

**YEDİTEPE UNIVERSITY  
FACULTY OF MEDICINE  
PHASE II  
ACADEMIC PROGRAM BOOK  
2020 - 2021**



# YEDİTEPE UNIVERSITY FACULTY OF MEDICINE PHASE II

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# 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*”

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### AIM

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

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

# YEDİTEPE UNIVERSITY FACULTY OF MEDICINE

## PROGRAM OUTCOMES OF MEDICAL EDUCATION \*, \*\*

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**Abbreviations:** PO: Program Outcomes, POD: Program Outcomes Domain, PODG: Program Outcomes Domain Group

### PODG.1. Basic Professional Competencies

#### POD.1.1. Clinical Competencies

**PO.1.1.1. values** preventive health services, **offers** primary prevention (i.e. prevention of diseases for the protection of health), secondary prevention (i.e. early diagnosis and treatment) tertiary prevention (i.e. rehabilitation) and quaternary prevention (i.e. prevention of excessive and unnecessary diagnosis and treatment) services, **provides** consultancy on these issues.

**PO.1.1.2. employs** a patient-centered approach in patient management.

**PO.1.1.3. recognizes** most frequently occurring or significant clinical complaints, symptoms, signs, findings and their emergence mechanisms in clinical conditions.

**PO.1.1.4. takes** medical history from the applicant himself/herself or from the individual's companions.

**PO.1.1.5. does** general and focused physical and mental examination.

**PO.1.1.6. interprets** findings in medical history, physical and mental examination.

**PO.1.1.7. employs** diagnostic procedures that are used frequently at the primary health care level.

**PO.1.1.8. selects** tests that have evidence-based high efficacy at the primary health care level and **interprets** results.

**PO.1.1.9. makes** clinical decisions using evidence-based systematic data in health care service.

**PO.1.1.10. performs** medical interventional procedures that are used frequently at the primary health care level.

**PO.1.1.11. manages** healthy individuals and patients in the context of health care services.

**PO.1.1.12. keeps** medical records in health care provision and **uses** information systems to that aim.

#### POD.1.2. Competencies related to Communication

**PO.1.2.1.** throughout his/her career, **communicates** effectively with health care beneficiaries, co-workers, accompanying persons, visitors, patient's relatives, care givers, colleagues, other individuals, organizations and institutions.

**PO.1.2.2. collaborates** as a team member with related organizations and institutions, with other professionals and health care workers, on issues related to health.

**PO.1.2.3. recognizes** the protection and privacy policy for health care beneficiaries, co-workers, accompanying persons and visitors.

**PO.1.2.4. communicates** with all stakeholders taking into consideration the socio-cultural diversity.

#### POD.1.3. Competencies Related to Leadership and Management

**PO.1.3.1. manages** and **leads** within the health care team in primary health care organization.

**PO.1.3.2. recognizes** the principles of health management and health sector economy, models of organization and financing of health care services.

**PO.1.3.3. recognizes** the resources in the health care service, the principles for cost-effective use.

#### POD.1.4. Competencies related to Health Advocacy

**PO.1.4.1. recognizes** the health status of the individual and the community and the factors affecting the health, **implements** the necessary measures to prevent effects of these factors on the health.

**PO.1.4.2. recognizes** and **manages** the health determinants including conditions that prevent access to health care.

#### POD.1.5. Competencies related to Research

**PO.1.5.1. develops, prepares** and **presents** research projects

#### POD.1.6. Competencies related to Health Education and Counseling

**PO.1.6.1. provides** consultancy services and **organizes** health education for the community to sustain and promote the health of individual and community.

## PODG.2. Professional Values and Perspectives

### POD.2.1. Competencies related to Law and Legal Regulations

PO.2.1.1. **performs** medical practices in accordance with the legal framework which regulates the primary health care service.

### POD.2.2. Competencies Related to Ethical Aspects of Medicine

PO.2.2.1. **recognizes** basic ethical principles completely, and **distinguishes** ethical and legal problems.

PO.2.2.2. **pays importance to** the rights of patient, patient's relatives and physicians, and **provides** services in this context.

### POD.2.3. Competencies Related to Social and Behavioral Sciences

PO.2.3.1. **relates** historical, anthropological and philosophical evolution of medicine, with the current medical practice.

PO.2.3.2. **recognizes** the individual's behavior and attitudes and factors that determine the social dynamics of the community.

### POD.2.4. Competencies Related to Social Awareness and Participation

PO.2.4.1. **leads** community with sense of responsibility, behavior and attitudes in consideration of individual behaviors and social dynamics of the community, and if there is a necessity, **develops** projects directed towards health care services.

### POD.2.5. Competencies Related to Professional Attitudes and Behaviors

PO.2.5.1. **displays** a patient-centered and holistic (biopsychosocial) approach to patients and their problems.

PO.2.5.2. **respects** patients, colleagues and all stakeholders in health care delivery.

PO.2.5.3. **displays** the proper behavior in case of disadvantaged groups and situations in the community.

PO.2.5.4. **takes** responsibility for the development of patient safety and healthcare quality.

PO.2.5.6. **evaluates** own performance as open to criticism, **realizes** the qualifications and limitations.

## PODG.3. Personal Development and Values

### POD.3.1. Competencies Related to Lifelong Learning

PO.3.1.1. **embraces** the importance of lifelong self-learning and **implements**.

PO.3.1.2. **embraces** the importance of updating knowledge and skills; **searches** current advancements and **improves** own knowledge and skills.

PO.3.1.3. **uses** English language at least at a level adequate to follow the international literature and to establish communication related to the profession.

