretation of Cardiac Abnormalities <i>Bayram Yılmaz</i>	Lecture Adaptations <i>Aydın Sav</i>	Lecture Hemorheology <i>Akif Maharramov</i>	Group A	SRPC SGS Group B <i>Deniz Kırac</i>	Independent Learning
16.00-16.50	Lecture Introduction to Bioelectromagnetics Magnetic Field <i>Akif Maharramov</i>	Lecture Adaptations <i>Aydın Sav</i>	Independent Learning			Independent Learning
17.00-17.50	Lecture Introduction to Bioelectromagnetics Electric Field <i>Akif Maharramov</i>	Independent Learning	Independent Learning			Independent Learning

IL: Independent Learning, CSL: Clinical Skills Learning, Student groups for laboratory/practice sessions will be announced by coordinators.

**COMMITTEE I - CARDIOVASCULAR SYSTEM**  
**IV. WEEK / 03 – 07 Oct 2022**

	Monday 03-Oct-2022	Tuesday 04-Oct-2022	Wednesday 05-Oct-2022	Thursday 06-Oct-2022		Friday 07-Oct-2022
09.00- 09.50	Laboratory / Physiology Hematocrit Determination and Blood Typing & Bleeding Time <i>Bayram Yılmaz &amp; Mehtap Kaçar &amp; Burcu Gemici Başol</i> Group D	Lecture Oxygen, Oxidative Stress, NO, Redox Disequilibrium in the Failing Heart and Cardiovascular System <i>Deniz Kırac</i>	Lecture Systemic Mycoses <i>Nilgün Çerikçioğlu</i>	Laboratory / Histology &Embryology Histology of Lymphoreticular System <i>Alev Cumbul &amp; Aylin Yaba Uçar</i> Group 2	Laboratory / Microbiology Safety in microbiology laboratory and Use of microscope <i>Güner Söyletir</i> Group A	Lecture Regulation of Blood Pressure <i>Mehtap Kaçar</i>
10.00- 10.50	Group C	Lecture Oxygen, Oxidative Stress, NO, Redox Disequilibrium in the Failing Heart and Cardiovascular System <i>Deniz Kırac</i>	Lecture Vascular Distensibility and Functions of Arterial and Venous Systems <i>Bayram Yılmaz</i>			Lecture Regulation of Blood Pressure <i>Mehtap Kaçar</i>
11.00- 11.50	Group A	Lecture Principles of Hemodynamics <i>Burcu Gemici Başol</i>	Lecture Vascular Distensibility and Functions of Arterial and Venous Systems <i>Bayram Yılmaz</i>			Lecture Diagnostic Methods in Mycology <i>Nilgün Çerikçioğlu</i>
12.00- 12.50	Group B	Lecture Principles of Hemodynamics <i>Burcu Gemici Başol</i>	Independent Learning	Group 1	Group C	Lecture Superficial/Subcutaneous Mycosis <i>Nilgün Çerikçioğlu</i>
13.00- 13.50	Lunch Break					
14.00- 14.50	Lecture Introduction to Mycology <i>Nilgün Çerikçioğlu</i>	Lecture Introduction to Bioelectromagnetics: Electromagnetic Field <i>Akif Maharramov</i>	Lecture Development of Head; Splanchnocranium, Neurocranium <i>Aylin Yaba Uçar</i>	ICP / CSL: Intramuscular/Intradermal/ Subcutan Injection <i>Özlem Tanrıöver / Arzu Akalın/ Pınar Tura</i> Group B		Lecture Opportunistic Mycoses-I <i>Nilgün Çerikçioğlu</i>
15.00- 15.50	Lecture Introduction to Mycology <i>Nilgün Çerikçioğlu</i>	Lecture Bioelectromagnetic Effects on the Heart <i>Akif Maharramov</i>	Lecture Development of Neck; Pharyngeal Arches and Anomalies <i>Aylin Yaba Uçar</i>			Lecture Opportunistic Mycoses-II <i>Nilgün Çerikçioğlu</i>
16.00- 16.50	Lecture Local and Humoral Control of Blood Flow by the Tissues <i>Bayram Yılmaz</i>	Laboratory / Anatomy Lymphatic System <i>Aikaterini Panteli</i> Group 1	Independent Learning	Group B	SRPC SGS Group C <i>Deniz Kırac</i>	Independent Learning
17.00-17.50	Lecture Local and Humoral Control of Blood Flow by the Tissues <i>Bayram Yılmaz</i>	Group 2	Independent Learning			Independent Learning

IL: Independent Learning, CSL: Clinical Skills Learning, Student groups for laboratory/practice sessions will be announced by coordinators.

**COMMITTEE I - CARDIOVASCULAR SYSTEM**  
**V. WEEK / 11 – 14 Oct 2022**

	Monday 10-Oct-2022		Tuesday 11-Oct-2022	Wednesday 12-Oct-2022		Thursday 13-Oct-2022		Friday 14-Oct-2022
09.00- 09.50	Laboratory/ Physiology ECG I-ECG II <i>Bayram Yılmaz &amp; Mehtap Kaçar &amp; Burcu Gemici Başol</i> Group A	Laboratory / Microbiology Laboratory methods in Mycology <i>Güner Söyletir</i> Group C	Lecture Heart Valves and Heart Sounds <i>Bayram Yılmaz</i>	Laboratory / Physiology Blood Pressure Heart Sounds <i>Bayram Yılmaz &amp; Mehtap Kaçar &amp; Burcu Gemici Başol</i> Group C	Laboratory / Biochemistry Peripheral Blood Smear <i>Jale Çoban &amp; Müge Kopuz Alvarez Noval</i> Group A	Lecture Hyperemia & Congestion <i>Aydın Sav</i>		Lecture Disorders Concerning Hemoglobin Metabolism <i>İnci Özden</i>
10.00- 10.50			Lecture Heart Valves and Heart Sounds <i>Bayram Yılmaz</i>			Lecture Hyperemia & Congestion <i>Aydın Sav</i>		Lecture Disorders Concerning Hemoglobin Metabolism <i>İnci Özden</i>
11.00- 11.50	Group B	Group D	Lecture Blood Coagulation, Primary Hemostasis <i>İnci Özden</i>	Group D	Group B	Lecture Nervous Regulation of the Circulation <i>Bayram Yılmaz</i>		Lecture Coronary Circulation <i>Mehtap Kaçar</i>
12.00- 12.50			Secondary Hemostasis, Procoagulation, Anticoagulation, Fibrinolysis <i>İnci Özden</i>			Lecture Nervous Regulation of the Circulation <i>Bayram Yılmaz</i>		Lecture Cardiac Failure <i>Mehtap Kaçar</i>
13.00- 13.50	Lunch Break							
14.00-14.50	Group C	Group A	Lecture Ischemia and Infarction <i>Aydın Sav</i>	Group A	Group C	ICP / CSL:Intramuscular/Intradermal/ Subcutan Injection <i>ÖzlemTanrıöver / Arzu Akalın/ Pınar Tura</i> Group C		Lecture Circulatory Shock and Physiology of Its Treatment <i>Mehtap Kaçar</i>
15.00- 15.50			Lecture Ischemia and Infarction <i>Aydın Sav</i>			Group C	SRPC SGS Group D <i>Deniz Kıraç</i>	SRPC SGS Group E <i>Deniz Kıraç</i>
16.00- 16.50	Group D	Group B	Independent Learning	Group B	Group D			
17.00-17.50			Independent Learning					

IL: Independent Learning, CSL: Clinical Skills Learning, Student groups for laboratory/practice sessions will be announced by coordinators.

**COMMITTEE I - CARDIOVASCULAR SYSTEM**  
**VI. WEEK / 17 – 21 Oct 2022**

	Monday 17-Oct-2022	Tuesday 18-Oct-2022	Wednesday 19-Oct-2022	Thursday 20-Oct-2022	Friday 21-Oct-2022
09.00- 09.50	Independent Learning	Assessment Session (Anatomy,Physiology, Histology&Embryology, Microbiology, Biochemisrty Practical Exams)		Independent Learning	Independent Learning
10.00- 10.50					Assessment Session Committee I (MCQ)
11.00- 11.50					
12.00- 12.50					
13.00- 13.50	Lunch Break				
14.00- 14.50	Independent Learning	Independent Learning	Independent Learning	Independent Learning	Program Evaluation Session Evaluation of the Committee I Program <i>Secretary of the Committee</i>
15.00- 15.50					Independent Learning
16.00- 16.50					
17.00-17.50					

IL: Independent Learning, CSL: Clinical Skills Learning, Student groups for laboratory/practice sessions will be announced by coordinator

## COMMITTEE II - RESPIRATORY SYSTEM

### DISTRIBUTION of LECTURE HOURS

October 24–December 2, 2022

COMMITTEE DURATION: 6 WEEKS

COURSES	BASIC MEDICAL SCIENCES II	THEORETICAL	PRACTICAL	SMALL GROUP DISCUSSION	TOTAL
MED 203	<b>DISCIPLINE / COMPONENTS</b>				
	ANATOMY	11	2GX3H	0	14
	BIOPHYSICS	4	0	0	4
	BIOSTATISTICS	4	0	0	4
	HISTOLOGY & EMBRYOLOGY	6	2GX2H	0	8
	IMMUNOLOGY	7	0	0	7
	MEDICAL GENETIC	18	0	0	18
	MEDICAL MICROBIOLOGY	26	4GX4H 1GX4H	0	34
	PATHOLOGY	9	0	0	9
	PHYSIOLOGY	17	4GX2H	0	19
	SCIENTIFIC RESEARCH and PROJECT-II	0	0	5GX3H	3
	PBL	0	0	6	6
	<b>TOTAL</b>	<b>105</b>	<b>12</b>	<b>9</b>	<b>126</b>
MED 202	INTRODUCTION to CLINICAL PRACTICE- II	5H	5GX3H		8

INDEPENDENT LEARNING HOURS	100
----------------------------	-----

Coordination Committee	Head	Burcu GEMİCİ BAŞOL, PhD Assoc. Prof.
	Secretary	Edibe BİLİŞLİ KARA, DVM Lecturer
	Member	Alev CUMBUL, MD Assist. Prof.
	Member	Deniz KIRAÇ, PhD Assoc. Prof.



**COMMITTEE II - RESPIRATORY SYSTEM  
LECTURERS**

<b>MED 203 BASIC MEDICAL SCIENCES II</b>	
<b>DISCIPLINE</b>	<b>LECTURERS</b>
ANATOMY	Erdem SÖZTUTAR, MD, Assist. Prof. Aikaterini PANTELİ, MD, Assist. Prof. LAB: Edibe BİLİŞLİ KARA, DVM, Lecturer LAB: Ahmet SAÇ, MD
BIOPHYSICS	Akif MAHARRAMOV, PhD Assist. Prof. Bilge GÜVENÇ TUNA, PhD Assoc. Prof.
BIOSTATISTICS	E. Çiğdem KELEŞ, PhD Assist. Prof.
HISTOLOGY & EMBRYOLOGY	Aylin YABA UÇAR, PhD Assoc. Prof. Alev CUMBUL, PhD Assist. Prof.
IMMUNOLOGY	Gülderen YANIKKAYA DEMİREL, MD PhD Prof.
MEDICAL GENETICS	Ömer Faruk BAYRAK, PhD Prof.
MEDICAL MICROBIOLOGY	Aynur EREN, MD Prof. Güner SÖYLETİR, MD PhD Prof. Pınar ÇIRAGİL, MD Prof.
PATHOLOGY	Aydın SAV, MD Prof.
PHYSIOLOGY	Bayram YILMAZ, PhD, Prof. Mehtap KAÇAR, MD, PhD, Prof. Burcu GEMİCİ BAŞOL, PhD, Assoc. Prof
SCIENTIFIC RESEARCH AND PROJECT-II	Bayram YILMAZ, PhD, Prof. Deniz KIRAÇ, PhD, Assoc. Prof.

**OTHER COURSES**

<b>MED 202 INTRODUCTION to CLINICAL PRACTICE II</b>	
<b>DISCIPLINE</b>	<b>LECTURERS</b>
CLINICAL SKILLS LAB	Özlem TANRIÖVER MD MPH Prof. Arzu AKALIN MD Assist.Prof. Gökhan GENCER, MD Assist.Prof. Alp KAYIRAN, MD Assist.Prof. Erman UYGUN, MD Abuzer KEKEÇ, MD

## **COMMITTEE II - RESPIRATORY SYSTEM**

### **AIM and LEARNING OBJECTIVES**

#### **AIMS**

1. To convey information about biophysical, biological, anatomical, embryological, histological, and physiological properties of respiratory system,
2. To convey information about functional activity of lungs by defining all basic parameters,
3. To convey information about respiratory system anatomy,
4. To convey basic, general knowledge about immunology,
5. To convey basic, general knowledge and information about the structural/biological features and pathogenesis of bacteria,
6. To convey information about good laboratory and clinical practices in research projects,
7. To convey basic knowledge about biostatistics.

#### **LEARNING OBJECTIVES**

At the end of this committee, student should be able to:

##### **KNOWLEDGE**

- 1.0. For respiratory system;
  - 1.1. explain biophysical changes,
  - 1.2. associate with the clinical reflections.
- 2.0. For nose, paranasal sinus, pharynx, larynx, and lung;
  - 2.1. describe their anatomy,
  - 2.2. associate with adjacent tissues and organs,
  - 2.3. explain their functional and clinical reflections.
- 3.0. Explain developmental stages and list embryological origins of organs,
  - 3.2. associate the relation between major birth abnormalities and developmental process.
  - 3.3. explain histological properties of upper respiratory system
  - 3.4. explain histological properties of lower respiratory system
- 4.0 Explain functions of pulmonary system.
- 5.0 explain mechanisms of oxygen and carbon dioxide exchange and transportation.
- 6.0 describe dynamics of microcirculation together with general and pulmonary circulation.
- 7.0 describe nervous (autonomous) control of pulmonary system.
- 8.0 describe dynamics and control of pulmonary circulation.
- 9.0 describe measurement of spirometry method.
- 10.0 Explain basics of exercise physiology and the effects of exercise on the cardiovascular and respiratory systems,
- 11.0 Explain the adaptive changes in the respiratory system in extreme conditions and basic information about pathophysiology of respiratory system disorders.
- 12.0 For immune system;
  - 12.1. describe the properties of pulmonary immune response
  - 12.2. relate changes with infection diseases.
- 13.0 Explain inherited and non-inherited genetic mechanisms in neoplasia.
- 14.0 Describe the structural/biological features and pathogenesis of bacteria.
- 15.0 List methods used in protection from microorganisms.
- 16.0 For endogenous and exogenous harmful agents;
  - 16.1. describe their mechanisms of cell and tissue damage,
  - 16.2. describe adaptation process of cells.
- 17.0 list pathologies resulting from endogenous and exogenous harmful agents and consequently emerging diseases.
- 18.0 describe how to prepare a scientific research presentation.
- 19.0 prepare a research article presentation
- 20.0 explain the steps of a statistical hypothesis test according to the properties of a given data.
- 21.0 for statistical hypothesis,
  - 21.1 list the statistical hypothesis test according to the properties of given data
  - 21.2. choose the appropriate statistical hypothesis test according to the properties of given data.
- 22.0 explain case scenario related basic medical science topics in a clinical context.

**COMMITTEE II - RESPIRATORY SYSTEM**  
**COMMITTEE II ASSESSMENT MATRIX**

LEARNING OBJECTIVES	DISCIPLINE	LECTURER/ INSTRUCTOR	DISTRUBITION of MCQs and SbMCQ			
			CE	FE	IE	TOTAL
2.0, 4.0, 7.0, 22.0	ANATOMY	Dr. A. Panteli	11	4	4	19
1.0, 6.0	BIOPHYSICS	Dr. A. Maharramov	4	1	1	6
20.0-21.0	BIOSTATISTICS	Dr. Ç. Keleş	4	1	1	6
3.0, 22.0	HISTOLOGY & EMBRYOLOGY	Dr. A. Yaba Uçar	2	1	1	10
		Dr. A. Cumbul	4	1	1	
12.0	IMMUNOLOGY	Dr. G. Yanıkkaya Demirel	7	3	3	13
13.0	MEDICAL GENETIC	Dr. Ö.F. Bayrak	18	6	6	30
14.0-15.0, 22.0	MEDICAL MICROBIOLOGY	Dr. G. Söyletir Dr. A. Eren Dr. P. Çiragil	24	9	9	42
16.0-17.0, 22.0	PATHOLOGY	Dr. A. Sav	9	3	3	15
5.0, 8.0-11.0, 22.0	PHYSIOLOGY	Dr. B. Yılmaz Dr. M. Kaçar Dr. B. Gemici Başol	16	6	6	28
22.0	PBL		1	0	0	1
		<b>TOTAL</b>	<b>100</b>	<b>35/200<sup>#</sup></b>	<b>35/200<sup>#</sup></b>	<b>170</b>

  

LEARNING OBJECTIVES	DISCIPLINE	DISTRUBITION of LAB ASSESSMENT POINTS	
		LPE	QUIZ
2.0, 4.0, 7.0	ANATOMY	40	
3.0	HISTOLOGY & EMBRYOLOGY	10	
14.0	MEDICAL MICROBIOLOGY	15	5
5.0, 8.0-11.0	PHYSIOLOGY	30	
<b>TOTAL</b>		<b>100</b>	

Total number of MCQs are 100, equal to 100 pts. Each question has 1 pt.).