### POD.3.2. Competencies Related to Career Management

PO.3.2.1. **recognizes** and **investigates** postgraduate work domains and job opportunities.

PO.3.2.2. **recognizes** the application requirements to postgraduate work/job domains, and **distinguishes** and **plans** any requirement for further training and work experience.

PO.3.2.3. **prepares** a resume, and **recognizes** job interview methods.

### POD.3.3. Competencies Related to Protection and Development of Own Physical and Mental Health

PO.3.3.1. **implements** the rules of healthy living.

PO.3.3.2. **displays** appropriate behavior specific to work under stressful conditions.

PO.3.3.3. **uses** self-motivation factors.

## YEDİTEPE UNIVERSITY FACULTY OF MEDICINE

### 2020-2021 ACADEMIC YEAR ANNOUNCEMENT (PHASE I-II-III)

Dear All,

In a statement of The Higher Education Council of Turkey (YÖK) related a new normalization process includes the expressions that: "Turkish Universities need to schedule their own online education process for relevant programs to be able to give its theoretical lectures and support its practical trainings considering the regional and local dynamics of COVID-19 pandemic and the number of student and infrastructure facilities of the relevant formal program. Also, it has been decided that in the face-to-face programs, up to 40 percent of courses can be lectured as online regardless of COVID-19 pandemic process.

However, at that point for 2020-2021 academic year as Faculty of Medicine, we have taken some decisions listed below in consequence of our experiences, resolutions of Yeditepe University Senate, discussions within our educational commissions and your feedbacks and requests.

- Preclinical students (Phase I-II-III) are going to get integrated education (both practical and theoretical lectures) as usual. The current academic program will be protected.
- The lecture commissions and the other code of courses' (ICP, laboratory and practical skills, anatomical drawing, problem-based learning sessions and free elective courses) theoretical parts will be given synchronous and online.
- The lectures' video recording will be hold. In this way, students have a chance and opportunity to watch these videos as asynchronous in case of missing the lecture.
- It is on our agenda that in the spring semester the theoretical exams will be conducted face to face considering the physical and academic infrastructure, the other facilities and taken the necessary measures of our University. In the fall semester theoretical exams will be synchronous and online. The examination rules will be declared at a later time.
- The practical training also will be given as online and synchronous as possibilities allow. If some practices postpone to spring semester, it will be planned to given face to face by divided into groups.
- 2020-2021 academic year program for preclinical students is preparing and going to be announced on our Faculty web site.

As a consequence, the whole lectures will be given as online and synchronous / asynchronous in 2020-2021 academic year fall semester. We are expecting and planning the realization of face-to-face and mostly practical training for spring semester, but taking into consideration that the planning face-to-face education might be transformed into online model in case of force majeure related with the progress of COVID-19 pandemic.

New academic programs is going to be declared as soon as possible.

We wish you all success and joy for this new academic year.

Prof. Dr. Sina Ercan  
Dean

**COORDINATION COMMITTEE  
(TEACHING YEAR 2020 – 2021)**

Mehtap KAÇAR, MD, Assoc. Prof. & Burcu GEMİCİ BAŞOL, PhD Assoc. Prof. (Coordinator)  
Deniz KIRAÇ, PhD Assoc. Prof. (Co-Coordinator)  
Alev CUMBUL, PhD Assist. Prof. (Co-Coordinator)  
Müge KOPUZ ALVAREZ NOVAL, PhD Assist. Prof. (Co-Coordinator)  
Mohammed ELGAZZAR, MD Lecturer (Co-Coordinator)  
Sıtkı TIPLAMAZ, MD, Asist. 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)  
İbrahim Çağatay ACUNER, MD Assoc. Prof. (Co-Coordinator)  
Deniz KIRAÇ, PhD Assoc. Prof. (Co-Coordinator)



## **DESCRIPTION and CONTENT**

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, 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 Course-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 equipments.
- 3.0. prepare a presentation of a scientific research

## **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 (8 weeks)

## **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

## **INTRODUCTION to CLINICAL PRACTICE (ICP MED 102, 202, 303)**

**Due to the pandemic conditions ICP Program will be held online during the Fall Semester. Any changes in the program will be announced later.**

### **Aim**

This course aims to equip the students with basic medical skills 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. The students improve the gained skills by observing real encounters in the clinical settings during 2nd and 3rd year.

### **Description**

ICP is a three years 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 the first and third year students while it is 4 ECTS for the second year students 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, develop skills in Basic Life Support, Patient/Casualty Transportation and Bandaging Techniques regarding to First Aid. They also acquire basic knowledge on communication and experience patient-doctor encounter with simulated patients (SP's).

The second years ICP Program consist of modules like handwashing, wearing sterile gloves, assessing vital signs, nasogastric intubation, bladder catheterization, intramuscular, subcutaneous, intradermal and intravenous injections as well as iv. catheterization.

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 exam 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 provide transition of students from the classroom to standardized patient contact in safe environments.

Encounters with specially trained individuals, known as simulated patients (SPs), simulate specific cases in outpatient and emergency settings. The pool of SPs consist of adults, from various backgrounds.

Clinical cases are created through research and extensive training of the patients portraying these roles.

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

**Rules for Attendance of the Students:** Students are grouped into 4 and group lists are announced in the 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 course coordinator. 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.

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.

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

### AIM and LEARNING OBJECTIVES of ICP- II

#### **AIM**

1. **To convey** hygienic skills (hand washing, sterile glove wearing) in working environment,
2. **To convey** measurement skills for basic vital findings,
3. **To equip with** basic interventional skills (nasogastric tube and urinary catheter application; intramuscular, intradermal and subcutaneous injection, intravenous cannulation).