Total value of LPE is equal to 100 points

**Committee Score (CS) = 95% of [90% CE (MCQ and SbMCQ) + 10 % (LPE)] + 5% of PBL-P**

**Abbreviations:**

**MCQ:** Multiple Choice Questions

**SbMCQ:** Scienario-based Multiple Choice Questions

**LPE:** Laboratory Practical Exam

**CE:** Committee Exam

**CS:** Committee Score

**FE:** Final Exam

**ICE:** Incomplete Exam

**Pts.:** Points

**#** In FE and ICE, 35 out of 200 FE and ICE MCQs and SbMCQ will be from Committee II (Each question is 0.5 pt, equal value

**COMMITTEE II - RESPIRATORY SYSTEM**  
**I. WEEK / 24 - 28 Oct 2022**

	Monday 24-Oct-2022	Tuesday 25-Oct-2022	Wednesday 26-Oct-2022	Thursday 27-Oct-2022		Friday 28-Oct-2022
09.00- 09.50	PBL	Lecture Patterns of Single Gene Inheritance <i>Ömer Faruk Bayrak</i>	Independent Learning	Lecture The Human Genome and Chromosomal Basis of Heredity <i>Ömer Faruk Bayrak</i>		Lecture Gram Positive Cocci <i>Güner Söyletir</i>
10.00- 10.50		Lecture Patterns of Single Gene Inheritance <i>Ömer Faruk Bayrak</i>	Independent Learning	Lecture Cytogenetics and Chromosomal Disorders <i>Ömer Faruk Bayrak</i>		Lecture Gram Positive Cocci <i>Güner Söyletir</i>
11.00- 11.50		Lecture Introduction to Respiratory System <i>Aikaterini Panteli</i>	Independent Learning	Lecture Bacterial Pathogenesis <i>Güner Söyletir</i>		Lecture Gram Positive Cocci <i>Güner Söyletir</i>
12.00- 12.50	Introduction to Committee II Secretary of Committee	Lecture Nasal Anatomy and Paranasal Sinuses <i>Aikaterini Panteli</i>	Independent Learning	Lecture Microbiome <i>Nilgün Çerikcioğlu</i>		Independent Learning
13.00- 13.50						
14.00- 14.50	Lecture Introduction to Medical Genetics <i>Ömer Faruk Bayrak</i>	Lecture Introduction to Bacteriology <i>Aynur Eren Topkaya</i>	Lecture The Pharynx <i>Aikaterini Panteli</i>	ICP/CSL IV Cannulation <i>Özlem Tanrıöver, Arzu Akalın, Gökhan Gencer</i> Group E		National Holiday
15.00- 15.50	Lecture Introduction to Medical Genetics <i>Ömer Faruk Bayrak</i>	Lecture Bacterial Genetics <i>Pınar Çırağil</i>	Lecture The Pharynx <i>Aikaterini Panteli</i>	Group E	SRPC SGS <i>Deniz Kıraç</i> Group A	
16.00- 16.50	Lecture Infection and Immunity <i>Gülderen Yanıkkaya Demirel</i>	Independent Learning	Independent Learning			
17.00-17.50	Lecture Infection and Immunity <i>Gülderen Yanıkkaya Demirel</i>	Independent Learning	Independent Learning			

IL: Independent Learning, CSL: Clinical Skills Learning, Student groups for laboratory/practice sessions will be announced by coordinators.

**COMMITTEE II - RESPIRATORY SYSTEM**  
**II. WEEK / 31 Oct - 4 Nov 2022**

	Monday 31-Oct-2022	Tuesday 1-Nov-2022	Wednesday 2-Nov-2022	Thursday 3-Nov-2022	Friday 4-Nov-2022
09.00- 09.50	PBL	Independent Learning	Independent Learning	Lecture Histology of the Upper Respiratory Tract <i>Alev Cumbul</i>	Lecture Gram Positive Aerob Bacilli <i>Güner Söyletir</i>
10.00- 10.50		Laboratory Lecture / Microbiology <i>Güner Söyletir</i> Group A, B, C, D	Laboratory Lecture / Microbiology <i>Güner Söyletir</i> Group A, B, C, D	Lecture Histology of the Upper Respiratory Tract <i>Alev Cumbul</i>	Lecture Gram Positive Aerob Bacilli <i>Güner Söyletir</i>
11.00- 11.50		Laboratory / Microbiology Laboratory Identification of Gr (+) cocci and Gr (-) cocci - I <i>Güner Söyletir</i> Group A	Laboratory / Microbiology Laboratory Identification of Gr (+) cocci and Gr (-) cocci - II <i>Güner Söyletir</i> Group A	Lecture The Larynx <i>Aikaterini Panteli</i>	Lecture Test Hypotheses and Significance in Large Samples <i>E. Çiğdem Keleş</i>
12.00- 12.50	Independent Learning	Group B	Group B	Lecture The Larynx <i>Aikaterini Panteli</i>	Lecture Test Hypotheses and Significance in Large Samples <i>E. Çiğdem Keleş</i>
13.00- 13.50	Lunch Break				
14.00- 14.50	Lecture Cultivation and identification of bacteria <i>Aynur Eren Topkaya</i>	Group C	Group C	ICP/CSL IV Cannulation <i>Özlem Tanrıöver, Arzu Akalın, Erman Uygun</i> Group A	Lecture Histology of The Respiratory Systems; Conducting Part <i>Alev Cumbul</i>
15.00- 15.50	Lecture Cultivation and identification of bacteria <i>Aynur Eren Topkaya</i>	Group D	Group D	Group A	Lecture Histology of The Respiratory Systems; Respiratory Part <i>Alev Cumbul</i>
16.00- 16.50	Lecture Developmental Genetics and Birth Defects <i>Ömer Faruk Bayrak</i>	Laboratory / Anatomy Upper Respiratory System <i>Aikaterini Panteli</i> Group A	Independent Learning		Lecture Cancer Genetics and Genomics <i>Ömer Faruk Bayrak</i>
17.00-17.50	Lecture Developmental Genetics and Birth Defects <i>Ömer Faruk Bayrak</i>	Group B	Independent Learning		Lecture Cancer Genetics and Genomics <i>Ömer Faruk Bayrak</i>

IL: Independent Learning, CSL: Clinical Skills Learning, Student groups for laboratory/practice sessions will be announced by coordinators. Full online lectures are in grey

**COMMITTEE II - RESPIRATORY SYSTEM**  
**III. WEEK / 7-11 Nov 20212**

	Monday 7-Nov-2022	Tuesday 8-Nov-2022	Wednesday 9-Nov-2022	Thursday 10-Nov-2022	Friday 11-Nov-2022
09.00- 09.50	Lecture Pulmonary Ventilation <i>Bayram Yılmaz</i>	Lecture Pleura and Diaphragm <i>Aikaterini Panteli</i>	Lecture Development of the Respiratory Systems & Anomalies <i>Aylin Yaba Uçar</i>	Commemoration of Atatürk	Lecture The Human Genome and Chromosomal Basis of Heredity <i>Ömer Faruk Bayrak</i>
10.00- 10.50	Lecture Pulmonary Ventilation <i>Bayram Yılmaz</i>	Lecture Pleura and Diaphragm <i>Aikaterini Panteli</i>	Lecture Development of the Respiratory Systems & Anomalies <i>Aylin Yaba Uçar</i>	Independent Learning	Lecture Cytogenetics and Chromosomal Disorders <i>Ömer Faruk Bayrak</i>
11:00-11:50	Lecture Cellular Injury and Necrosis <i>Aydın Sav</i>	Lecture Pulmonary Circulation, Pulmonary Edema, Pleural Fluid <i>Bayram Yılmaz</i>	Lecture Molecular Basis of Genetic Diseases <i>Ömer Faruk Bayrak</i>	Lecture Diffusion of Blood Gases <i>Bayram Yılmaz</i>	Lecture Transport of Blood Gases <i>Bayram Yılmaz</i>
12:00-12:50	Lecture Cellular Injury and Necrosis <i>Aydın Sav</i>	Lecture Pulmonary Circulation, Pulmonary Edema, Pleural Fluid <i>Bayram Yılmaz</i>	Lecture Tools of Human Molecular Genetics <i>Ömer Faruk Bayrak</i>	Lecture Diffusion of Blood Gases <i>Bayram Yılmaz</i>	Lecture Transport of Blood Gases <i>Bayram Yılmaz</i>
13.00- 13.50	Lunch Break				
14.00- 14.50	Lecture Hemodynamics <i>Aydın Sav</i>	Lecture Hemorrhage and Thrombosis <i>Aydın Sav</i>	Lecture Gram Negative Cocci <i>Güner Söyletir</i>	ICP/CSL IV Cannulation <i>Özlem Tanrıöver, Arzu Akalın, Alp Kayran</i> Group B	Lecture Test Hypotheses and Significance in Large Samples <i>E. Çiğdem Keleş</i>
15.00- 15.50	Lecture Hemodynamics <i>Aydın Sav</i>	Lecture Hemorrhage and Thrombosis <i>Aydın Sav</i>	Lecture Gram Negative Cocci <i>Güner Söyletir</i>	Group B	Lecture Test Hypotheses and Significance in Large Samples <i>E. Çiğdem Keleş</i>
16.00- 16.50	Lecture Pulmonary Innate Immune Response <i>Gülderen Yanıkkaya Demirel</i>	Laboratory / Anatomy Larynx-Pleura and Diaphragm <i>Aikaterini Panteli</i> Group 2	Lecture Principle of Surface Tension & Alveolar Mechanic <i>Akif Maharramov</i>		Lecture Enterobacteriaceae <i>Güner Söyletir</i>
17.00-17.50	Lecture Pulmonary Innate Immune Response <i>Gülderen Yanıkkaya Demirel</i>	Group 1	Lecture Principle of Surface Tension & Alveolar Mechanic <i>Akif Maharramov</i>		Lecture Enterobacteriaceae <i>Güner Söyletir</i>

IL: Independent Learning, CSL: Clinical Skills Learning, Student groups for laboratory/practice sessions will be announced by coordinators.

**COMMITTEE II - RESPIRATORY SYSTEM**  
**IV. WEEK / 14 – 18 Nov 2022**

	Monday 14-Nov-2022	Tuesday 15-Nov-2022	Wednesday 16-Nov-2022	Thursday 17-Nov-2022		Friday 18-Nov-2022
09.00- 09.50	Lecture Pulmonary Adaptive Immune Response <i>Gülderen Yanıkkaya Demirel</i>		Independent Learning	Laboratory /Histology& Embryology Histology of Respiratory System <i>Alev Cumbul, Aylin Yaba Uçar</i> Group 2	Laboratory / Physiology Spirometry <i>Bayram Yılmaz &amp; Mehtap Kaçar &amp; Burcu Gemici Başol</i> Group A	Lecture Aviation, High-Altitude and Space Physiology <i>Bayram Yılmaz</i>
10.00- 10.50	Lecture Pulmonary Adaptive Immune Response <i>Gülderen Yanıkkaya Demirel</i>	Laboratory Lecture / Microbiology <i>Güner Söyletir</i> Group A, B, C, D	Laboratory Lecture / Microbiology <i>Güner Söyletir</i> Group A, B, C, D		Group B	Lecture Physiology of Deep-Sea Diving and Hyperbaric Conditions-1 <i>Bayram Yılmaz</i>
11.00- 11.50	Lecture Regulation of Respiration <i>Burcu Gemici Başol</i>	Laboratory / Microbiology Laboratory Identification of Gr (-) and Gr(+) bacilli and mycobacteria – I <i>Güner Söyletir</i> Grup A	Laboratory / Microbiology Laboratory Identification of Gr (-) and Gr(+) bacilli and mycobacteria – II <i>Güner Söyletir</i> Group C	Group 1	GroupC	Lecture Physiology of Deep-Sea Diving and Hyperbaric Conditions-2 <i>Bayram Yılmaz</i>
12.00- 12.50	Lecture Regulation of Respiration <i>Burcu Gemici Başol</i>	Grup B	Group D		Group D	Independent Learning
13.00- 13.50	Lunch Break					
14.00- 14.50	Lecture The Trachea <i>Aikaterini Panteli</i>	Grup C	Group A	ICP/CSL IV Cannulation <i>Özlem Tanrıöver, Arzu Akalın, Alp Kayıran</i> Group C		Lecture Sports Physiology <i>Mehtap Kaçar</i>
15.00- 15.50	Lecture The Lungs <i>Aikaterini Panteli</i>	Grup D	Group B	Group C	SRPC SGS <i>Deniz Kıraç</i> Group D	Lecture Sports Physiology <i>Mehtap Kaçar</i>
16.00- 16.50	Lecture Review of the Respiratory System <i>Aikaterini Panteli</i>	Independent Learning	Independent Learning			Independent Learning
17.00-17.50	Independent Learning	Independent Learning	Independent Learning			Independent Learning

IL: Independent Learning, CSL: Clinical Skills Learning, Student groups for laboratory/practice sessions will be announced by coordinators.

**COMMITTEE II - RESPIRATORY SYSTEM**  
**V. WEEK / 21 – 25 Nov 2022**

	Monday 21-Nov-2022	Tuesday 22-Nov-2022	Wednesday 23-Nov-2022	Thursday 24-Nov-2022	Friday 25-Nov-2022
09.00- 09.50	Lecture Genetics of Complex Diseases <i>Ömer Faruk Bayrak</i>	Independent Learning	Lecture Treatment of Genetic Disease - Introduction to Gene Therapy <i>Ömer Faruk Bayrak</i>	Lecture Anaerobs <i>Aynur Eren Topkaya</i>	Lecture Gram Negative Curved Bacilli <i>Güner Söyletir</i>
10.00- 10.50	Lecture Genetics of Complex Diseases <i>Ömer Faruk Bayrak</i>	Lecture Mycoplasma-Chlamydia-Rickettsia <i>Pınar Çıragil</i>	Lecture Treatment of Genetic Disease - Introduction to Gene Therapy <i>Ömer Faruk Bayrak</i>	Lecture Anaerobs <i>Aynur Eren Topkaya</i>	Lecture Mycobacteria-Actinomycetes- Nocardia <i>Güner Söyletir</i>
11.00- 11.50	Lecture Introduction to Pathophysiology of Respiratory System <i>Mehtap Kaçar</i>	Lecture Mycoplasma-Chlamydia-Rickettsia <i>Pınar Çıragil</i>	Lecture Modeling in Circulatory & Respiratory Systems <i>Akif Maharramov</i>	Laboratory / Anatomy Lower Respiratory System <i>Aikaterini Panteli</i> Group 1	Lecture Mycobacteria-Actinomycetes- Nocardia <i>Güner Söyletir</i>
12.00- 12.50	Lecture Introduction to Pathophysiology of Respiratory System <i>Mehtap Kaçar</i>	Lecture Spirochetes <i>Pınar Çıragil</i>	Lecture Modeling in Circulatory & Respiratory Systems <i>Akif Maharramov</i>	Group 2	Independent Learning
13.00- 13.50	Lunch Break				
14.00- 14.50	Lecture Injury by Endogenous Substances <i>Aydın Sav</i>	Laboratory / Physiology Exercise and Metabolism <i>Bayram Yılmaz &amp; Mehtap Kaçar &amp; Burcu Gemici Başol</i> Group C	Lecture Non-fermenters <i>Güner Söyletir</i>	ICP/CSL IV Cannulation <i>Özlem Tanrıöver, Arzu Akalın, Abuzer Kekeç</i> Group D	Independent Learning
15.00- 15.50	Lecture Injury by Toxic Substances and Pneumoconiosis <i>Aydın Sav</i>	Group D	Lecture Gram Negative Small Non-enteric Bacilli I <i>Güner Söyletir</i>	Group D	Independent Learning
16.00- 16.50	Lecture Injury by Toxic Substances and Pneumoconiosis <i>Aydın Sav</i>	Group A	Lecture Gram Negative Small Non-enteric Bacilli II <i>Güner Söyletir</i>		Independent Learning
17.00-17.50	Independent Learning	Group B	Independent Learning		Independent Learning

IL: Independent Learning, CSL: Clinical Skills Learning, Student groups for laboratory/practice sessions will be announced by coordinators