#### **LEARNING OBJECTIVES**

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

#### **KNOWLEDGE**

1. **describe** the techniques of hand washing and sterile glove wearing in accordance with the skill procedure.
2. **describe** measurement of blood pressure with sphygmomanometer in adults in accordance with the skill procedure.
3. **count** nasogastric probe types, application indications, contraindications and the steps in application procedure.
4. **count** urinary catheter types, application indications, contraindications and the steps in application.
5. **count** application indications, contraindications and the steps in application procedure of intramuscular, intradermal and subcutaneous injections as well as intravenous cannulation.

#### **SKILLS**

1. **apply** hand washing and sterile glove wearing skill completely in accordance with the skill procedure.
2. **measure** blood pressure by adult sphygmomanometer completely in accordance with the skill procedure.
3. **perform** nasogastric probe application on an adult model in accordance with the skill procedure.
4. **perform** urinary catheter application in an adult woman and male model in accordance with the skill procedure.
5. **perform** intramuscular, intradermal and subcutaneous injection as well as intravenous cannulation applications in an adult model in accordance with the skill procedure.
6. **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.

**Due to pandemic conditions Early Clinical Exposure Program will not be held this year. The changes due to pandemic conditions will be announced later.**

## **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 the 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:**

Education Program is spread over a total of 8 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 the 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 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 hospital
- Observing the Clinical process
- Observing the work area of health care workers in the hospital

- Observing the 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:**

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.

**Evaluation of the Training Program:**

Student feedback forms will be given to the coordinator, after collecting the forms, the coordinator will send them to the “Program Evaluation Commission”. In addition, the coordinator will write a report on the functioning of the ECE program to the “Early Clinical Exposure Commission”.

**Student Work Load:**

The duration of the educational program for each student; in the clinical settings face to face 6 hours, 6 hours for independent learning, 6 hours in primary care setting: a total of 18 hours.

**Requirements for the Educational Program:**

Student service bus should be allocated to ensure the transfer of students to the clinical settings.

**Responsible Faculty for the ECE:**

**Coordinator:** Yaşar KÜÇÜKARDALI, MD, Prof.

**ICP II Coordinator and Co-coordinator:**

Özlem TANRIÖVER, MD, MPH Prof.

A. Arzu AKALIN, MD, MSc. Assist. Prof.



## **SCIENTIFIC RESEARCH and PROJECT COURSE - II**

The aim of Scientific Research and Project Course – 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 course - 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 Course-II course has 2% 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.

## 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>	<p>At the end of this course, the student should be able to</p> <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>

Code	Subject		
<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>	<p>At the end of this course, the student should be able to</p> <p>create personal brand for successful business life.</p> <p>use behavioral codes for business etiquette.</p>		
<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>

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 develop leadership skills to manage teams. use empathy techniques for conciliation with their patients and co-workers.		
<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>		<b>100</b>

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 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		
		<b>Total</b>	<b>100</b>
	Contribution of Final Examination to Overall Grade		60
	Contribution of In-Term Studies to Overall Grade		40
		<b>Total</b>	<b>100</b>

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		
MED 628	Healthy Living: The Milestones of the Life for Performance Management		
Goals	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.		
Content	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.		
Course Learning Outcomes	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>		
Assessment		NUMBER	PERCENTAGE
	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

<b>Code</b>	<b>Subject</b>
<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>

<b>Code</b>	<b>Subject</b>		
<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>

## OVERVIEW OF THE YEDİTEPE UNIVERSITY UNDERGRADUATE MEDICAL EDUCATION PROGRAM

Please see the below links to access Yeditepe University Medical School Undergraduate Medical Education Program's Information Package, Curriculum, and Detailed Course Plans in compliance with European Higher Education Area and Bologna Process regulations. These documents will provide you with a comprehensive overview of the program.

Faculty Website Links (Turkish):

- Curriculum: <https://med.yeditepe.edu.tr/tr/mezuniyet-oncesi-tip-egitimi>
- Bologna information Package: <https://med.yeditepe.edu.tr/tr/bologna>

Faculty Website Links (English):

- Curriculum: <https://med.yeditepe.edu.tr/en/mezuniyet-oncesi-tip-egitimi>
- Bologna information Package: <https://med.yeditepe.edu.tr/en/bologna>



## **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.

## COMMITTEE 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>).

## 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):

<b>Problems</b>	<b>Hypotheses</b>	<b>Additional (Required) information</b>	<b>Learning issues (Learning objectives)</b>
<i><b>Example</b></i>	<i><b>Example</b></i>	<i><b>Example</b></i>	<i><b>Example</b></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>Online PBL First session flow</b>
• Introducing yourselves <i>(for the first session of the term)</i>
• Determination of group rules <i>(for the first session of the term) (Google Jamboard will be used.)</i>
• Introducing the PBL Student Assessment Form to the students <i>(for the first session of the semester) (It will be shown to the students by screen sharing by the tutor)</i>
• Warming Game
• Reader and writer selection
• Reading the scenario step by step <i>(The scenario will be displayed to the students by sharing the screen by the instructor.) (The next page will not be shared until the previous page is read and the related questions are answered by the students.) (The pages of the scenario will be shared sequentially in the Google Classroom as PDF.)</i>
• Discussion <i>(Writing hypotheses on Google Jamboard, bringing preliminary information to learning environment, reviewing hypotheses, etc.)</i>
• The tutor asks questions that lead students to their learning goals during the discussion <i>(these are questions written in the instructor's copy of the scenario).</i>
• Setting learning goals by students <i>(learning goals will be written on Google Jamboard by the writer)</i>
• Feedback <i>(each group member's thoughts about themselves, the group, scenario, the instructor, PBL flow, PBL setting, etc.)</i>
<b>Online PBL Second session flow</b>
• Warming Game
• Discussion of the learning objectives determined in the previous session <i>(via the Google Jamboard where the learning objectives were written in the previous session)</i>
• Reader selection
• Reading the scenario <i>(The second session of the scenario will be screen shared and displayed to the students by the tutor.)</i>
• Discussing the psychosocial dimension of the case
• Filling out Tutor Evaluation Form by the students
• Feedback <i>(each group member's thoughts about themselves, the group, scenario, the instructor, PBL flow, PBL setting, etc.)</i>