**COMMITTEE II - RESPIRATORY SYSTEM**  
**VI. WEEK / 28 Nov – 2 Dec 2022**

	Monday 28-Nov-2022	Tuesday 29-Nov-2022	Wednesday 30-Nov-2022	Thursday 1-Dec-2022	Friday 2-Dec-2022
09.00- 09.50	Independent Learning	Assessment Session (Anatomy, Physiology and Histology&Embryology, MicrobiologyPractical Exams)	Independent Learning	Independent Learning	Independent Learning
10.00- 10.50					Assessment Session Committee II (MCQ)
11.00- 11.50					
12.00- 12.50					
13.00- 13.50	Lunch Break				
14.00- 14.50	Independent Learning	Independent Learning	Independent Learning	Independent Learning	Program Evaluation Session Review of the Exam Questions, Evaluation of the Committee II Program <i>Secretary of the Committee</i>
15.00- 15.50					Independent Learning
16.00- 16.50					
17.00- 17.50					

### COMMITTEE III - GASTROINTESTINAL SYSTEM and METABOLISM

#### DISTRIBUTION of LECTURE HOURS

December 5, 2022– January 20, 2023

COMMITTEE DURATION: 7 WEEKS

COURSES	BASIC MEDICAL SCIENCES II	THEORETICAL	PRACTICAL	SMALL GROUP DISCUSSION	TOTAL
MED 203	<b>DISCIPLINE / COMPONENTS</b>				
	ANATOMY	21	2GX6H	0	27
	BIOCHEMISTRY	33	4GX1H	0	34
	BIOPHYSICS	10	0	0	10
	BIostatISTICS	4	0	0	4
	HISTOLOGY & EMBRYOLOGY	12	2GX4H	0	16
	IMMUNOLOGY	2	0	0	2
	MEDICAL BIOLOGY	6	0	0	6
	MEDICAL MICROBIOLOGY	10	1GX2H	0	12
	PATHOLOGY	6	0	0	6
	PHYSIOLOGY	17	4GX1H	0	18
	SCIENTIFIC RESEARCH and PROJECT-II	0	0	5GX3H	3
	PBL	0	0	6	6
	<b>TOTAL</b>	<b>124</b>	<b>11</b>	<b>9</b>	<b>144</b>
MED 202	<b>INTRODUCTION to CLINICAL PRACTICE- II</b>	5	5GX4H		9

<b>INDEPENDENT LEARNING HOURS</b>	104
-----------------------------------	-----

<b>Coordination Committee</b>	<b>Head</b>	İnci ÖZDEN, PhD Prof.
	<b>Secretary</b>	Müge KOPUZ ALVAREZ NOVAL, PhD Assist. Prof
	<b>Member</b>	Mehtap KAÇAR, MD PhD Prof.
	<b>Member</b>	Aikaterini PANTELİ, MD Lecturer

### COMMITTEE III - GASTROINTESTINAL SYSTEM and METABOLISM LECTURERS

MED 203 BASIC MEDICAL SCIENCES II	
DISCIPLINE	LECTURERS
ANATOMY	Erdem SÖZTUTAR, MD Assist. Prof. Aikaterini PANTELİ, MD Lecturer LAB: Edibe BİLİŞLİ, DVM. LAB: Ahmet SAÇ, MD
BIOCHEMISTRY	İnci ÖZDEN, PhD Prof. LAB: Jale ÇOBAN, MD Prof. LAB: Müge KOPUZ ALVAREZ NOVAL, PhD Assist. Prof.
BIOPHYSICS	Akif MAHARRAMOV, PhD Assist. Prof. Bilge GÜVENÇ TUNA, PhD Assoc. Prof.
BIOSTATISTICS	E. Çiğdem KELEŞ, PhD Assist. Prof.
HISTOLOGY & EMBRYOLOGY	Aylin YABA UÇAR, PhD Assoc. Prof. Alev CUMBUL, PhD Assist. Prof.
IMMUNOLOGY	Gülderen YANIKKAYA DEMİREL, MD PhD Prof.
MEDICAL BIOLOGY	Turgay İSBİR, PhD Prof. Soner DOĞAN, PhD Prof. Deniz KIRAÇ, PhD Assoc. Prof. Seda GÜLEÇ YILMAZ, PhD Assoc. Prof.
MEDICAL MICROBIOLOGY	Aynur EREN, MD Prof. Güner Söyletir, MD PhD Prof. Pınar ÇIRAGİL, MD Prof. Sibel Ergüven, MD Prof.
PATHOLOGY	Aydın SAV MD Prof.
PHYSIOLOGY	Bayram YILMAZ, PhD Prof. Mehtap KAÇAR, MD PhD Prof. Burcu GEMİCİ BAŞOL, PhD Assoc. Prof.
SCIENTIFIC RESEARCH AND PROJECT-II	Bayram YILMAZ, PhD Prof. Deniz KIRAÇ, PhD Assoc. Prof.

#### OTHER COURSES

MED 202 INTRODUCTION TO CLINICAL PRACTICE II	
DISCIPLINE	LECTURERS
CLINICAL SKILLS LAB	Özlem TANRIÖVER, MD MPH Prof. Arzu AKALIN, MD Assist. Prof. Cem ŞİMŞEK, MD Assist.Prof. Hande CANDEMİR, MD Assist. Prof. Özkan ERASLAN, MD Pınar TURA, MD Assist. Prof. Alp KAYIRAN MD Assoc. Prof. Erman UYGUN MD

**COMMITTEE III - GASTROINTESTINAL SYSTEM and METABOLISM**  
**AIM and LEARNING OBJECTIVES**

**AIMS**

1. To convey information about biophysical, biological, anatomical, embryological, histological, physiological and biochemical properties of gastrointestinal system,
2. To convey knowledge on metabolic events in human organism and their clinical reflections.
3. To convey information about the structural/biological features and pathogenesis of parasites.
4. To convey basic, general knowledge about immunology,
5. To convey information about good laboratory and clinical practices in research projects.
6. To convey basic knowledge about biostatistics.

**LEARNING OBJECTIVES**

At the end of this committee, student should be able to:

**KNOWLEDGE**

- 1.0 describe metabolic events in human organisms, using concepts of internal energy, work, temperature, entropy, free energy and enthalpy.
- 2.0 describe gastrointestinal system biology and basics of proper alimentation.
- 3.0 For oral cavity, temporomandibular joint, chewing muscles, pharynx, esophagus, stomach, small intestine, large intestine, liver, gall bladder and tracts, pancreas, spleen and peritoneum;
  - 3.1. describe the anatomy,
  - 3.2. associate with adjacent tissue and organs,
  - 3.3. explain their functional and clinical reflections.
- 4.0 For abdominal wall, inguinal canal and portal system;
  - 4.1. describe anatomy,
  - 4.2. associate with adjacent tissue and organs,
  - 4.3. explain their functional and clinical reflections.
- 5.0 For digestive system and related glands;
  - 5.1. classify embryological origins and developmental stages Gastrointestinal Tract
  - 5.2. classify embryological origins and developmental stages Gastrointestinal System Glands
  - 5.3. associate the relation between birth abnormalities and developmental process
  - 5.4. explain the histological properties of Upper Gastrointestinal tract
  - 5.5. explain the histological properties of Lower Gastrointestinal tract
  - 5.5. explain the histological properties of gland associated with Gastrointestinal system
- 6.0 For lipid, protein and carbohydrate metabolisms;
  - 6.1. describe physiological mechanisms,
  - 6.2. explain the relation to each other,
  - 6.3. associate the changes of these relations at fasting and postprandial phase.
- 7.0 In digestive system;
  - 7.1. list exocrine glands secreting acid-neutralizing fluids,
  - 7.2. explain their secretion mechanisms,
  - 7.3. explain hormonal and neural factors.
- 8.0 classify the roles of enzymes and hormones in digestion and absorption of lipids and proteins.
- 9.0 explain types and roles of lipoproteins.
- 10.0 explain metabolisms of fatty acids, cholesterol, ketone bodies.
- 11.0 explain amino acid metabolisms, synthesis of urea and control mechanism of the synthesis.
- 12.0 Describe the structural/biological features and pathogenesis of parasites.
- 13.0 describe the properties of mucosal immunity
- 14.0 describe how to prepare a scientific research presentation.
- 15.0 prepare a research article presentation
- 16.0 explain the steps of a statistical hypothesis test according to the properties of a given data count biostatistical sampling methods.
- 17.0 for statistical hypothesis,
  - 17.1 list the statistical hypothesis test according to the properties of given data
  - 17.2 choose the appropriate statistical hypothesis test according to the properties of given data
- 18.0 explain case scenario related basic medical science topics in a clinical context.
- 19.0 explain inflammatory processes, termination pathways, effects on tissues and mechanisms for inducing diseases.

**COMMITTEE III - GASTROINTESTINAL SYSTEM and METABOLISM  
COMMITTEE ASSESSMENT MATRIX**

LEARNING OBJECTIVES	DISCIPLINE	LECTURER/ INSTRUCTOR	DISTRIBUTION of MCQs and SbMCQ			
			CE	FE	IE	TOTAL
3.0.-4.0.	ANATOMY	Dr. E.Söztutar	17	7	7	31
6.0, 8.0.-11.0., 18.0	BIOCHEMISTRY	Dr. İ. Özden	27	11	11	49
1.0., 18.0	BIOPHYSICS	Dr. A. Maharramov	8	3	3	14
16.0-17.0	BIOSTATISTICS	Dr. E.Ç. Keleş	3	1	1	5
5.0.	HISTOLOGY & EMBRYOLOGY	Dr. A. Yaba Uçar Dr. A. Cumbul	10	4	4	18
13.0.	IMMUNOLOGY	Dr. G. Yanıkkaya Demirel	2	1	1	4
2.0.	MEDICAL BIOLOGY	Dr. S. Doğan	5	2	2	9
12.0.	MEDICAL MICROBIOLOGY	Dr. S.Ergüven	8	3	3	14
19.0	PATHOLOGY	Dr. A. Sav	5	2	2	9
7.0., 18.0.	PHYSIOLOGY	Dr. B. Yılmaz Dr. M. Kaçar Dr. B. Gemici Başol	14	6	6	26
18.0	PBL		1	0	0	1
	<b>TOTAL</b>		<b>100</b>	<b>40/200#</b>	<b>40/200#</b>	<b>180</b>

LEARNING OBJECTIVES	DISCIPLINE	DISTRUBITION of LAB ASSESSMENT POINTS	
		LPE	QUIZ
3.0-4.0	ANATOMY	60	
6.0, 8.0.-11.0.	BIOCHEMISTRY	5	
5.0.	HISTOLOGY & EMBRYOLOGY	20	
12.0.	MICROBIOLOGY	3,75	1,25
7.0.	PHYSIOLOGY	10	
<b>TOTAL</b>		<b>100</b>	

Total number of MCQs are 100, equal to 100 pts. Each question has 1 pt.).

Total value of LPE is equal to 100 points

**Committee Score (CS) 95% of [90% CE (MCQ) + 10% (LPE)] + 5% of PBL-P**

**Abbreviations:**

**MCQ:** Multiple Choice Questions

**LPE:** Laboratory Practical Exam

**CE:** Committee Exam

**CS:** Committee Score

**FE:** Final Exam

**ICE:** Incomplete Exam

**Pts.:** Points # In FE and ICE, 41 out of 200 FE and ICE MCQs will be from Committee III (Each question is 0.5 pt, equal value.

**COMMITTEE III - GASTROINTESTINAL SYSTEM and METABOLISM**

**I. WEEK / 05 – 9 Dec 2022**

	Monday 05-Dec-2022	Tuesday 06-Dec-2022	Wednesday 07-Dec-2022	Thursday 08-Dec-2022	Friday 9-Dec-2022	
09.00- 09.50	PBL	Lecture Introduction to Medical Parasitology <i>Sibel Ergüven</i>	Lecture Blood and tissue Protozoa <i>Sibel Ergüven</i>	Laboratory / Anatomy Oral Cavity <i>Erdem Söztutar</i> <i>Edibe Bilişli</i> <i>Ahmet Saç</i> Group 1	Independent Learning	
10.00- 10.50		Lecture Urogenital and gastrointestinal Protozoa <i>Sibel Ergüven</i>	Lecture Blood and tissue Protozoa <i>Sibel Ergüven</i>	Group 2	Lecture Histology of Upper Gastrointestinal Tract; Oral Cavity <i>Alev Cumbul</i>	
11.00- 11.50		Lecture Gastrointestinal Functions <i>Burcu Gemici Başol</i>	Lecture Digestion and Absorption of Lipids <i>İnci Özden</i>	Lecture The Zeroth and First Laws of Thermodynamics <i>Akif Maharramov</i>	Lecture Histology of Upper Gastrointestinal Tract; Tongue, Salivary Gland <i>Alev Cumbul</i>	
12.00- 12.50	Introduction to Committee III <i>Secretary of Committee</i>	Lecture Gastrointestinal Functions <i>Burcu Gemici Başol</i>	Lecture Digestion and Absorption of Lipids <i>İnci Özden</i>	Lecture Energy Transformation & Distribution in Bio-molecular Systems <i>Akif Maharramov</i>	Lecture Histology of Alimentary Canal; Esophagus, Stomach <i>Alev Cumbul</i>	
13.00- 13.50	Lunch Break					
14.00- 14.50	Lecture GIT Development <i>Erdem Söztutar</i>	Lecture Energy Transformation & Distribution in Bio-molecular Systems <i>Akif Maharramov</i>	Lecture Oral Cavity <i>Erdem Söztutar</i>	ICP/CSL Nasogastric Tube Administration <i>Özlem Tanrıöver/ ArzuAkalın/</i> <i>Özkan Eraslan</i> Group C		
15.00- 15.50	Lecture GIT Development <i>Erdem Söztutar</i>	Lecture Bio-thermodynamics, Laws of Thermodynamics <i>Akif Maharramov</i>	Lecture Oral Cavity <i>Erdem Söztutar</i>	Group C	SRPC SGS <i>Deniz Kiraç</i> Group A	Lecture Esophagus & Stomach <i>Erdem Söztutar</i>
16.00- 16.50	Independent Learning	Independent Learning	<i>Introduction to Elective Courses</i>			Independent Learning
17.00-17.50	Independent Learning	Independent Learning				Independent Learning

IL: Independent Learning, CSL: Clinical Skills Learning, Student groups for laboratory/practice sessions will be announced by coordinators.

**COMMITTEE III - GASTROINTESTINAL SYSTEM and METABOLISM**

**II. WEEK /12 – 16 Dec 2022**

	Monday 12-Dec-2022	Tuesday 13-Dec-2022	Wednesday 14-Dec-2022	Thursday 15-Dec-2022	Friday 16-Dec-2022
09.00- 09.50	PBL	Lecture Histology of Alimentary Canal; Small Intestine <i>Aylin Yaba Uçar</i>	Lecture Gland Associated with the Digestive System; Liver <i>Aylin Yaba Uçar</i>	Lecture Interrelationship of Biology of Major Organs <i>Soner Doğan</i>	Lecture Gland Associated with the Digestive System; Pancreas <i>Aylin Yaba Uçar</i>
10.00- 10.50		Lecture Histology of Alimentary Canal; Large Intestine & Appendix <i>Aylin Yaba Uçar</i>	Lecture Gland Associated with the Digestive System; Gall Bladder <i>Aylin Yaba Uçar</i>	Lecture Interrelationship of Biology of Major Organs <i>Soner Doğan</i>	Lecture Gland Associated with the Digestive System; APUD System <i>Aylin Yaba Uçar</i>
11.00- 11.50		Laboratory / Anatomy The stomach & Duodenum <i>Erdem Söztutar</i> <i>Edibe Bilişli</i> <i>Ahmet Saç</i> Group 2	Lecture Propulsion and Mixing Movements in the GI Tract <i>Burcu Gemici Başol</i>	Lecture Secretory Functions of the Alimentary Tract <i>Burcu Gemici Başol</i>	Lecture Lipolysis <i>İnci Özden</i>
12.00- 12.50	Independent Learning	Group 1	Lecture Propulsion and Mixing Movements in the GI Tract <i>Burcu Gemici Başol</i>	Lecture Secretory Functions of the Alimentary Tract <i>Burcu Gemici Başol</i>	Lecture Lipolysis <i>İnci Özden</i>
13.00- 13.50	Lunch Break				
14.00- 14.50	Lecture Transport of Lipids in Plasma <i>İnci Özden</i>	Lecture Lipogenesis, Triacylglycerol Synthesis <i>İnci Özden</i>	Lecture Cholesterol Metabolism <i>İnci Özden</i>	ICP/CSL Nasogastric Tube Administration <i>Özlem Tanrıöver / Arzu Akalın / Özkan Eraslan</i> Group D	
15.00- 15.50	Lecture Transport of Lipids in Plasma <i>İnci Özden</i>	Lecture Lipogenesis, Triacylglycerol Synthesis <i>İnci Özden</i>	Lecture Cholesterol Metabolism <i>İnci Özden</i>	Group D	Lecture Digestion and Absorption in the Gastrointestinal Tract <i>Burcu Gemici Başol</i>
16.00- 16.50	Lecture Duodenum <i>Erdem Söztutar</i>	Lecture Interrelationship of Biology of Major Organs <i>Soner Doğan</i>	Lecture Test Hypotheses and Significance-Chi-Square Test <i>E. Çiğdem Keleş</i>		Lecture Test Hypotheses and Significance- Z-Test <i>Çiğdem Keleş</i>
17.00-17.50	Lecture Duodenum <i>Erdem Söztutar</i>	Lecture Interrelationship of Biology of Major Organs <i>Soner Doğan</i>	Lecture Test Hypotheses and Significance-Chi-Square Test <i>E. Çiğdem Keleş</i>		Lecture Test Hypotheses and Significance- Z-Test <i>Çiğdem Keleş</i>

IL: Independent Learning, CSL: Clinical Skills Learning, Student groups for laboratory/practice sessions will be announced by coordinators.