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

## 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 feed-back 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'

## 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 Course 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
		EQ: Essay Questions	CE	CS
		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		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 104, MED 102)	
<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 104, MED 102, 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. Contribution of student's 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>	= (40% MTE <sub>ICP</sub> ) + (60% 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 pages of Elective Courses in the APB.
<b>SRPCS</b>	= Score information is shown at 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>	= 98% of CMS + 2% of SRPCS
<b>TS</b> for students, <u>who are not exempted from FE</u>	= 98% of (60% of CMS + 40% of FES or ICES) + 2% of SRPCS

Pass or Fail Calculations of the Courses
<b>Basic Medical Sciences I (MED 104)</b>
<b>Pass; TS ≥ 60</b>
<b>Fail; FES &lt; 50 (barrier point), ICES &lt; 50 (barrier point), or/and TS &lt; 60</b>
<i>The student is <u>exempted from FE</u>, if the CMS is ≥ 80 and all CSs are ≥ 60</i>
<i>The FE and ICE <u>barrier point is not applied</u> to the students whose all CSs are ≥ 60</i>
<b>Introduction to Clinical Practice I (MED 102)</b>
<b>Pass; ICPS ≥ 60</b>
<b>Fail; ICPS &lt; 60</b>
<b>Anatomical Drawing (MED 103)</b>
<b>Pass; ADS ≥ 60</b>
<b>Fail; ADS &lt; 60</b>
<b>Common Compulsory Courses (HUM 103, TKL 201, TKL 202, HTR 301, HTR 302, AFYA 101, AFYA 102)</b>
<b>Pass; CCCSs ≥ 50</b>
<b>Fail; CCCSs &lt; 50</b>
<b>Elective Courses (MED 611, MED 612, MED 613, MED 614, MED 616, MED 619, MED 620, MED 623, MED 627, MED 628, MED 632, MED 633)</b>

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** consist 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.

**EQ** 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 in order 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 interview, examine and treat simulated patients who present with some type of medical problem.

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

**LPE** is included as it has been a traditional assessment format in many school 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:

<b>Grades</b>	<b>Letter Grades</b>
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 non attendance 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 non academic 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.

## ONLINE EXAM RULES

1. The online examination application of the Education Management Information System (EYS) works with connection to the internet. During your exam, you should take the exam in a quiet area where you have an internet connection.
2. You are not allowed to take the online exam from places that are not suitable for the exam such as private cars, public transportation vehicles, cafes, etc. You are expected to take the online exam in your own home, if possible, in your own study room.
3. During the online exam, connect to the Internet at a location near your wireless modem or, if possible, using the LAN cable to avoid network problems.
4. Online exam length, number of questions and question types will be announced by coordinators (preclinical years) or educational supervisors (clerkships).
5. You can use a desktop or laptop computer for the exam. Google Chrome should be used as an internet browser.
6. First of all, you need to register your computer with your Yeditepe e-mail address at [tf.yeditepe.edu.tr/online\\_sinav/](mailto:tf.yeditepe.edu.tr/online_sinav/) You can attend your online exam only from the registered (IP address is registered) computer.
7. You must be ready by entering the system 30 minutes before the specified time for the online exam.
8. Before starting the exam, you must connect to the Google Meet session from the link which will be delivered by the Coordinator. The online exam will be recorded with the Google Meet.
9. Identity check will be done before the exam starts. For this reason, you should have your student IDs with you.
10. When you enter the online exam system, you will be asked to switch the program in full screen mode and continue with it. How to switch to full screen mode and which key combinations\* to use for this will be indicated on the online exam screen.
11. Your computer's camera should be turned on during the exam.
12. The total time which is given to you for the exam will be displayed on the screen. In other words, after recording your answer, you will be able to move on to the next question without waiting.
13. After selecting your choice, do not forget to save it from the confirmation button.
14. You can answer the questions in the order you want. You will be given the option to check your answers or to return to the question you left blank.
15. The order of the questions will be arranged differently for each student and will be displayed on the screen.
16. If you have disconnection to internet during the exam, you will be able to reconnect to the exam. In this case, you will be able to continue the exam from where you left off.
17. You will not be allowed to leave the computer during the exam (online exam process will be recorded through the Google Meet).

## **ONLINE EXAM ETHICAL RULES**

\*This rules also includes situations that will be considered as cheating during the exam.

During the exam, students, shall act honestly, and not to tend cheating to uphold the reputation of the medical student.

All students must have their cameras on and their microphones off during the exam. A healthy camera view is a requirement of the online exam. If this cannot be achieved with an integrated or external camera, students should download google meet to their mobile phones, join the observer links on their phones, and transmit their images with the phone's camera throughout the exam.

During the exam, It is forbidden;

1. to wear headphones,
2. to speak and / or to close the mouth to speak.
3. to go out of the camera view,
4. to use or attempt to use mobile phones etc.
5. to look outside the exam screen,
6. to take screenshots of the questions and share them electronically

Students who exhibit the above-mentioned behaviors will be warned by the observers. Despite the warnings, the exams of the students who constantly behave in this way will be considered invalid and these students will be regarded within the scope of the Student Disciplinary Regulations for Higher Education Institutions.

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

	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY
09:00-09:50	MED 203 (B 310)	MED 203 (B 310)	MED 203 (B 310)	MED 203 (B 310)	MED 203 (B 310)
10:00-10:50	MED 203 (B 310)	MED 203 (B 310)	MED 203 (B 310)	MED 203 (B 310)	MED 203 (B 310)
11:00-11:50	MED 203 (B 310)	MED 203 (B 310)	MED 203 (B 310)	MED 203 (B 310)	MED 203 (B 310)
12:00-12:50	MED 203 (B 310)	MED 203 (B 310)	MED 203 (B 310)	MED 203 (B 310)	MED 203 (B 310)
13:00-13:50					
14:00-14:50	MED 203 (B 310)	MED 203 (B 310)	MED 203 (B 310)	MED 202**** (Base Floor 442)	Elective Course (SPRING)
15:00-15:50	MED 203 (B 310)	MED 203 (B 310)	MED 203 (B 310)	MED 202**** (Base Floor 442)	Elective Course (SPRING)
16:00-16:50	MED 203 (B 310)	MED 203 (B 310)	MED 203 (B 310)	MED 202**** (Base Floor 442)	Elective Course (SPRING)
17:00-17:50	MED 203 (B 310)	MED 203 (B 310)	MED 203 (B 310)	MED 202**** (Base Floor 442)	Elective Course (SPRING))

**COURSE CODES:**

**MED 203**

Basic Medical Sciences II (B 310) or Laboratories\*\*

**MED 202**

Introduction to Clinical Practice II (CSL)\*\*\* or (B 310)

**ELECTIVE COURSES CODES:**

**MED 614**

Business Etiquette and Personal Image

**MED 615**

Futurism and Idea Creation

**MED 616**

Medical Management, Leadership and Coaching

**MED 617**

Stress and Time Management

**MED 618**

Medicine & Pharmaceutical Industry

**MED 621**

Epidemiology Journal Club

**MED 622**

Application of Economics in Health Care

**MED 624**

Narrative 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

**CLASSES**

**B 311**

Ground Floor

**Elective Course Classess**

Will be announced later

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

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

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

Histology and Embriology 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 friday during fall semester, and thursday during spring semester**



## ONLINE EDUCATION GOOGLE CLASSROOM INFORMATIONS OF THE DEPARTMENTS

	Department	Classroom Name	Google Classroom Code
1	Phase II Coordination	Phase II 2020-2021 MED II-COORDINATION COMMITTEE	p4abw3k
2	Anatomy	2020 2021 Meds Anatomy Phase II	dsahd6c
3	Biochemistry	BIOCHEMISTRY- Medicine Phase 2 (2020-2021)	3lgbxj3
		Medicine Phase II Biochemistry Practical	dxnqqg7
4	Medical Biology	Phase II Medical Biology 2020-2021	ooxrefe
5	Histology and Embryology	MED II H&E with ACumbul	nhyrzcz
		PHASE 2 2020-2021	mg5v7yr
6	Medical Microbiology	Phase II 2020-2021 MED II-COORDINATION COMMITTEE	p4abw3k
7	Immunology	Phase II Immunology	pt6rpmk
8	Pathology	PATHOLOGY ASAV 2020-2021 PHASE II	hlbf7z5
9	Physiology	B.Yilmaz Phase II Physiology 2020-2021	33xd66
		MEDII Physiology MK	i7wtg32
10	Biophysics	Med. Phase-II. Biophysics	znkomze
11	Scientific Research and Project II	SRPC II 2020-2021, SRPC-II Group A,B,C,D	g26pnd4, wrhxiwf,2fdz2zu,3nwebpx sjgvnfj
12	Biostatistics	Med Phase II Biostatistics	u6jqbn3
13	Phase II ICP II Medical Education	PHASE II ICP II O.Tanrıöver MED.EDU	nnjm6ks
14	PBL	PBL-PHASEII	Group 12: fodzl4j Group 11: yepp2m3 Group 10: qjiz3xf Group 9: xzd4wm4 Group 8: s5zllpd Group 7: fb4ebtl Group 6: gacejvo Group 5: ry54jaa Group 4: m7y7pof Group 3: kqb6oqa Group 2: efyucaa Group 1: epvf7pn

\*Online lecture meeting links are shared in the google classrooms

## 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

## ACADEMIC CALENDAR 2020 – 2021

### **BASIC MEDICAL SCIENCES II**

#### **COMMITTEE I**

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

Beginning of Committee:	October 05, 2020 Monday
End of Committee:	November 13, 2020 Friday
Committee Exam (Theoretical and Practical Exams):	November 09-13, 2020 Monday-Friday
Committee Exam Discussion:	November 13, 2020 Friday
National Holiday:	October: 29, 2020 Thursday
Commemoration of Atatürk:	November 10, 2020

#### **COMMITTEE II**

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

Beginning of Committee:	November 16, 2020	Monday
End of Committee:	December 25, 2020	Friday
Committee Exam (Theoretical and Practical Exams):	December 21-25, 2020	Monday-Friday
Committee Exam Discussion:	December 25, 2020	Friday