**COMMITTEE III - GASTROINTESTINAL SYSTEM and METABOLISM**  
**III. WEEK / 19 – 23 Dec 2022**

	Monday 19-Dec-2022	Tuesday 20-Dec-2022	Wednesday 21-Dec-2022	Thursday 22-Dec-2022		Friday 23-Dec-2022
9.00- 09.50	Lecture Energetics and Metabolic Rate <i>Bayram Yılmaz</i>	Lecture Applications of the First Law to Isochoric, Isobaric Processes, Enthalpy <i>Akif Maharramov</i>	Lecture Cestodes <i>Sibel Ergüven</i>	Lecture Entropy, Free Energy, Boltzmann Distribution <i>Akif Maharramov</i>		Laboratory / Anatomy Small and Large Intestine <i>Erdem Söztutar</i> <i>Edibe Bilişli</i> <i>Ahmet Saç</i> Group 1
10.00- 10.50	Lecture Energetics and Metabolic Rate <i>Bayram Yılmaz</i>	Lecture Applications of the First Law to Isochoric, Isobaric Processes, Enthalpy <i>Akif Maharramov</i>	Lecture Trematodes <i>Sibel Ergüven</i>	Lecture The Second Law of Thermodynamics <i>Akif Maharramov</i>		Group 2
11:00-11:50	Lecture Oxidation of Fatty Acids <i>İnci Özden</i>	Lecture Regulation of Feeding and Obesity <i>Bayram Yılmaz</i>	Lecture Ketone Bodies <i>İnci Özden</i>	Lecture Digestion and Absorption of Proteins <i>İnci Özden</i>		Independent Learning
12:00-12:50	Lecture Oxidation of Fatty Acids <i>İnci Özden</i>	Lecture Regulation of Feeding and Obesity <i>Bayram Yılmaz</i>	Lecture Ketone Bodies <i>İnci Özden</i>	Lecture Digestion and Absorption of Proteins <i>İnci Özden</i>		Independent Learning
13.00- 13.50	Lunch Break					
14.00- 14.50	Lecture Small Intestine <i>Erdem Söztutar</i>	Lecture Development of Gastrointestinal Tract; Alimentary Canal <i>Alev Cumbul</i>	Lecture Large Intestine <i>Erdem Söztutar</i>	ICP/CSL Nasogastric Tube Administration <i>Özlem Tanrıöver / Arzu Akalın/ Hande Candemir</i> Group E		Independent Learning
15.00- 15.50	Lecture Small Intestine <i>Erdem Söztutar</i>	Lecture Development of Gastrointestinal Tract; Alimentary Canal <i>Alev Cumbul</i>	Lecture Large Intestine <i>Erdem Söztutar</i>	Group E	SRPC SGS <i>Deniz Kiraç</i> Group C	Independent Learning
16.00- 16.50	Independent Learning	Independent Learning	Independent Learning			Independent Learning
17.00-17.50	Independent Learning	Independent Learning	Lecture Drug Addiction <i>Ece Genç</i>			Independent Learning

IL: Independent Learning, CSL: Clinical Skills Learning, Student groups for laboratory/practice sessions will be announced by coordinators.



**COMMITTEE III - GASTROINTESTINAL SYSTEM and METABOLISM**  
IV. WEEK / 26 – 30 Dec 2022

	Monday 26-Dec-2022	Tuesday 27-Dec-2022	Wednesday 28-Dec-2022	Thursday 29-Dec-2022	Friday 30-Dec-2022
09.00- 09.50	Lecture Body Temperature and Its Regulation <i>Bayram Yılmaz</i>	Lecture Liver <i>Erdem Söztutar</i>	Lecture Nutrigenomics <i>Soner Doğan</i>	Lecture Liver as Organ <i>Bayram Yılmaz</i>	Independent Learning
10.00- 10.50	Lecture Body Temperature and Its Regulation <i>Bayram Yılmaz</i>	Lecture Biliary System <i>Erdem Söztutar</i>	Lecture Nutrigenomics <i>Soner Doğan</i>	Lecture The Pancreas and Spleen <i>Erdem Söztutar</i>	Lecture Congenital Anaomalies of Gastrointestinal Trac <i>Alev Cumbul</i>
11.00- 11.50	Lecture Metabolisms of Individual Amino Acids <i>İnci Özden</i>	Lecture Urea Cycle <i>İnci Özden</i>	Lecture Metabolic Interrelationships and Provision of Tissue Fuels <i>İnci Özden</i>	Laboratory / Anatomy Liver and Biliary System <i>Erdem Söztutar/Edibe Bilişli</i> <i>Ahmet Saç</i> Group 2	Laboratory / Anatomy The Pancreas and Spleen <i>Erdem Söztutar/Edibe Bilişli</i> <i>Ahmet Saç</i> Group 1
12.00- 12.50	Lecture Metabolisms of Individual Amino Acids <i>İnci Özden</i>	Lecture Urea Cycle <i>İnci Özden</i>	Lecture Metabolic Interrelationships and Provision of Tissue Fuels <i>İnci Özden</i>	Group 1	Group 2
13.00- 13.50	Lunch Break				
14.00- 14.50	Lecture Physiology of Gastrointestinal Disorders <i>Mehtap Kaçar</i>	Lecture Nematodes <i>Sibel Ergüven</i>	Independent Learning	ICP/CSL Nasogastric Tube Administration <i>Özlem Tanrıöver/ Arzu Akalın /</i> <i>Cem Şimşek</i> Group A	Lecture Citric Acid Cycle <i>İnci Özden</i>
15.00- 15.50	Lecture Physiology of Gastrointestinal Disorders <i>Mehtap Kaçar</i>	Lecture Nematodes <i>Sibel Ergüven</i>	Independent Learning	Group A	Lecture Citric Acid Cycle <i>İnci Özden</i>
16.00- 16.50	Lecture Repetition all of the Material <i>Akif Maharramov</i>	Lecture Inflammation <i>Aydın Sav</i>	Independent Learning		Independent Learning
17.00-17.50	Lecture Repetition all of the Material <i>Akif Maharramov</i>	Lecture Wound Healing <i>Aydın Sav</i>	Independent Learning		Independent Learning

IL: Independent Learning, CSL: Clinical Skills Learning, Student groups for laboratory/practice sessions will be announced by coordinators

**COMMITTEE III - GASTROINTESTINAL SYSTEM and METABOLISM**  
**V. WEEK / 02 – 06 Jan 2023**

	Monday 02-Jan-2023	Tuesday 03-Jan-2023	Wednesday 04-Jan-2023	Thursday 05-Jan-2023	Friday 06-Jan-2023
09.00- 09.50	Lecture Opportunistic parasites <i>Sibel Ergüven</i>	Lecture Acute Inflammation <i>Aydın Sav</i>	Lecture Mucosal Immunity <i>Gülderen Yanıkkaya Demirel</i>	Lecture Nerves and vasculature <i>Erdem Söztutar</i>	Lecture Review of the Digestive System <i>Erdem Söztutar</i>
10.00- 10.50	Lecture Medical entomology <i>Sibel Ergüven</i>	Lecture Acute Inflammation <i>Aydın Sav</i>	Lecture Mucosal Immunity <i>Gülderen Yanıkkaya Demirel</i>	Lecture Nerves and vasculature <i>Erdem Söztutar</i>	Lecture Review of the Digestive System <i>Erdem Söztutar</i>
11:00-11:50	Lecture Purine and Pyrimidine Metabolism <i>İnci Özden</i>	Lecture Metabolic Interrelationships and Provision of Tissue Fuels <i>İnci Özden</i>	Lecture Xenobiotic Metabolism <i>İnci Özden</i>	Laboratory / Anatomy Abdominal Cavity and Peritoneum <i>Erdem Söztutar/Edibe Bilişli</i> <i>Ahmet Saç</i> Group 2	Lecture Overview of Metabolism <i>İnci Özden</i>
12:00-12:50	Lecture Purine and Pyrimidine Metabolism <i>İnci Özden</i>	Lecture Metabolic Interrelationships and Provision of Tissue Fuels <i>İnci Özden</i>	Lecture Xenobiotic Metabolism <i>İnci Özden</i>	Group 1	Lecture Overview of Metabolism <i>İnci Özden</i>
13.00- 13.50	Lunch Break				
14.00- 14.50	Lecture Peritoneal and Abdominal Cavity <i>Erdem Söztutar</i>	ICP REVIEW Group A <i>Arzu Akalın/Özlem Tanrıöver</i>	Independent Learning	ICP/CSL Nasogastric Tube Administration <i>Özlem Tanrıöver/ Arzu Akalın /</i> <i>Cem Şimşek</i> Group B	Lecture Chronic Inflammation <i>Aydın Sav</i>
15.00- 15.50	Lecture Abdominal Wall Topographic Anatomy <i>Erdem Söztutar</i>	ICP REVIEW Group E <i>Arzu Akalın/Özlem Tanrıöver</i>	Independent Learning	Group B	Lecture Chronic Inflammation <i>Aydın Sav</i>
16.00- 16.50	Independent Learning	ICP REVIEW Group C <i>Erman Uygun/Alp Kayıran</i>	Independent Learning		Independent Learning
17.00-17.50	Independent Learning	ICP REVIEW Group D <i>Erman Uygun/Alp Kayıran</i>	Independent Learning		Independent Learning

IL: Independent Learning, CSL: Clinical Skills Learning, Student groups for laboratory/practice sessions will be announced by coordinators

**COMMITTEE III - GASTROINTESTINAL SYSTEM and METABOLISM**  
**VI. WEEK / 09 – 13 Jan 2023**

	Monday 09-Jan-2023	Tuesday 10-Jan-2023	Wednesday 11-Jan-2023	Thursday 12-Jan-2023	Friday 13-Jan-2023	
09.00- 09.50	Independent Learning	Laboratory / Microbiology Laboratory methods in Parasitology <i>Güner Söyletir</i> Group A, B, C, D	MIDTERM OSCE EXAM	MIDTERM OSCE EXAM	Independent Learning	
10.00- 10.50	ICP REVIEW Group B <i>Cem Şimşek/Pınar Tura</i>				Laboratory Lecture Lipid Determination in Blood <i>Jale Çoban &amp; Müge Kopuz Alvarez Noval</i> Group A, B, C, D	
11:00-11:50	Laboratory / Histology& Embryology Histology of GIS- I <i>Alev Cumbul &amp; Aylin Yaba Uçar</i>  Group 1	Laboratory / Histology& Embryology Histology of GIS-II <i>Alev Cumbul &amp; Aylin Yaba Uçar</i> Group 2			Laboratory / Physiology Digestive System <i>Bayram Yılmaz &amp; Mehtap Kaçar &amp; Burcu Gemici Başol</i>  Group A	Laboratory / Biochemistry Lipid Determination in Blood <i>Jale Çoban &amp; Müge Kopuz Alvarez Noval</i> Group B
12:00-12:50					Group B	Group A
13.00- 13.50	Lunch Break					
14.00- 14.50	Group 2	Group 1	MIDTERM OSCE EXAM	MIDTERM OSCE EXAM	Group C	Group D
15.00- 15.50					Group D	Group C
16.00- 16.50	Independent Learning	Independent Learning			Independent Learning	
17.00-17.50	Independent Learning	Independent Learning			Independent Learning	

IL: Independent Learning, CSL: Clinical Skills Learning, Student groups for laboratory/practice sessions will be announced by coordinators.

**COMMITTEE III - GASTROINTESTINAL SYSTEM and METABOLISM**  
**III. WEEK / 16 – 20 Jan 2023**

	Monday 16-Jan-2023	Tuesday 17-Jan-2023	Wednesday 18-Jan-2023	Thursday 19-Jan-2023	Friday 20-Jan-2023
09.00- 09.50	Independent Learning	Assessment Session (Anatomy, Physiology, Biochemistry, Microbiology and Histology&Embryology Practical Exams)	Independent Learning	Independent Learning	Independent Learning
10.00- 10.50					Assessment Session Committee III (MCQ)
11.00- 11.50					
12.00- 12.50					
13.00- 13.50	Lunch Break				Program Evaluation Session Review of the Exam Questions, Evaluation of the Committee III Program Secretary of the Committee
14.00- 14.50	Independent Learning	Independent Learning	Independent Learning	Independent Learning	Independent Learning
15.00- 15.50					
16.00- 16.50					
17.00-17.50					

IL: Independent Learning, CSL: Clinical Skills Learning, Student groups for laboratory/practice sessions will be announced by coordinators.

**MIDTERM BREAK: JANUARY 23 – FEBRUARY 3, 2023**

## COMMITTEE IV - NERVOUS SYSTEM DISTRIBUTION of LECTURE HOURS

FEBRUARY 6-MARCH 31, 2023  
COMMITTEE DURATION: 8 WEEKS

COURSES	BASIC MEDICAL SCIENCES II	THEORETICAL	PRACTICAL	SMALL GROUP DISCUSSION	TOTAL
MED 203	DISCIPLINE				
	ANATOMY	42	2GX14H	0	56
	BIOPHYSICS	3	0	0	3
	BIOSTATISTICS	4	0	0	4
	HISTOLOGY & EMBRYOLOGY	13	2GX2H	0	15
	IMMUNOLOGY	2	0	0	2
	MEDICAL BIOLOGY	4	0	0	4
	PHARMACOLOGY	9	2GX1H	0	10
	PHYSIOLOGY	34	4GX6H	0	40
	SCIENTIFIC RESEARCH and PROJECT-II	0	0	5GX3H	3
	PBL	6	0	6	6
	<b>TOTAL</b>	<b>114</b>	<b>20</b>	<b>9</b>	<b>143</b>
MED 202	INTRODUCTION to CLINICAL PRACTICE- II	7	5GX3H	0	23
MED 614-631	ELECTIVE COURSES	14	0	0	14

INDEPENDENT LEARNING HOURS	146
----------------------------	-----

Coordination Committee	Head	Bayram YILMAZ, PhD Prof.
	Secretary	Deniz KIRAÇ, PhD Assoc. Prof
	Member	Mehtap KAÇAR, MD PhD Prof.
	Member	Alev CUMBUL, MD Assist. Prof.

**COMMITTEE IV- NERVOUS SYSTEM  
LECTURERS**

<b>MED 203 BASIC MEDICAL SCIENCES II</b>	
<b>DISCIPLINE</b>	<b>LECTURERS</b>
ANATOMY	Erdem SÖZTUTAR MD Assist. Prof. Aikaterini PANTELİ, MD Lecturer LAB: Edibe BİLİŞLİ, DVM LAB: Ahmet SAÇ, MD
BIOPHYSICS	Akif MAHARRAMOV, PhD Assist. Prof. Bilge GÜVENÇ TUNA, PhD Assoc. Prof.
BIOSTATISTICS	Çiğdem KELEŞ, PhD, Assist. Prof.
HISTOLOGY & EMBRYOLOGY	Aylin YABA UÇAR PhD Assoc. Prof. Alev CUMBUL, PhD Assist. Prof.
IMMUNOLOGY	Gülderen YANIKKAYA DEMİREL, MD PhD Prof.
MEDICAL BIOLOGY	Turgay İSBİR, PhD Prof. Soner DOĞAN, PhD Prof. Deniz KIRAÇ, PhD Assoc. Prof Seda GÜLEÇ YILMAZ, PhD Assoc. Prof.
PHARMACOLOGY	Ece GENÇ, PhD Prof. Emine Nur ÖZDAMAR, MD Assist. Prof. Cenk Andaç, PhD Assist. Prof.
PHYSIOLOGY	Bayram YILMAZ, PhD Prof. Mehtap KAÇAR, MD PhD Prof. Burcu GEMİCİ, PhD Assoc. Prof.
SCIENTIFIC RESEARCH AND PROJECT-II	Bayram YILMAZ, PhD Prof. Deniz KIRAÇ, PhD Assoc. Prof.
PBL	

**OTHER COURSES**

<b>MED 202 INTRODUCTION TO CLINICAL PRACTICE II</b>	
<b>DISCIPLINE</b>	<b>LECTURERS</b>
CLINICAL SKILLS LAB	Tijen Alkan BOZKAYA, MD Assoc. Prof. Arzu AKALIN, MD, Assist. Prof. Seha AKDUMAN, MD, Assist. Prof. Mehmet Akif ÖZTÜRK, MD Özlem DURMUŞ ARIN, MD Erman UYGUN, MD Abuzer KEKEÇ, MD
ELECTIVE COURSES	

## **COMMITTEE IV - NERVOUS SYSTEM AIM and LEARNING OBJECTIVES**

### **AIMS**

1. To convey basic knowledge on biophysical, biological, anatomical, embryological, histological, physiological and biochemical properties of nervous system,
2. To convey knowledge on histology and development of central and peripheral nervous system and special senses,
3. To convey knowledge on biological basics of vision, hearing and taste,
4. To convey development mechanisms of inflammatory processes,
5. To convey general knowledge about neuroimmunology,
6. To convey basic knowledge about pharmacology,
7. To convey knowledge about the drugs effecting nervous system,
8. To convey information about good laboratory and clinical practices in research projects.
9. To convey basic knowledge about biostatistics.