#### **COMMITTEE III**

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

Beginning of Committee:	December 28, 2020	Monday
End of Committee:	February 26, 2021	Friday
Committee Exam (Theoretical and Practical Exams):	February 22-26, 2021	Monday-Friday
Committee Exam Discussion:	February 26, 2021	Friday
New Year:	January 1, 2021	Friday

#### **MIDTERM BREAK:**

**February 1, 2021                      February 14, 2021**

#### **COMMITTEE IV**

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

Beginning of Committee:	March 1, 2021	Monday
End of Committee:	April 22, 2021	Friday
Committee Exam (Theoretical and Practical Exams):	April 19-22, 2021	Monday-Thursday
Committee Exam Discussion:	April 22, 2021	Friday
Physicians' Day:	March 14, 2021	Sunday
National Holiday:	April 23, 2021	Friday

#### **COMMITTEE V**

##### **ENDOCRINE and UROGENITAL SYSTEMS (8 Weeks)**

Beginning of Committee:	April 26 2021	Monday
End of Committee:	June 25, 2021	Friday
Committee Exam (Theoretical and Practical Exams):	June 21-25, 2021	Monday-Friday
Committee Exam Discussion:	June 25, 2021	Friday
Labor's Day:	May 1, 2021	Saturday
Feast of Ramadan	May 13-15 2021	Wednesday-Saturday
National Holiday:	May 19, 2021	Wednesday
Make-up Exam:	July 12-14, 2021	Monday-Wednesday
Final Exam:	July 30, 2021	Friday
Incomplete Exam:	August 13, 2021	Friday

<b>National Holiday:</b>	<b>October: 29, 2020</b>	<b>Thursday</b>
<b>National Holiday</b>	<b>April 23, 2021</b>	<b>Thursday</b>
<b>Physicians' Day</b>	<b>March 14, 2021</b>	<b>Sunday</b>
<b>Labor's Day</b>	<b>May 1, 2021</b>	<b>Friday</b>
<b>Feast of Ramadan</b>	<b>May 13-15, 2021</b>	<b>Wednesday-Saturday</b>
<b>National Holiday</b>	<b>May 19, 2021</b>	<b>Tuesday</b>

#### **ELECTIVE COURSES-Spring 2020-2021**

Introduction to Elective Courses	December 17, 2020	Thursday
Beginning of Elective Courses	February 19, 2021	Friday
Midterm Exam	April 2, 2021	Friday
Make-up Exam	June 14- 18, 2021	Monday-Friday
Final Exam	June 21- 28, 2021	Monday
Incomplete Exam	July 5-27, 2021	Monday-Tuesday

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

Midterm Exam:	March 05, 2021	Friday
Make-up Exam:	June 4, 2021	Friday
Final Exam:	June 28- July 2, 2021	Monday-Friday
Incomplete Exam:	July 29, 2021	Thursday

#### **THE COORDINATION COMMITTEE MEETINGS**

1 <sup>st</sup> Coordination Committee Meeting:	November 6, 2020	Friday
2 <sup>nd</sup> Coordination Committee Meeting: (with student participation)	January 12, 2021	Tuesday
3 <sup>rd</sup> Coordination Committee Meeting: (with student participation)	May 25, 2021	Tuesday

**COMMITTEE I - CARDIOVASCULAR SYSTEM  
LECTURERS**

<b>MED 203 BASIC MEDICAL SCIENCES II</b>	
<b>DISCIPLINES</b>	<b>LECTURERS</b>
ANATOMY	ERDEM SÖZTUTAR, MD, Assist. Prof. Aikaterini PANTELİ, MD, Lecturer Mohammed ELGAZZAR, MD, Lecturer LAB: Edibe BİLİŞLİ, DVM LAB: Zeynep Büşra ODABAŞ, DMD
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, Assist. Prof.
BIOSTATISTICS	E. Çiğdem ALTUNOK, 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, Assoc. Prof. Deniz KIRAÇ, PhD, Assoc. Prof.
MEDICAL MICROBIOLOGY	Aynur EREN, MD, Prof. Pınar ÇIRAGIL, MD, Prof. Çağatay ACUNER, MD, Assoc. Prof.
PATHOLOGY	Aydın SAV, MD, Prof.
PHYSIOLOGY	Bayram YILMAZ, PhD, Prof. Mehtap KAÇAR, MD PhD, Assoc. Prof. Burcu GEMİCİ BAŞOL, PhD, Assoc. Prof.
SCIENTIFIC RESEARCH AND PROJECT COURSE-II	Bayram YILMAZ, PhD, Prof. Deniz KIRAÇ, PhD, Assoc. Prof.

<b>OTHER COURSES</b>	
<b>DISCIPLINES</b>	<b>LECTURERS</b>
MED 202 INTRODUCTION to CLINICAL PRACTICE II	Özlem TANRIÖVER, MD, MPH, Prof. A. Arzu AKALIN, MD, MSc. Assist. Prof. Serdar ÖZDEMİR, MD, PhD, Assist. Prof.