### **LEARNING OBJECTIVES**

*At the end of this committee, student should be able to:*

- 1.0 describe biophysical basis of nervous system.
- 2.0 describe biology of nervous system.
- 3.0 In nervous system;
  - 3.1. describe the anatomy of cerebrum, cerebellum, meninges, brain stem, cranial nerves and spinal cord,
  - 3.2. describe limbic and autonomic nervous system,
  - 3.3. describe the anatomy of structures forming eyes and ears,
  - 3.4. describe the anatomy of skin and its derivatives and the mammary glands
  - 3.5. describe descending and ascending pathways,
  - 3.6. associate with adjacent tissue and organs,
  - 3.7. explain functional and clinical reflections.
- 4.0 For central and peripheral nervous system and special senses
  - 4.1. classify embryological origins and developmental stages Nervous System
  - 4.2. classify embryological origins and developmental stages Eye and Ear
  - 4.3. classify embryological origins and developmental stages Skin
  - 4.4. explain of the histological properties Nervous System
  - 4.5. explain of the histological properties Eye and Ear
  - 4.6. describe histological properties of Skin
- 5.0 explain nervous conduction, ion channels and intracellular, extracellular ion concentration differences.
- 6.0 describe neuron, neuroglia, neurotransmitters and nerve fibers.
- 7.0 explain the synthesis and inactivation of neurotransmitters.
- 8.0 describe the energy mechanisms of brain.
- 9.0 In the nervous system;
  - 9.1. explain parts and functions of brain cortex,
  - 9.2. describe sensorial transmission pathways and special senses,
  - 9.3. describe control of motor function (cortex, cerebellum, basal ganglions and brain stem),
  - 9.4. describe functions of hypothalamus.
- 10.0 explain the relationship of learning-memory with hippocampus.



- 11.0 For brain waves and reflexes;
  - 11.1. describe,
  - 11.2. explain how they are measured in clinics.
- 12.0 explain biochemical basics of vision, hearing and taste senses.
- 13.0 In drug metabolism;
  - 13.1. explain mechanisms and factors affecting absorption,
  - 13.2. explain mechanisms and factors affecting distribution,
  - 13.3. explain mechanisms and factors affecting excretion.
  - 13.4. For drug pharmacokinetics;
  - 13.5. explain clinical importance,
- 14.0 analyze examples.
- 15.0 describe the properties of neuroimmunology
- 16.0 describe how to prepare a scientific research presentation.
- 17.0 prepare a research article presentation
- 18.0 explain the steps of a statistical hypothesis test according to the properties of a given data.
- 19.0 for statistical hypothesis,
  - 19.1 list the statistical hypothesis test according to the properties of given data
  - 19.2 choose the appropriate statistical hypothesis test according to the properties of given data.
- 20.0 explain case scenario related basic medical science topics in a clinical context.

### COMMITTEE IV - NERVOUS SYSTEM COMMITTEE ASSESSMENT MATRIX

LEARNING OBJECTIVES	DISCIPLINE	LECTURER/ INSTRUCTOR	DISTRUBITION of MCQs and SbMCQ			
			CE	FE	IE	TOTAL
3.0., 20.0	ANATOMY	Dr. A. Panteli	37	15	15	67
1.0.	BIOPHYSICS	Dr. B. Güvenç Tuna	3	1	1	5
18.0-19.0	BIOSTATISTICS	Dr. E.Ç. Keleş	4	2	2	8
4.0., 20.0	HISTOLOGY & EMBRYOLOGY	Dr. A. Yaba Uçar Dr. A. Cumbul	11	5	5	21
15.0.	IMMUNOLOGY	Dr. G. Yanıkkaya Demirel	2	1	1	4
2.0.	MEDICAL BIOLOGY	Dr. S. Güleç Yılmaz	4	2	2	8
13.0-14.0.	PHARMACOLOGY	Dr. E. Genç Dr. Emine Nur Özdamar	8	3	3	14
5.0-12.0.,20.0	PHYSIOLOGY	Dr. B. Yılmaz Dr. M. Kaçar Dr. B. Gemici Başol	30	12	12	54
20.0	PBL		1	0	0	1
TOTAL			100	41/200#	41/200#	182
LEARNING OBJECTIVES	DISCIPLINE	POINTS of ASSESSMENT METHODS				
		LPE				
3.0.	ANATOMY	60				
4.0.	HISTOLOGY & EMBRYOLOGY	10				
13.0-14.0	PHARMACOLOGY	5				
5.0-12.0.	PHYSIOLOGY	25				
TOTAL		100				

Total value of LPE is equal to 100 points

**Committee Score (CS) = 95% of [90% CE (MCQ and SbMCQ) + 10% (LPE)] + 5% of PBL-P**

**Abbreviations:**

**MCQ:** Multiple Choice Questions

**LPE:** Laboratory Practical Exam **CE:**

Committee Exam

**CS:** Committee Score

**FE:** Final Exam

**ICE:** Incomplete Exam

**Pts.:** Points

**#** In FE and ICE, 41 out of 200 FE and ICE MCQs will be from Committee IV (Each question is 0.5 Pts., equal value.

**COMMITTEE IV- NERVOUS SYSTEM**  
**I. WEEK / 6-10 February 2023**

	Monday 6-Feb-2023	Tuesday 7-Feb-2023	Wednesday 8-Feb-2023	Thursday 9-Feb-2023	Friday 10-Feb-2023		
09.00-09.50	PBL	Independent Learning	Lecture Cranial Nerves <i>Aikaterini Panteli</i>	Laboratory / Anatomy Brain stem <i>Aikaterini Panteli</i> Group 2	Independent Learning		
10.00-10.50		Lecture Brainstem <i>Aikaterini Panteli</i>	Lecture Cranial Nerves <i>Aikaterini Panteli</i>	Group 1	Independent Learning		
11.00-11.50		Lecture Brainstem <i>Aikaterini Panteli</i>	Lecture Synapse and Neurotransmitters <i>Bayram Yılmaz</i>	Lecture Sensory Receptors and Pathways <i>Bayram Yılmaz</i>	Laboratory / Anatomy Cranial Nerves <i>Aikaterini Panteli</i> Group 1		
12.00-12.50	Introduction to Committee IV Secretary of Committee	Lecture Brainstem <i>Aikaterini Panteli</i>	Lecture Synapse and Neurotransmitters <i>Bayram Yılmaz</i>	Lecture Peripheral Nervous System <i>Bayram Yılmaz</i>	Group 2		
13.00-13.50	Lunch Break						
14.00-14.50	Program Improvement Sessions	Lecture Organization of Nervous System <i>Bayram Yılmaz</i>	Lecture Cranial Nerves <i>Aikaterini Panteli</i>	ICP LECTURE Intraarterial Blood Sampling <i>Mehmet Akif Öztürk/ Tijen Alkan Bozkaya/ Seha Akduman</i> Group D		Elective Courses Week I	IL
15.00-15.50	Lecture Introduction to Neuroanatomy <i>Aikaterini Panteli</i>	Lecture Neuron and Neuroglia <i>Bayram Yılmaz</i>	Lecture Cranial Nerves <i>Aikaterini Panteli</i>	Group D	SRPC SGS Group A <i>Deniz Kiraç</i>		
16.00-16.50	Lecture Spinal Cord <i>Aikaterini Panteli</i>	Laboratory/ Anatomy Spinal Cord <i>Aikaterini Panteli</i> Group 1	Independent Learning			IL	Elective Courses Week I
17.00-17.50	Lecture Spinal Cord <i>Aikaterini Panteli</i>	Group 2	Independent Learning				

IL: Independent Learning, CSL: Clinical Skills Learning, Student groups for laboratory/practice sessions will be announced by coordinators.

**COMMITTEE IV- NERVOUS SYSTEM**  
**II. WEEK / 13-17 February 2023**

	Monday 13-Feb-2023	Tuesday 14-Feb-2023	Wednesday 15-Feb-2023	Thursday 16-Feb-2023	Friday 17-Feb-2023
09.00-09.50	PBL	Lecture Diencephalon <i>Aikaterini Panteli</i>	Lecture Drug Distribution <i>Ece Genç</i>	Lecture Physiology of Pain <i>Bayram Yılmaz</i>	Laboratory / Anatomy Basal Ganglia <i>Aikaterini Panteli</i> Group 1
10.00-10.50		Lecture Diencephalon <i>Aikaterini Panteli</i>	Lecture Drug Distribution <i>Ece Genç</i>	Lecture Physiology of Pain <i>Bayram Yılmaz</i>	Group 2
11.00-11.50		Lecture Diencephalon <i>Aikaterini Panteli</i>	Lecture Cutaneous Senses <i>Bayram Yılmaz</i>	Lecture Histology of CNS; PNS, Meninges and Spinal Cord <i>Aylin Yaba Uçar</i>	Lecture Development of Central Nervous System; Early Stages <i>Aylin Yaba Uçar</i>
12.00-12.50	Independent Learning	Lecture Scope of Pharmacology and Passage of Drugs Across Membranes <i>Ece Genç</i>	Lecture Cutaneous Senses <i>Bayram Yılmaz</i>	Lecture Histology of CNS; PNS, Meninges and Spinal Cord <i>Aylin Yaba Uçar</i>	Lecture Development of Central Nervous System; Late Stages <i>Aylin Yaba Uçar</i>
13.00-13.50	Lunch Break				
14.00-14.50	Lecture Cerebellum <i>Aikaterini Panteli</i>	Laboratory / Anatomy Cerebellum and Diencephalon <i>Aikaterini Panteli</i> Group 2	Lecture Basal Ganglia <i>Aikaterini Panteli</i>	ICP LECTURE Intraarterial Blood Sampling <i>Mehmet Akif Öztürk/ Tijen Alkan</i> <i>Bozkaya/ Seha Akduman</i> Group E	
15.00-15.50	Lecture Cerebellum <i>Aikaterini Panteli</i>	Group 1	Lecture Basal Ganglia <i>Aikaterini Panteli</i>	Group E	Elective Courses Week II
16.00-16.50	Independent Learning	Independent Learning	Independent Learning		
17.00-17.50	Independent Learning	Independent Learning	Independent Learning		IL
				SRPC SGS Group B <i>Deniz Kiraç</i>	Elective Courses Week II

IL: Independent Learning, CSL: Clinical Skills Learning, Student groups for laboratory/practice sessions will be announced by coordinators.

**COMMITTEE IV- NERVOUS SYSTEM**  
**III. WEEK / 20-24 February 2023**

	Monday 20-Feb-2023	Tuesday 21-Feb-2023	Wednesday 22-Feb-2023	Thursday 23-Feb-2023	Friday 24-Feb-2023		
09.00-09.50	Independent Learning	Independent Learning	Laboratory / Physiology Reflexes- Electroencephalography <i>Bayram Yılmaz &amp; Mehtap Kaçar &amp; Burcu G.Başol</i> Group A	Independent Learning	Laboratory / Anatomy Limbic system <i>Aikaterini Panteli</i> Group 1		
10.00-10.50	Lecture Telencephalon <i>Aikaterini Panteli</i>	Independent Learning		Cortical and Brainstem Control of Motor Function <i>Bayram Yılmaz</i>	Group 2		
11.00-11.50	Lecture Telencephalon <i>Aikaterini Panteli</i>	Lecture Limbic System <i>Aikaterini Panteli</i>	Group B	Lecture Cortical and Brainstem Control of Motor Function <i>Bayram Yılmaz</i>	Lecture Biology of Nervous System <i>Seda Güleç Yılmaz</i>		
12.00-12.50	Lecture Telencephalon <i>Aikaterini Panteli</i>	Lecture Limbic System <i>Aikaterini Panteli</i>		Lecture Congenital Anomalies of Nervous System <i>Aylin Yaba Uçar</i>	Lecture Biology of Nervous System <i>Seda Güleç Yılmaz</i>		
13.00-13.50	Lunch Break						
14.00-14.50	Lecture Motor Functions of Spinal Cord <i>Bayram Yılmaz</i>	Lecture Dopamine and Drugs Effecting Dopaminergic System <i>Emine Nur Özdamar</i>	Group C	ICP LECTURE Intraarterial Blood Sampling Group A <i>Mehmet Akif Öztürk, Özlem Durmuş Arın, Seha Akduman</i> Group A		Elective Courses Week III	IL
15.00-15.50	Lecture Motor Functions of Spinal Cord <i>Bayram Yılmaz</i>	Lecture Serotonin and Drugs Effecting Serotonergic System of CNS <i>Emine Nur Özdamar</i>		Group D	Group A		
16.00-16.50	Independent Learning	Laboratory / Anatomy Telencephalon <i>Aikaterini Panteli</i> Group 2					
17.00-17.50	Independent Learning	Group 1					

IL: Independent Learning, CSL: Clinical Skills Learning, Student groups for laboratory/practice sessions will be announced by coordinators.

**COMMITTEE IV- NERVOUS SYSTEM**  
**IV. WEEK / 27 February- 3 March 2023**

	Monday 27-Feb-2023	Tuesday 28-Feb-2023	Wednesday 1-Mar-2023	Thursday 2-Mar-2023	Friday 3-Mar-2023
09.00-09.50	Lecture Ascending Pathways of the CNS <i>Aikaterini Panteli</i>	Lecture Vasculature of the CNS <i>Aikaterini Panteli</i>	Independent Learning	Lecture Biology of Nervous System <i>Seda Güleç Yılmaz</i>	Laboratory / Anatomy Eye and Visual Pathways <i>Aikaterini Panteli</i> Group 2
10.00-10.50	Lecture Descending Pathways of the CNS <i>Aikaterini Panteli</i>	Lecture Vasculature of the CNS <i>Aikaterini Panteli</i>	Independent Learning	Lecture Biology of Nervous System <i>Seda Güleç Yılmaz</i>	Group 1
11.00-11.50	Lecture Functions of Cerebellum and Basal Ganglia in motor control <i>Bayram Yılmaz</i>	Lecture Development of Sensory Organs; Eye <i>Alev Cumbul</i>	Lecture States of Brain Activity- Sleep and Brain Waves <i>Bayram Yılmaz</i>	Laboratory / Anatomy Vasculature of CNS <i>Aikaterini Panteli</i> Group 1	Lecture Drug Excretion <i>Ece Genç</i>
12.00-12.50	Lecture Functions of Cerebellum and Basal Ganglia in Motor Control <i>Bayram Yılmaz</i>	Lecture Histology of Sensory Organs; Eye; Fibrous and Vascular Coat <i>Alev Cumbul</i>	Lecture States of Brain Activity- Sleep and Brain Waves <i>Bayram Yılmaz</i>	Group 2	Lecture Drug Excretion <i>Ece Genç</i>
13.00-13:50	Lunch Break				
14.00-14.50	Lecture Meninges and Dural Venous Sinuses <i>Aikaterini Panteli</i>	Lecture Histology of Sensory Organs; Eye; Nervous Coat and Appendix <i>Alev Cumbul</i>	Lecture Eye and Orbit <i>Aikaterini Panteli</i>	ICP LECTURE Intraarterial Blood Sampling <i>Mehmet Akif Öztürk, Özlem Durmuş Arın, Seha Akduman</i> Group B	
15.00-15.50	Lecture Meninges and Dural Venous Sinuses <i>Aikaterini Panteli</i>	Laboratory / Anatomy Meninges and Dural Venous Sinuses <i>Aikaterini Panteli</i> Group 2	Lecture Eye and Orbit <i>Aikaterini Panteli</i>	Group B	Elective Courses Week IV
16.00-16.50	Independent Learning	Group 1	Lecture Visual Pathways <i>Aikaterini Panteli</i>		IL
17.00-17.50	Independent Learning	Independent Learning	Independent Learning		Elective Courses Week IV
				SRPC SGS Group D <i>Deniz Kıraç</i>	

IL: Independent Learning, CSL: Clinical Skills Learning, Student groups for laboratory/practice sessions will be announced by coordinators.