**COMMITTEE I - CARDIOVASCULAR SYSTEM**  
**DISTRIBUTION of LECTURE HOURS**  
**October 05 - November 13, 2020**  
**COMMITTEE DURATION: 6 WEEKS**

MED 203	BASIC MEDICAL SCIENCES II	THEORETICAL	PRACTICAL	TOTAL
	<b>DISCIPLINE</b>			
	ANATOMY	14	1Grx4H	18
	BIOCHEMISTRY	12	1Grx2H	14
	BIOPHYSICS	10	0	10
	BIOSTATISTICS	2	0	2
	HISTOLOGY & EMBRYOLOGY	11	1Grx5H	16
	IMMUNOLOGY	3	0	3
	MEDICAL BIOLOGY	4	0	4
	MEDICAL MICROBIOLOGY	9	1Grx3H	12
	PATHOLOGY	7	0	7
	PHYSIOLOGY	34	1Grx10H	44
	SCIENTIFIC RESEARCH and PROJECT COURSE-II	2	4Grx3H	5
	PBL	6	0	6
	<b>TOTAL</b>	<b>114</b>	<b>27</b>	<b>141</b>
	INDEPENDENT LEARNING HOURS	75		

**OTHER COURSES**

MED 202	INTRODUCTION to CLINICAL PRACTICE- II	1H	4GrX 3H	4
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<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, Assoc. Prof.
	<b>Member</b>	Akif MAHARRAMOV, PhD, Assist. Prof.

## **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;
  - 2.1. explain biological characteristics of the system,
  - 2.2. 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. Describe of development of Neck and Pharyngeal Archs and Anomalies
- 6.0. For cardiovascular system;
  - 6.1. explain developmental stages of heart,
  - 6.2. explain developmental stages of arteries, veins and capillaries,
  - 6.3. associate the relation between major birth abnormalities and developmental process.
  - 6.4. explain the histological properties of heart
  - 6.5. explain the histological features of arteries, veins and capillaries
- 7.0. For lymphoreticular System and blood
  - 7.1. explain the histological properties of Lymph organs
  - 7.2. 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 human flora;
  - 29.1 describe the flora,
  - 29.2 explain its relation to clinical conditions.
- 30.0 describe the structural/biological features and pathogenesis of fungi.
- 31.0 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, 31.0	ANATOMY	Dr. A. Panteli	14	5	5	24
8.0-10.0, 31.0	BIOCHEMISTRY	Dr. İ. Özden	11	4	4	19
1.0	BIOPHYSICS	Dr. A. Maharramov	9	4	4	17
28.0	BIostatISTICS	Dr. Ç. Altunok	2	1	1	4
5.0-7.0, 31.0	HISTOLOGY & EMBRYOLOGY	Dr. A. Yaba Uçar Dr. A. Cumbul	10	4	4	18
18.0	IMMUNOLOGY	Dr. G. Yanıkkaya Demirel	3	1	1	5
2.0	MEDICAL BIOLOGY	Dr. T. İsbir Dr. D. Kıraç	4	1	1	6
29.0-30.0, 31.0	MEDICAL MICROBIOLOGY	Microbiology Lecturer	8	3	3	14
19.0-25.0, 31.0	PATHOLOGY	Dr. A. Sav	6	3	3	12
8.0-17.0, 31.0	PHYSIOLOGY	Dr. B. Yılmaz Dr. M. Kaçar Dr. B. Gemici Başol	32	12	12	56
31.0	PBL		1	0	0	1
TOTAL			100	38/200 <sup>#</sup>	38/200 <sup>#</sup>	176
LEARNING OBJECTIVES	DISCIPLINE	DISTRUBITION of LAB POINTS				
		LPE				
3.0-4.0	ANATOMY	30				
8.0-10.0	BIOCHEMISTRY	5				
5.0-6.0	HISTOLOGY & EMBRYOLOGY	15				
29.0-30.0	MEDICAL MICROBIOLOGY	10				
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 / 05– 09 Oct 2020

	<b>Monday 05-Oct-2020</b>	<b>Tuesday 06-Oct-2020</b>	<b>Wednesday 07-Oct-2020</b>	<b>Thursday 08-Oct-2020</b>	<b>Friday 09-Oct-2020</b>
<b>09.00- 09.50</b>	<b>Introductory Session</b> Introduction to Phase II Phase II Coordination Committee/ Introduction to Committee I Secretary of Committee	<b>Lecture</b> Porphin, Porphyrins, Heme, Hemoglobin, Structure of Hemoglobin <i>Inci Özden</i>	<b>Independent Learning</b>	<b>Lecture</b> Introduction to Bioelectromagnetics Magnetic Field <i>Akif Maharramov</i>	<b>Lecture</b> Synthesis of Hemoglobin, Disorders Concerning Synthesis of Hemoglobin <i>Inci Özden</i>
<b>10.00- 10.50</b>	<b>Introduction to PBL Session</b> <i>İ. Çağatay Acuner</i> <i>Serdar Özdemir</i>	<b>Lecture</b> Porphin, Porphyrins, Heme, Hemoglobin, Structure of Hemoglobin <i>Inci Özden</i>	<b>Lecture</b> Leucocyte Circulation and Migration into Tissue <i>Gülderen Yanıkkaya Demirel</i>	<b>Lecture</b> Introduction to Bioelectromagnetics Electric Field <i>Akif Maharramov</i>	<b>Lecture</b> Synthesis of Hemoglobin, Disorders Concerning Synthesis of Hemoglobin <i>Inci Özden</i>
<b>11.00- 11.50</b>	<b>Lecture</b> Introduction to Medical Microbiology <i>Microbiology Lecturer</i>	<b>Lecture</b> Introduction to Cardiovascular System <i>Aikaterini Panteli</i>	<b>Lecture</b> Functions of Hemoglobin <i>Inci Özden</i>	<b>Lecture</b> Functions of Blood <i>Burcu Gemici Başol</i>	<b>Lecture</b> Great Vessels of the Heart <i>Aikaterini Panteli</i>
<b>12.00- 12.50</b>	<b>Lecture</b> Sterilization and Disinfection <i>Microbiology Lecturer</i>	<b>Lecture</b> Pericardium and Outer Surface of the Heart <i>Aikaterini Panteli</i>	<b>Lecture</b> Functions of Hemoglobin <i>Inci Özden</i>	<b>Lecture</b> Erythrocyte <i>Burcu Gemici Başol</i>	<b>Lecture</b> Major Vessels of the Body <i>Aikaterini Panteli</i>
<b>13.00- 13.50</b>	<b>Lunch Break</b>				
<b>14.00- 14.50</b>	<b>Lecture</b> Thoracic Cavity & Mediastinum <i>Aikaterini Panteli</i>	<b>Lecture / Scientific Research and Project Course - II</b> Presentation of Scientific Research <i>Deniz Kırac</i>	<b>Lecture</b> Histology of Lymph Organs; General Aspects, Thymus and Lymph Node <i>Aylin Yaba Uçar</i>	<b>Lecture</b> Erythrocytes <i>Burcu Gemici Başol</i>	<b>Lecture</b> Introduction to Mycology <i>Microbiology Lecturer</i>
<b>15.00- 15.50</b>	<b>Lecture</b> Thoracic Cavity & Mediastinum <i>Aikaterini Panteli</i>	<b>Lecture / Scientific Research and Project Course - II</b> Presentation of Scientific Research <i>Deniz Kırac</i>	<b>Lecture</b> Histology of Lymph Organs; Spleen and MALT (Tonsils) <i>Aylin Yaba Uçar</i>	<b>Independent Learning</b>	<b>Lecture</b> Introduction to Mycology <i>Microbiology Lecturer</i>
<b>16.00- 16.50</b>	<b>Independent Learning</b>	<b>Independent Learning</b>	<b>Lecture</b> Chambers of the Heart <i>Aikaterini Panteli</i>	<b>Independent Learning</b>	<b>Independent Learning</b>
<b>17.00-17.50</b>	<b>Independent Learning</b>	<b>Independent Learning</b>	<b>Lecture</b> Chambers of the Heart <i>Aikaterini Panteli</i>	<b>Independent Learning</b>	<b>Independent Learning</b>