**COMMITTEE IV – NERVOUS SYSTEM**

IV. WEEK / 6-10 March 2023

	Monday 6-Mar-2023	Tuesday 7-Mar-2023	Wednesday 8-Mar-2023	Thursday 9-Mar-2023	Friday 10-Mar-2023
09.00-09.50	Independent Learning	Independent Learning	Laboratory / Physiology Visual Examination <i>Bayram Yılmaz &amp; Mehtap Kaçar &amp; Burcu G. Başol</i> Group B	Independent Learning	Lecture Taste and Smell Pathways <i>Aikaterini Panteli</i>
10.00-10.50	Lecture Drug Metabolism <i>Ece Genç</i>	Lecture Physiology of Vision <i>Mehtap Kaçar</i>		Lecture Histology of Ear <i>Alev Cumbul</i>	Lecture Taste and Smell Pathways <i>Aikaterini Panteli</i>
11.00-11.50	Lecture Cerebral Cortex, Intellectual Functions of the Brain <i>Bayram Yılmaz</i>	Lecture Physiology of Vision <i>Mehtap Kaçar</i>		Lecture Histology of Ear <i>Alev Cumbul</i>	Lecture Physiology of Hearing <i>Burcu Gemici Başol</i>
12.00-12.50	Lecture Learning and Memory <i>Bayram Yılmaz</i>	Lecture Drug Application Routes and Pharmaceutical Forms of Drugs <i>Emine Nur Özdamar</i>	Group A	Lecture Development of Sensory Organs; Ear <i>Alev Cumbul</i>	Lecture Physiology of Hearing <i>Burcu Gemici Başol</i>
13.00-13.50	Lunch Break				
14.00-14.50	Lecture Physiology of Vision <i>Mehtap Kaçar</i>	Laboratory / Pharmacology Drug Metabolism <i>Ece Genç &amp; Emine Özdamar &amp; Cenk Andaç</i> Group 1	Group D	ICP LECTURE Intraarterial Blood Sampling <i>Mehmet Akif Öztürk/ Özlem Durmuş Arın/ Seha Akduman</i> Group C	Elective Courses Week V
15.00-15.50	Lecture Physiology of Vision <i>Mehtap Kaçar</i>	Group 2			IL
16.00-16.50	Independent Learning	Independent Learning		Group C	SRPC SGS Group E <i>Deniz Kırac</i>
17.00-17.50	Independent Learning	Independent Learning	Group C		IL
					Elective Courses Week V

IL: Independent Learning, CSL: Clinical Skills Learning, Student groups for laboratory/practice sessions will be announced by coordinators.

COMMITTEE IV- NERVOUS SYSTEM

VI.WEEK / 13-17 March 2023

	Monday 13-Mar-2023	Tuesday 14-Mar-2023	Wednesday 15-Mar-2023	Thursday 16-Mar-2023	Friday 17-Mar-2023		
09.00-09.50	Independent Learning	Independent Learning	Lecture Neuroimmunology <i>Gülderen Yanıkkaya Demirel</i>	Laboratory / Anatomy Ear and Auditory Pathways <i>Aikaterini Panteli</i> Group 1	Laboratory / Anatomy Sympathetic Nervous System <i>Aikaterini Panteli</i> Group 2		
10.00-10.50	Lecture Ear <i>Aikaterini Panteli</i>	Lecture Introduction to Autonomic Nervous System <i>Aikaterini Panteli</i>	Lecture Neuroimmunology <i>Gülderen Yanıkkaya Demirel</i>	Group 2	Group 1		
11.00-11.50	Lecture Ear <i>Aikaterini Panteli</i>	Lecture Sympathetic Nervous System <i>Aikaterini Panteli</i>	Lecture Parasympathetic Nervous System <i>Aikaterini Panteli</i>	Lecture Autonomic Nervous System <i>Bayram Yılmaz</i>	Lecture Cerebrospinal Fluid and Brain Metabolism <i>Bayram Yılmaz</i>		
12.00-12.50	Lecture Auditory Pathways <i>Aikaterini Panteli</i>	Lecture Sympathetic Nervous System <i>Aikaterini Panteli</i>	Lecture Parasympathetic Nervous System <i>Aikaterini Panteli</i>	Lecture Autonomic Nervous System <i>Bayram Yılmaz</i>	Lecture Cerebrospinal Fluid and Brain Metabolism <i>Bayram Yılmaz</i>		
13.00-13.50	Lunch Break						
14.00-14.50	Lecture Chemical Senses: Taste and Smell <i>Burcu Gemici Başol</i>	PHYSICIANS DAY	Lecture Limbic System and the Hypothalamus <i>Bayram Yılmaz</i>	ICP LECTURE Bladder Catheterization Group A <i>Arzu Akalın/ Erman Uygun/ Abuzer Kekeç</i> Group A		Elective Courses Week VI	IL
15.00-15.50	Lecture Chemical Senses: Taste and Smell <i>Burcu Gemici Başol</i>		Lecture Limbic System and the Hypothalamus <i>Bayram Yılmaz</i>	Group A	SRPC SGS Group B <i>Deniz Kıraç</i>		
16.00-16.50	Lecture Test Hypotheses and Significance- Z-Test <i>Çiğdem Keleş</i>		Independent Learning			IL	Elective Coures Week VI
17.00-17.50	Lecture Test Hypotheses and Significance- Z-Test <i>Çiğdem Keleş</i>		Independent Learning				

IL: Independent Learning, CSL: Clinical Skills Learning, Student groups for laboratory/practice sessions will be announced by coordinators.



**COMMITTEE IV- NERVOUS SYSTEM**  
**VII.WEEK / 20-24 March 2023**

	Monday 20-Mar-2023	Tuesday 21-Mar-2023	Wednesday 22-Mar-2023	Thursday 23-Mar-2023	Friday 24-Mar 2023
09.00-09.50	Independent Learning	Laboratory/ Physiology Hearing test /Galvanized Skin Response Group C <i>Bayram Yılmaz &amp; Mehtap Kaçar &amp; Burcu Gemici Başol</i>	Laboratory / Histology& Embryology Histology of CNS and Skin <i>Alev Cumbul &amp; Aylin Yaba Uçar</i> Group 1	Independent Learning	Lecture Auditory System Biophysics and Function <i>Bilge Güvenç Tuna</i>
10.00-10.50	Lecture Skin, its derivatives and the Mammary Glands <i>Aikaterini Panteli</i>	Group C		Independent Learning	Lecture Review to Neuroanatomy <i>Aikaterini Panteli</i>
11.00-11.50	Lecture Test Hypotheses and Significance- t-Test <i>Çiğdem Keleş</i>	Group D	Laboratory / Histology& Embryology Histology of CNS and Skin <i>Alev Cumbul &amp; Aylin Yaba Uçar</i> Group 2	Lecture Electrical Activity of Cortex and Evoked Potentials. Neural Coding <i>Bilge Güvenç Tuna</i>	Laboratory / Anatomy Skin And Mammary Glands <i>Aikaterini Panteli</i> Group 2
12.00-12.50	Lecture Test Hypotheses and Significance- t-Test <i>Çiğdem Keleş</i>			Lecture Electrical Activity of Cortex and Evoked Potentials. Neural Coding <i>Bilge Güvenç Tuna</i>	Group 1
13.00-13.50	Lunch Break				
14.00-14.50	Lecture Histology of Skin and Appendage; Epidermis, Dermis, Appendage <i>Aylin Yaba Uçar</i>	Group A	Independent Learning	ICP LECTURE Bladder Catheterization Group B <i>Arzu Akalın/ Erman Uygun/ Abuzer Kekeç</i> Group B	
15.00-15.50	Lecture Development of Skin and Appendage <i>Aylin Yaba Uçar</i>		Independent Learning		
16.00-16.50	Laboratory / Anatomy Parasympathetic Nervous System <i>Aikaterini Panteli</i> Group 1	Group B	Independent Learning	Group B	SRPC SGS Group A <i>Deniz Kıraç</i>
17.00-17.50	Group 2		Independent Learning		
					Elective Courses Week VII (Midterm)
					IL
					IL
					Elective Courses Week VII

**COMMITTEE IV- NERVOUS SYSTEM**  
**VIII.WEEK / 27-31 March 2023**

	Monday 27-Mar-2023	Tuesday 28-Mar-2023	Wednesday 29-Mar-2023	Thursday 30-Mar-2023	Friday 31-March-2023	
09.00-09.50	Independent Learning	Independent Learning	Independent Learning	Independent Learning	Independent Learning	
10.00-10.50		Assessment Session (Physiology, Pharmacology, Histology&Embryology and Anatomy Practical Exams)			Assessment Session Committee IV Exam (MCQ)	
11.00-11.50						
12.00-12.50						
13.00-13.50	Lunch Break					Program Evaluation Session Review of the Exam Questions, Evaluation of the Committee IV Program <i>Secretary of Committee IV</i>
14.00-14.50	Independent Learning	Independent Learning	Independent Learning	Independent Learning	Elective Courses Week VIII	IL
15.00-15.50						
16.00-16.50					IL	Elective Courses Week VIII
17.00-17.50						

**COMMITTEE V - UROGENITAL and ENDOCRINE SYSTEMS**  
**DISTRIBUTION of LECTURE HOURS**

April 3<sup>rd</sup> – May 26<sup>th</sup>, 2023  
 COMMITTEE DURATION: 8 WEEKS

COURSES	BASIC MEDICAL SCIENCES II	THEORETICAL	PRACTICAL	SMALL GROUP DISCUSSION	TOTAL
<b>MED 203</b>	<b>DISCIPLINE /COMPONENTS</b>				
	ANATOMY	15	2GX5H	0	20
	BIOCHEMISTRY	22	4GX1H 1GX1H	0	24
	BIOPHYSICS	3	0	0	3
	BIOSTATISTICS	4	1GX2H	0	6
	HISTOLOGY & EMBRYOLOGY	14	2GX2H	0	16
	IMMUNOLOGY	1	0	0	1
	MEDICAL BIOLOGY	6	0	0	6
	MEDICAL MICROBIOLOGY	16	1GX2H	0	18
	PATHOLOGY	7	1GX1H	0	8
	PHARMACOLOGY	13	2GX1H	0	14
	PHYSIOLOGY	32	1GX2H 4GX2H	0	36
	SCIENTIFIC RESEARCH and PROJECT-II	0	0	5GX3H	3
	PBL	0	0	6	6
	<b>TOTAL</b>	<b>139</b>	<b>22</b>		<b>161</b>
<b>MED 202</b>	INTRODUCTION to CLINICAL PRACTICE- II	5	5GX3H	0	8
<b>MED 614-631</b>	ELECTIVE COURSES	14	0	0	14

INDEPENDENT LEARNING HOURS	143
----------------------------	-----

<b>Coordination Committee</b>	<b>Head</b>	Burcu Gemici BASOL, PhD, Assoc. Prof.
	<b>Secretary</b>	Soner DOGAN, PhD, Prof.
	<b>Member</b>	Bilge Guvenc TUNA, PhD, Assoc. Prof.
	<b>Member</b>	Akif MAHARRAMOV, PhD, Assist. Prof.

**COMMITTEE V- UROGENITAL and ENDOCRINE SYSTEMS  
LECTURERS**

<b>MED 203 BASIC MEDICAL SCIENCES II</b>	
<b>DISCIPLINE</b>	<b>LECTURERS</b>
ANATOMY	Erdem SÖZTUTAR, MD, Assist. Prof. Aikaterini PANTELİ, MD, Assist. Prof. LAB: Edibe BİLİŞLİ KARA, DVM LAB: Ahmet Saç, M.D
BIOCHEMISTRY	İnci ÖZDEN, PhD, Prof. LAB: Jale ÇOBAN, MD, Prof. LAB: Müge KOPUZ, PhD.
BIOPHYSICS	Akif MAHARRAMOV, PhD, Assist. Prof. Bilge GÜVENÇ TUNA, PhD, Assoc. Prof.
BIOSTATISTIC	E. Çiğdem KELEŞ, PhD, Assist. Prof.
HISTOLOGY & EMBRYOLOGY	Aylin YABA UÇAR, PhD, Assoc. Prof. Alev CUMBUL, PhD, Assist. Prof.
IMMUNOLOGY	Gülderen YANIKKAYA DEMİREL, MD, PhD, Assoc. Prof.
MEDICAL BIOLOGY	Turgay İSBİR, PhD, Prof. Deniz KIRAÇ, PhD, Assoc. Prof.
MICROBIOLOGY	Aynur EREN, MD Prof. Güner SÖYLETİR, MD PhD Prof. Pınar ÇIRAGİL, MD Prof.
PATHOLOGY	Aydın SAV MD, Prof.
PHARMACOLOGY	Ece GENÇ, PhD, Prof. Emine Nur ÖZDAMAR, MD, Assist. Prof. Cenk ANDAÇ MD, Assist. Prof.
PHYSIOLOGY	Bayram YILMAZ, PhD, Prof. Mehtap KAÇAR, MD, PhD, Prof. Burcu GEMİCİ, PhD, Assoc. Prof.
PBL	
SCIENTIFIC PROJECTS-II	Bayram YILMAZ, PhD, Prof. Deniz KIRAÇ, PhD, Assoc. Prof.
ELECTIVE COURSES	

<b>MED 202 INTRODUCTION TO CLINICAL PRACTICE II</b>	
<b>DISCIPLINE</b>	<b>LECTURERS</b>
CLINICAL SKILLS LAB	Özlem TANRIOVER, MD, MPH. Prof. Arzu AKALIN, MD, Assist. Prof. Gökhan GENCER, MD. Assist. Prof. Pınar TURA, MD. Assist. Prof. Hande CANDEMİR, MD. Assist. Prof. Mustafa YÜKSEL, MD

## **COMMITTEE V-UROGENITAL AND ENDOCRINE SYSTEMS**

### **AIM AND LEARNING OBJECTIVES**

#### **AIMS**

1. To convey knowledge about biological, anatomical, embryological, histological, physiological, immunological and biochemical properties of urogenital and endocrine systems.
2. To convey general knowledge about interrelationship of hormones and immunology,
3. To convey knowledge about structural/biological features and pathogenesis of viruses.
4. To convey development mechanisms of neoplasia and its effects and consequences on organism.
5. To convey information about good laboratory and clinical practices in research projects.
6. To convey basic knowledge about biostatistics.

#### **LEARNING OBJECTIVES**

*At the end of this committee, student should be able to:*

- 1.0. Describe biology of gonadal development and genetic differentiation.
- 2.1. In urogenital system, for male and female genital system organs, kidney, ureter, bladder, urethra, pelvis and perineum;
  - 2.2. Describe its anatomy,
  - 2.3. Associate with adjacent tissue and organs,
  - 2.4. Explain their functional and clinical reflections.
- 3.1. In endocrine system, for thyroid, parathyroid, suprarenal gland and thymus,
  - 3.2. Describe its anatomy,
  - 3.3. Associate with adjacent tissue and organs,
  - 3.4. Explain their functional and clinical reflections.
- 4.1. explain the Histology of Endocrine System; General Aspect, Hypothalamus, Epiphysis
- 4.2. explain the Histology of Endocrine System; Hypophysis
- 4.3. explain the Histology of Endocrine System; Thyroid and Parathyroid and Suprarenal Glands
- 4.4. classify embryological origins and explain developmental stages of Endocrine Organs
- "5.1. explain the histological properties of Urinary System; General Aspect, Kidney Nephron"
- 5.2. explain the histological properties of Urinary System; Excretory Passage
- 5.3. explain the Histology of The Male Genital System; Testis
- 5.4. explain the Histology of The Male Genital System; Excretory Parts
- 5.5. explain the Histology of The Female Genital System; Ovaries
- 5.6. explain the Histology of The Female Genital System; Conducting Part
- 5.7. Classify embryological origins and explain developmental stages of urinary system organs
- 5.8. Classify embryological origins and explain developmental stages of male system organs
- 5.8. Classify embryological origins and explain developmental stages of female system organs
- 5.9. Associate the relation between birth anomalies and developmental processes of urogenital organs
- 6.1. In endocrine system;
  - 6.2. Describe endocrine, paracrine and neuroendocrine secretion,
  - 6.3. Explain the regulatory role of hypothalamus and pituitary gland,
  - 6.4. List secretions and functions of endocrine glands and organs.
- 7.1. In urinary system;
  - 7.2. Explain renal function and structure of nephrons,
  - 7.3. Explain renal blood flow and mechanisms of urine production,
  - 7.4. Explain liquid-electrolyte and acid-base equilibrium.
- 8.1. In genital system;
  - 8.2. Explain reproductive hormones and their functions in men and women,
  - 8.3. Describe changes in the maternal body in pregnancy and lactation.
- 9.1. For hormones;

- 9.2. Classify according to mechanisms of action,
- 9.3. Explain their effects and relation to each other.
- 10.0 Explain biochemical functions of vitamins and minerals.
- 11.0 Describe factors causing neoplasia, formation, mechanisms of occurrence, and neoplastic diseases in organism, classification and staging of neoplasia.
- 12.0 Distinguish mechanisms of actions of drugs and explain toxicity of drugs.
- 13.0 Analyze events developing in response to drug receptor interactions.
- 14.0 Describe general principles of antimicrobial chemotherapy.
- 15.0 Describe general principles of cancer chemotherapy.
- 16.0 Describe pharmacology of inflammation and immunomodulation.
- 17.0 Describe the structural/biological features and pathogenesis of viruses
- 18.0 Describe the interrelationship of hormones and immunology
- 19.0 Describe the general principles of magnetic resonance imaging
- 20.0 For correlations between two continuous variables
  - 20.1. Explain linear correlations using scatter plot and correlation coefficients
  - 20.2. Classify the interpretations of the correlation coefficient
- 21.0 Explain linear regression equation and its features
- 22.0 Explain case scenario related basic medical science topics in a clinical context.
- 23.0 Define the prenatal diagnosis and teratology

**COMMITTEE V - UROGENITAL and ENDOCRINE SYSTEMS**  
**COMMITTEE ASSESSMENT MATRIX**

LEARNING OBJECTIVES	DISCIPLINE	LECTURER/ INSTRUCTOR	DISTRUBITION of MCQsand SbMCQ			
			CE	FE	IE	TOTAL
2.0-3.0,22.0	ANATOMY	Dr. E.Söztutar	11	6	6	23
9.0-10.0	BIOCHEMISTRY	Dr. İ. Özden	18	8	8	34
19.0	BIOPHYSICS	Dr. B.G. Tuna	2	1	1	4
20.0-21.0	BIOSTATISTICS	Dr. E.Ç. Keleş	3	1	1	5
4.0.-5.0-23	HISTOLOGY& EMBRYLOGY	Dr. A. Yaba Uçar Dr. A. Cumbul	10	5	5	20
18.0	IMMUNOLOGY	Dr. G. Yanıkkaya Demirel	1	1	1	3
1.0	MEDICAL BIOLOGY	Dr.T.İsbir Dr.D. Kırac	4	2	2	8
17.0	MEDICAL MICROBIOLOGY	Dr. Güner Söyletir	13	6	6	25
11.0	PATHOLOGY	Dr. A. Sav	5	2	2	9
12.0-16.0	PHARMACOLOGY	Dr. E. Genç Dr. E. N. Özdamar Dr. C. Andaç	9	4	4	17
6.0-8.0., 22.0.	PHYSIOLOGY	Dr. B. Yılmaz Dr. M. Kaçar Dr. B. Gemici Başol	23	10	10	43
22.0	PBL		1	0	0	1
<b>TOTAL</b>			<b>100</b>	<b>46/200<sup>#</sup></b>	<b>46/200<sup>#</sup></b>	<b>192</b>

  

LEARNING OBJECTIVES	DISCIPLINE	POINTS of ASSESSMENT METHODS	
		LPE	QUIZ
2.0-3.0	ANATOMY	30	
8.0-9.0	BIOCHEMISTRY	5	
	BIOSTATISTICS	5	
4.0.	HISTOLOGY & EMBRYLOGY	10	
16.0.	MEDICAL MICROBIOLOGY	7,5	2,5
10.0.	PATHOLOGY	5	
11.0-15.0.	PHARMACOLOGY	5	
5.0-7.0	PHYSIOLOGY	30	
<b>TOTAL</b>		<b>100</b>	

Total number of MCQs are 100, equal to 100 pts. Each question has 1 pt.). Total value of LPE is equal to 100 points

**Committee Score (CS) 95% of [90% CE (MCQ) + 10% (LPE)] + 5% of PBL-P**

**Abbreviations:**

**MCQ:** Multiple Choice Questions

**LPE:** Laboratory Practical Exam **CE:** Committee Exam

**CS:** Committee Score

**FE:** Final Exam

**ICE:** Incomplete Exam

**Pts.:** Points

**#** In FE and ICE, 46 out of 200 FE and ICE MCQs will be from Committee I (Each question is equal value)

**COMMITTEE V – UROGENITAL and ENDOCRINE SYSTEMS**  
**I. WEEK / 3 – 7 April 2022**

	Monday 3-April-2023	Tuesday 4-April-2023	Wednesday 5-April-2023	Thursday 6-April-2023	Friday 7-April-2023		
09.00-09.50	PBL	Lecture Viruses—Basic Concepts <i>Güner Söyletir</i>	Lecture Mechanisms of Hormone Actions, Intracellular and Cell Surface Receptors <i>İnci Özden</i>	Laboratory/ Anatomy Urinary System <i>Erdem Söztutar</i> Group 1	Lecture Pathogenesis of Viral Infections <i>Güner Söyletir</i>		
10.00-10.50		Lecture Viruses—Basic Concepts <i>Güner Söyletir</i>	Lecture Mechanisms of Hormone Actions, Intracellular and Cell Surface Receptors <i>İnci Özden</i>	Group 2	Lecture Antiviral Agents and Resistance <i>Güner Söyletir</i>		
11.00-11.50		Lecture Body Fluids and Functions of Kidneys <i>Bayram Yılmaz</i>	Lecture Histology of Urinary System: General Aspect, Kidney Nephron <i>Aylin Yaba Uçar</i>	Lecture Urine Formation and Renal Blood Flow <i>Bayram Yılmaz</i>	Lecture Mechanisms of Hormone Actions, Intracellular and Cell Surface Receptors <i>İnci Özden</i>		
12.00-12.50	Independent Learning	Lecture Micturition <i>Bayram Yılmaz</i>	Lecture Histology of Urinary System: Excretory Passage <i>Aylin Yaba Uçar</i>	Lecture Urine Formation and Renal Blood Flow <i>Bayram Yılmaz</i>	Lecture Mechanisms of Hormone Actions, Intracellular and Cell Surface Receptors <i>İnci Özden</i>		
13.00-13.50	Lunch Break						
14.00-14.50	Introduction to Committee IV Secretary of Committee	Lecture Urinary Tracts and Suprarenal Glands <i>Erdem Söztutar</i>	Lecture Introduction to Genital Systems <i>Erdem Söztutar</i>	ICP LECTURE Bladder Catheterization <i>Arzu Akalın/ Pınar Tura/ Mustafa Yüksel</i> Group C			
15.00-15.50	Lecture Introduction to Urinary System <i>Erdem Söztutar</i>	Lecture Mechanism of Drug Action 1 <i>Ece Genç</i>	Lecture Male Genital Organs <i>Erdem Söztutar</i>	Group C	SRPC SGS Group D <i>Deniz Kiraç</i>	Elective Courses Week IX	IL
16.00-16.50	Lecture The Kidneys <i>Erdem Söztutar</i>	Lecture Mechanism of Drug Action 2 <i>Ece Genç</i>	Lecture Male Genital Organs <i>Erdem Söztutar</i>			IL	Elective Courses Week IX
17.00-17.50	Lecture The Kidneys <i>Erdem Söztutar</i>	Independent Learning	Independent Learning				

IL: Independent Learning, CSL: Clinical Skills Learning, Student groups for laboratory/practice sessions will be announced by coordinators.



**COMMITTEE V- UROGENITAL and ENDOCRINE SYSTEMS**  
**II. WEEK / 10-14 April 2023**

	Monday 10-April-2023	Tuesday 11-April-2023	Wednesday 12-April-2023	Thursday 13-April-2023	Friday 14-April-2023
09.00-09.50	PBL	Lecture Histology of Endocrine System: General Aspect, Hypothalamus, Epiphysis <i>Aylin Yaba Uçar</i>	Lecture Fluid and Electrolyte Balance <i>Bayram Yılmaz</i>	Lecture Histology of Endocrine System: Thyroid and Parathyroid and Suprarenal Glands <i>Aylin Yaba Uçar</i>	Laboratory / Anatomy Female Genital Organs <i>Erdem Söztutar</i> Group 1
10.00-10.50		Lecture Histology of Endocrine System: Hypophysis <i>Aylin Yaba Uçar</i>	Lecture Fluid and Electrolyte Balance <i>Bayram Yılmaz</i>	Lecture Post-receptor Events and Second Messengers <i>Çenk Andaç</i>	Group 2
11.00-11.50		Lecture Respiratory Viruses <i>Güner Söyletir</i>	Lecture Hormones of Hypothalamus and Pituitary <i>İnci Özden</i>	Lecture Female Genital Organs <i>Erdem Söztutar</i>	Lecture Hormones of Hypothalamus and Pituitary <i>İnci Özden</i>
12.00-12.50	Independent Learning	Lecture Viruses of Mumps, Measles, Rubella, and Other Exanthems (including Poxviruses) <i>Güner Söyletir</i>	Lecture Thyroid Hormones <i>İnci Özden</i>	Lecture Female Genital Organs <i>Erdem Söztutar</i>	Lecture Hormones of Hypothalamus and Pituitary <i>İnci Özden</i>
13.00-13.50	Lunch Break				
14.00-14.50	Lecture Urine Formation: Tubular Processing <i>Bayram Yılmaz</i>	Lecture Viruses of Mumps, Measles, Rubella, and Other Exanthems (including Poxviruses) <i>Güner Söyletir</i>	Independent Learning	ICP LECTURE Bladder Catheterization Group D <i>Arzu Akalın/ Mustafa Yüksel/ Hande Candemir</i>	
15.00-15.50	Lecture Urine Formation: Tubular Processing <i>Bayram Yılmaz</i>	Laboratory / Anatomy Male Genital Organs <i>Erdem Söztutar</i> Group 2	Independent Learning	Group D	Elective Courses Week X
16.00-16.50	Lecture Introduction to Neoplasia and Biologic Behaviors of Neoplasm <i>Aydin Sav</i>	Group 1	Independent Learning		IL
17.00-17.50	Introduction to Neoplasia and Biologic Behaviors of Neoplasm <i>Aydin Sav</i>	Independent Learning	Independent Learning		IL
					Elective Courses Week X

IL: Independent Learning, CSL: Clinical Skills Learning, Student groups for laboratory/practice sessions will be announced by coordinators.

**COMMITTEE V- UROGENITAL and ENDOCRINE SYSTEMS**  
**III. WEEK / 17-21 April 2023**

	Monday 17-April-2023	Tuesday 18-April-2023	Wednesday 19-April-2023	Thursday 20-April-2023	Friday 21-April-2023
09.00-09.50	Lecture Enteroviruses <i>Güner Söyletir</i>	Lecture Correlation <i>Çiğdem Keleş</i>	Laboratory / Physiology Glomerular Filtration &Metabolic Rate <i>Bayram Yılmaz &amp; Mehtap Kaçar &amp; Burcu G.Başol</i> Group A	Lecture Posterior Pituitary Hormones <i>Mehtap Kaçar</i>	RAMADANFEAST HOLIDAY
10.00-10.50	Lecture Viruses of Diarrhea <i>Güner Söyletir</i>	Lecture Correlation <i>Çiğdem Keleş</i>		Lecture Thyroid Metabolic Hormones <i>Mehtap Kaçar</i>	
11.00-11.50	Lecture Regulation of Acid-Base Balance <i>Bayram Yılmaz</i>	Lecture Biology of Endocrine System <i>Deniz Kırac</i>	Group B	Lecture Hepatitis Viruses <i>Güner Söyletir</i>	
12.00-12.50	Lecture Regulation of Acid-Base Balance <i>Bayram Yılmaz</i>	Lecture Biology of Endocrine System <i>Deniz Kırac</i>		Lecture Hepatitis Viruses <i>Güner Söyletir</i>	
13.00-13:50					
14.00-14.50	Lecture Hormones of Adrenal Cortex and Adrenal Medulla <i>İnci Özden</i>	Lecture Introduction to Endocrinology <i>Mehtap Kaçar</i>	Group C	RAMADANFEAST HOLIDAY	
15.00-15.50	Lecture Hormones of Adrenal Cortex and Adrenal Medulla <i>İnci Özden</i>	Lecture Pituitary Gland and Hypothalamic Control <i>Mehtap Kaçar</i>			
16.00-16.50	Lecture Nerves of the Pelvis <i>Erdem Söztutar</i>	Laboratory / Anatomy Nerves and Vessels of the Pelvis <i>Erdem Söztutar</i> Group 2	Group D		
17.00-17.50	Lecture Vasculature of the Pelvis <i>Erdem Söztutar</i>	Group 1			

IL: Independent Learning, CSL: Clinical Skills Learning, Student groups for laboratory/practice sessions will be announced by coordinators.

**COMMITTEE V- UROGENITAL and ENDOCRINE SYSTEMS**  
V. WEEK / 24-28 April 2023

	Monday 24-April-2023	Tuesday 25-April-2023	Wednesday 26-April-2023	Thursday 27-April-2023	Friday 28-April-2023	
09.00-09.50	Lecture Introduction to Rational Pharmacotherapy <i>Emine Nur Özdamar</i>	Lecture Insulin, Diabetes Mellitus <i>Mehtap Kaçar</i>	Lecture Regulation of Calcium & Phosphate Metabolism and Bone Formation <i>Bayram Yılmaz</i>	Lecture Physiology of Growth Hormones <i>Bayram Yılmaz</i>	Lecture Insulin, Glucagon <i>İnci Özden</i>	
10.00-10.50	Lecture Eicosanoids <i>Emine Nur Özdamar</i>	Lecture Insulin, Diabetes Mellitus <i>Mehtap Kaçar</i>	Lecture Regulation of Calcium & Phosphate Metabolism and Bone Formation <i>Bayram Yılmaz</i>	Lecture Pineal Gland & Melatonin <i>Bayram Yılmaz</i>	Lecture Insulin, Glucagon <i>İnci Özden</i>	
11.00-11.50	Lecture Histology of The Male Genital System; Testis <i>Alev Cumbul</i>	Lecture Regulation of Calcium & Phosphate Metabolism and Bone Formation <i>Bayram Yılmaz</i>	Lecture Herpes Viruses <i>Güner Söyletir</i>	Lecture Endocrine Organs <i>Erdem Söztutar</i>	Laboratory / Anatomy Perineum and Ischiorectal Fossa <i>Erdem Söztutar</i> Group 1	
12.00-12.50	Lecture Histology of The Male Genital System; Excretory Parts <i>Alev Cumbul</i>	Lecture Regulation of Calcium & Phosphate Metabolism and Bone Formation <i>Bayram Yılmaz</i>	Lecture Herpes Viruses <i>Güner Söyletir</i>	Lecture Endocrine Organs <i>Erdem Söztutar</i>	Group 2	
13.00-13:50	Lunch Break					
14.00-14.50	Lecture Adrenocortical Hormones <i>Mehtap Kaçar</i>	Lecture PTH, Calcitonin, Calcitriol <i>İnci Özden</i>	Lecture Male Reproductive Physiology <i>Mehtap Kaçar</i>	Lecture Perineum and Ischiorectal Fossa <i>Erdem Söztutar</i>	Elective Courses Week XI	IL
15.00-15.50	Lecture Adrenocortical Hormones <i>Mehtap Kaçar</i>	Lecture PTH, Calcitonin, Calcitriol <i>İnci Özden</i>	Lecture Male Reproductive Physiology <i>Mehtap Kaçar</i>	Independent Learning		
16.00-16.50	Independent Learning	Independent Learning	Independent Learning	Independent Learning	IL	Elective Courses Week XI
17.00-17.50	Independent Learning	Independent Learning	Independent Learning	Independent Learning		

IL: Independent Learning, CSL: Clinical Skills Learning, Student groups for laboratory/practice sessions will be announced by coordinators.

VI. WEEK / 1-5 May 2023

	Monday 1-May-2023	Tuesday 2-May-2023	Wednesday 3-May-2023	Thursday 4-May-2023	Friday 5-May-2023		
09.00-09.50	LABOR'S DAY	Lecture Arthropod-Borne and Other Zoonotic Viruses (including Rabies) <i>Güner Söyletir</i>	Lecture Female Reproductive Physiology <i>Mehtap Kaçar</i>	Lecture Histology of The Female Genital System; Ovaries <i>Alev Cumbul</i>	Laboratory / Histology Histology of ES & US (Kidney, Hypophysis, Thyroids, Pancreas) <i>Alev Cumbul &amp; Aylin Yaba Uçar</i>  Group 1		
10.00-10.50		Lecture Retroviruses: Human T-Lymphotropic Virus, Human Immunodeficiency Virus, and Acquired Immunodeficiency Syndrome <i>Güner Söyletir</i>	Lecture Female Reproductive Physiology <i>Mehtap Kaçar</i>	Lecture Histology of The Female Genital System; Conducting Part <i>Alev Cumbul</i>			
11.00-11.50		Lecture Oncogenesis, Incidence and Distribution of Cancer <i>Aydın Sav</i>	Laboratory / Physiology Dissection and Examination of Endocrine System <i>Bayram Yılmaz &amp; Mehtap Kaçar &amp; Burcu G.Başol</i> Group A,B,C,D	Independent Learning	Group 2		
12.00-12.50		Lecture Oncogenesis, Incidence and Distribution of Cancer <i>Aydın Sav</i>		Independent Learning			
13.00-13.50	Lunch Break						
14.00-14.50		Lecture Seeing with Sound: Images from Echoes (Diagnostic Ultrasound Imaging) <i>Bilge Güvenç Tuna</i>	ICP LECTURE Bladder Catheterization Group E <i>Arzu Akalın/ Gökhan Gencer/ Hande Candemir</i>		Elective Courses Week XII	IL	
15.00-15.50		Independent Learning	Group E	SRPC SGS Group C <i>Deniz Kıraç</i>			ICP REVIEW Group A <i>Hande Candemir</i>
16.00-16.50		Independent Learning			ICP REVIEW Group B <i>Gökhan Gencer</i>	IL	Elective Courses Week XII
17.00-17.50		Independent Learning			ICP REVIEW Group B <i>Gökhan Gencer</i>		

IL: Independent Learning, CSL: Clinical Skills Learning, Student groups for laboratory/practice sessions will be announced by coordinators.

**COMMITTEE V- UROGENITAL and ENDOCRINE SYSTEMS**  
**VI. WEEK / 8-12 May 2023**

	Monday 8-May-2023	Tuesday 9-May-2023	Wednesday 10-May-2023	Thursday 11-May-2023	Friday 12-May-2023	
09.00-09.50	Lecture Biology of Sexual Differentiation And Development <i>Turgay İsbir</i>	Lecture Linear Regression <i>Çiğdem Keleş</i>	Lecture Hormones and Immunity <i>Gülderen Yanıkkaya Demirel</i>	Lecture Development of Female Genital System and Anomalies <i>Alev Cumbul</i>	Laboratory / Histology Histology of Genital Systems <i>Alev Cumbul &amp; Aylin Yaba Uçar</i>  Group 2	
10.00-10.50	Lecture Biology of Sexual Differentiation And Development <i>Turgay İsbir</i>	Lecture Linear Regression <i>Çiğdem Keleş</i>	Lecture Development of Male Genital System and Anomalies <i>Alev Cumbul</i>	Lecture Prenatal Diagnosis, Teratology and Congenital Anomalies <i>Alev Cumbul</i>		
11.00-11.50	Lecture Pharmacogenetics & Pharmacogenomics <i>Ece Genç</i>	Lecture Fetal and Neonatal Physiology <i>Bayram Yılmaz</i>	Lecture Pregnancy and Lactation <i>Mehtap Kaçar</i>	Lecture Basics of MRI <i>Bilge Güvenç Tuna</i>	Group 1	
12.00-12.50	Lecture Pharmacogenetics & Pharmacogenomics <i>Ece Genç</i>	Lecture Endocrine Distruptors <i>Bayram Yılmaz</i>	Lecture Pregnancy and Lactation <i>Mehtap Kaçar</i>	Lecture Basics of MRI <i>Bilge Güvenç Tuna</i>		
13.00-13:50	Lunch Break					
14.00-14.50	ICP REVIEW Group E <i>Özlem Tanrıöver</i>	ICP REVIEW Group C <i>Arzu Akalın</i>	Independent Learning	Lecture Biology of Sexual Differentiation And Development <i>Turgay İsbir</i>	Elective Courses Week XIII	IL
15.00-15.50	ICP REVIEW Group E <i>Özlem Tanrıöver</i>	ICP REVIEW Group C <i>Arzu Akalın</i>	Independent Learning	Lecture Biology of Sexual Differentiation And Development <i>Turgay İsbir</i>		
16.00-16.50	Independent Learning	Independent Learning	Independent Learning	ICP REVIEW Group D <i>Abuzer Kekeç</i>	IL	Elective Courses Week XIII
17.00-17.50	Independent Learning	Independent Learning	Independent Learning	ICP REVIEW Group D <i>Abuzer Kekeç</i>		

IL: Independent Learning, CSL: Clinical Skills Learning, Student groups for laboratory/practice sessions will be announced by coordinators

**COMMITTEE V- UROGENITAL and ENDOCRINE SYSTEMS**  
**VII. WEEK / 15-19 May 2023**

	Monday 15-May-2023		Tuesday 16-May-2023	Wednesday 17-May-2023	Thursday 18-May-2023	Friday 19-May-2023
09.00-09.50	Independent Learning		Lecture Vasoactive Peptides <i>Emine Nur Özdamar</i>	Independent Learning	Independent Learning	NATIONAL HOLIDAY
10.00-10.50	Lecture Insulin, Glucagon <i>İnci Özden</i>		Lecture Lecture Histamine and Antihistamines <i>Emine Nur Özdamar</i>	Lecture Review of the Urinary System <i>Erdem Söztutar</i>	Independent Learning	
11.00-11.50	Lecture Insulin, Glucagon <i>İnci Özden</i>		Lecture Hormones Regulating Calcium Metabolism <i>İnci Özden</i>	Lecture Minerals <i>İnci Özden</i>	Independent Learning	
12.00-12.50	Laboratory Lecture Urine Analyses <i>Jale Çoban &amp; Müge Kopuz Alvarez Noval</i> Group A, B, C, D		Lecture Hormones Regulating Calcium Metabolism <i>İnci Özden</i>	Lecture Minerals <i>İnci Özden</i>	Independent Learning	
13.00-13:50	Lunch Break					
14.00-14.50	Laboratory / BIOCHEMISTRY Urine Analyses <i>Jale Çoban &amp; Müge Kopuz Alvarez Noval</i> Group A	Laboratory/ Biostatistics Computer Applications of Tests of Significance <i>Çiğdem Keleş</i> Group B	Lecture Histogenesis and Nomenclature <i>Aydın Sav</i>	Lecture Drug Toxicity-1 <i>Cenk Andaç</i>	Independent Learning	
15.00-15.50	Group B	Group A	Lecture Histogenesis and Nomenclature <i>Aydın Sav</i>	Lecture Drug Toxicity-2 <i>Cenk Andaç</i>	Independent Learning	
16.00-16.50	Group C	Group D	Independent Learning	Independent Learning	Independent Learning	
17.00-17.50	Group D	Group C	Independent Learning	Independent Learning	Independent Learning	

IL: Independent Learning, CSL: Clinical Skills Learning, Student groups for laboratory/practice sessions will be announced by coordinators.

**COMMITTEE V – UROGENITAL and ENDOCRINE SYSTEMS**  
**VIII. WEEK / 22-26 May 2023**

	Monday 22-May-2023	Tuesday 23-May-2023	Wednesday 24-May-2023	Thursday 25-May-2023	Friday 26-May-2023
09.00-09.50	Lecture Papilloma and Polyoma Viruses <i>Güner Söyletir</i>	Lecture Tissue Damage by Eating Disorders and Diabetes Mellitus <i>Aydın Sav</i>	Independent Learning	Independent Learning	Independent Learning
10.00-10.50	Lecture Persistent Viral Infections of the Central Nervous System and Prions <i>Güner Söyletir</i>	Laboratory/Pathology Inflammation and Neoplasia <i>Aydın Sav</i>	Independent Learning	Independent Learning	Independent Learning
11.00-11.50	Laboratory / MICROBIOLOGY Diagnostic methods in viral infections <i>Güner Söyletir</i> Group A, B, C, D	Lecture Introduction to Drug Development <i>Cenk Andaç</i>	Independent Learning	Independent Learning	Independent Learning
12.00-12.50		Lecture Development of Biopharmaceuticals <i>Cenk Andaç</i>	Independent Learning	Independent Learning	Independent Learning
13.00-13.50	Lunch Break				
14.00-14.50	Lecture Vitamins <i>İnci Özden</i>	Laboratory / PHARMACOLOGY Efficacy and Potency Concepts <i>Ece Genç &amp; Emine Nur Özdamar&amp;Cenk Andaç</i> Group 1	ICP MAKEUP EXAM	Independent Learning	Elective Courses Week XIV  IL
15.00-15.50	Lecture Vitamins <i>İnci Özden</i>	Group 2		Independent Learning	
16.00-16.50	Independent Learning	Independent Learning		Independent Learning	Elective Courses Week XIV  IL
17.00-17.50	Independent Learning	Independent Learning		Independent Learning	

IL: Independent Learning, CSL: Clinical Skills Learning, Student groups for laboratory/practice sessions will be announced by coordinators.

**COMMITTEE V – UROGENITAL and ENDOCRINE SYSTEMS**  
**IX. WEEK / 29 May-2 June 2023**

	Monday 29-May-2023	Tuesday 30-May-2023	Wednesday 31-May-2023	Thursday 1-June-2023	Friday 2-June-2023
09.00- 09.50	Independent Learning	Independent Learning	Independent Learning	Independent Learning	Independent Learning
10.00- 10.50		Assessment Session (Anatomy, Physiology, Biochemistry, Microbiology, Pathology, Pharmacology, Biostatistics and Histology&Embryology Practical Exams)			Assessment Session Committee V (MCQ)
11.00- 11.50					
12.00- 12.50					
13.00- 13.50	Lunch Break				Program Evaluation Session Review of the Exam Questions, Evaluation of the Committee V Program <i>Secretary of the Committee</i>
14.00- 14.50	Independent Learning	Independent Learning	Independent Learning	Independent Learning	Independent Learning
15.00- 15.50					Independent Learning
16.00- 16.50					
17:00-17:50					



## STUDENT COUNSELING

Student counseling is a structured development process established between the student and the consultant that aims to maximize student success by focusing the student to her/his target. Although the major component of this relationship is the student, the faculties also take part by bringing the requirements of this interaction to their systems. The targeted outcomes of the consultant-student interaction are success in the exams, success in the program, and preparation for the professional life.

The aim of counseling is to help students to solve their problems, to give professional guidance, to provide coaching, to contribute to adopting the habit of lifelong learning, to provide information about the University and Faculty, to follow their success and failure and to help them select courses.

The consultants selected among Basic Medical Sciences instructors for the first three years transfer the students to Clinical Sciences instructors for the following three years.

***The topics that will be addressed by the consultants are as follows:***

- a. Inform students about the university, faculty and surrounding facilities
  - b. Inform students about the courses and help them select courses
  - c. Inform students about the education and assessment regulations
  - d. Follow student's attendance to lectures and success
  - e. In case of failure, investigate the causes and cooperate with the students to overcome them
  - f. Help students in career planning
  - g. Contribute to students adapting the habit of lifelong learning
  - h. Guide students to counseling services of the university
  - i. Set a role model as long as the professional susceptibility, professional guidance, intellectual responsibility, interaction with peers, ethics, professional values are concerned
  - j. Contribute to cultivation of professional and intellectual development in a rapidly changing world
  - k. Inform the coordinator when there are unsolved problems of the students
- Consultant-student relationship is a dynamic and mutual process carried out within the campus and the hospital. It is recommended that the consultant and the student meet at least twice during a semester.

***The expectations from the student are as follows:***

- a) Contribute to improvement of satisfaction level in the problem areas
- b) Report the social and economic conditions that require consultant's help
- c) Specify expectations from the education and the department from which this training is taken
- d) Give feedback on the counseling services regarding their satisfaction level

Student counsellors will be appointed after finalization of the class list and will be announced to the students. After the announcement of the counsellors on the information board, each student is expected to contact his/her counsellor until the end of the current committee.

## STUDENT COUNSELING

Student counseling is a structured development process established between the student and the consultant that aims to maximize student success by focusing the student to her/his target. Although the major component of this relationship is the student, the faculties also take part by bringing the requirements of this interaction to their systems. The targeted outcomes of the consultant-student interaction are success in the exams, success in the program, and preparation for the professional life.

The aim of counseling is to help students to solve their problems, to give professional guidance, to provide coaching, to contribute to adopting the habit of lifelong learning, to provide information about the University and Faculty, to follow their success and failure and to help them select courses.

The consultants selected among Basic Medical Sciences instructors for the first three years transfer the students to Clinical Sciences instructors for the following three years.

### ***The topics that will be addressed by the consultants are as follows:***

- l. Inform students about the university, faculty and surrounding facilities
  - m. Inform students about the courses and help them select courses
  - n. Inform students about the education and assessment regulations
  - o. Follow student's attendance to lectures and success
  - p. In case of failure, investigate the causes and cooperate with the students to overcome them
  - q. Help students in career planning
  - r. Contribute to students adapting the habit of lifelong learning
  - s. Guide students to counseling services of the university
  - t. Set a role model as long as the professional susceptibility, professional guidance, intellectual responsibility, interaction with peers, ethics, professional values are concerned
  - u. Contribute to cultivation of professional and intellectual development in a rapidly changing world
  - v. Inform the coordinator when there are unsolved problems of the students
- Consultant-student relationship is a dynamic and mutual process carried out within the campus and the hospital. It is recommended that the consultant and the student meet at least twice during a semester.

### ***The expectations from the student are as follows:***

- a) Contribute to improvement of satisfaction level in the problem areas
- b) Report the social and economic conditions that require consultant's help
- c) Specify expectations from the education and the department from which this training is taken
- d) Give feedback on the counseling services regarding their satisfaction level

Student counsellors will be appointed after finalization of the class list and will be announced to the students.

After the announcement of the counsellors on the information board, each student is expected to contact his/her counsellor until the end of the current committee.

**The student counseling lists are announced through the Google Classroom pages of the respective phase.**

## CONTACT INFORMATION

**Faculty Secretary:**

Tel: +90 216 578 05 93

**Dean Secretary:**

Tel: +90 216 578 05 05 – 06

Fax: +90 216 578 05 75

**Student Affairs:**

Tel: 0216 578 06 86

**Documents Affairs:**

Tel: 0216 578 05 23

**Coordinators/ Co-coordinators:**

Burcu GEMİCİ BAŞOL, PhD, Assoc. Prof. (Coordinator) 216 578 00 00 (1579) / burcu.gemici@yeditepe.edu.tr

Alev CUMBUL, PhD, Assist. Prof. (Co-Coordinator) 216 578 00 00 (1534) / alev.cumbul@yeditepe.edu.tr

Edibe BİLİŞLİ KARA, DVM, Lecturer (Co-Coordinator) 216 578 00 00 (0000)/ edibe.bilisli@yeditepe.edu.tr

Müge KOPUZ ALVAREZ NOVAL, PhD, Assist. Prof. (Co-Coordinator) 216 578 00 00 / 1552 / muge.kopuz@yeditepe.edu.tr

Deniz KIRAÇ, PhD, Assoc. Prof. (Co-Coordinator& PBL Co-Coordinator) 216 578 00 00 (1568) / dyat@yeditepe.edu.tr

Soner DOĞAN, PhD, Prof. (Co-Coordinator) 216 578 00 00 (0000) / soner.dogan@yeditepe.edu.tr

Özlem TANRIOVER, MD, MPH, Prof. (ICP-Coordinator) 216 578 0000 (3742) / otanrioover@yeditepe.edu.tr

A. Arzu AKALIN, MD, Assist. Prof. (ICP Co-Coordinator& Elective Courses Coordinator) 216 578 00 00 (1525) / arzu.akalin@yeditepe.edu.tr

Seda GÜLEÇ, PhD, Assoc. Prof. (Elective Courses Co-Coordinator) 216 578 00 00 / (0000) seda.gulec@yeditepe.edu.tr

Serdar ÖZDEMİR, MD, PhD, Assist. Prof. (PBL Coordinator) 216 578 00 00 (3066) / serdar.ozdemir@yeditepe.edu.tr

**Address:**

Yeditepe University Faculty of Medicine  
İnönü Mah. Kayışdağı Caddesi,  
26 Ağustos Yerleşimi,  
34755 Ataşehir, İstanbul

**Web:** [www.med.yeditepe.edu.tr](http://www.med.yeditepe.edu.tr)

**E-mail:** [tipfakdek@yeditepe.edu.tr](mailto:tipfakdek@yeditepe.edu.tr)



YEDİTEPE UNIVERSITY  
FACULTY OF MEDICINE

İnönü Mah. Kayışdağı Caddesi,  
26 Ağustos Yerleşimi,  
34755 Ataşehir, İstanbul

+ 90 216 578 00 00

[www.yeditepe.edu.tr](http://www.yeditepe.edu.tr)  
<http://www.med.yeditepe.edu.tr>  
[tipfakdek@yeditepe.edu.tr](mailto:tipfakdek@yeditepe.edu.tr)