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

**COMMITTEE I - CARDIOVASCULAR SYSTEM**

**II. WEEK / 12– 16 Oct 2020**

	<b>Monday 12-Oct-2020</b>	<b>Tuesday 13-Oct-2020</b>	<b>Wednesday 14-Oct-2020</b>	<b>Thursday 15-Oct-2020</b>	<b>Friday 16-Oct-2020</b>
<b>09.00- 09.50</b>	<b>Independent Learning</b>	<b>Lecture</b> Platelets and Coagulation <i>Mehtap Kaçar</i>	<b>Lecture</b> Regulation of Cardiac Function <i>Bayram Yılmaz</i>	<b>Lecture</b> Rhythmical Excitation of the Heart <i>Bayram Yılmaz</i>	<b>Independent Learning</b>
<b>10.00- 10.50</b>	<b>PBL Session</b>	<b>Lecture</b> Platelets and Coagulation <i>Mehtap Kaçar</i>	<b>Lecture</b> Regulation of Cardiac Function <i>Bayram Yılmaz</i>	<b>Lecture</b> Rhythmical Excitation of the Heart <i>Bayram Yılmaz</i>	<b>Independent Learning</b>
<b>11.00- 11.50</b>		<b>Lecture</b> Coronary arteries, Cardiac Veins, and Cardiac Conduction System <i>Aikaterini Panteli</i>	<b>Lecture</b> Degradation of Hemoglobin <i>İnci Özden</i>	<b>Lecture</b> Sampling, Data Collection and Data Processing <i>E. Çiğdem Altunok</i>	<b>Lecture</b> Introduction to Lymphatic System <i>Aikaterini Panteli</i>
<b>12.00- 12.50</b>		<b>Lecture</b> Coronary arteries, Cardiac Veins, and Cardiac Conduction System <i>Aikaterini Panteli</i>	<b>Lecture</b> Degradation of Hemoglobin <i>İnci Özden</i>	<b>Lecture</b> Statistical Decision Theory, Test of Hypothesis and Significance <i>E. Çiğdem Altunok</i>	<b>Lecture</b> Circulation of Lymph <i>Aikaterini Panteli</i>
<b>13.00- 13.50</b>	<b>Lunch Break</b>				
<b>14.00- 14.50</b>	<b>Lecture</b> Leukocytes <i>Burcu Gemici Başol</i>	<b>Lecture</b> Blood Types and Transfusion Reactions <i>Bayram Yılmaz</i>	<b>Lecture</b> Histology of Circulatory Systems; Gn Spec. Arteries <i>Aylin Yaba Uçar</i>	<b>Lecture</b> Ischemia and Infarction <i>Aydın Sav</i>	<b>ICP / CSL:</b> Theoretical Lecture for Hand Washing & Sterile Gloves and Mask <i>Özlem Tanrıöver</i>
<b>15.00- 15.50</b>	<b>Lecture</b> Leukocytes & Lymphocytes <i>Burcu Gemici Başol</i>	<b>Lecture</b> Blood Types and Transfusion Reactions <i>Bayram Yılmaz</i>	<b>Lecture</b> Histology of Circulatory Systems; Capillaries & Veins <i>Aylin Yaba Uçar</i>	<b>Lecture</b> Ischemia and Infarction <i>Aydın Sav</i>	<b>ICP / CSL:</b> Hand Washing & Wearing Sterile Gloves <i>Özlem Tanrıöver/ Serdar Özdemir</i> <b>Group A</b>
<b>16.00- 16.50</b>	<b>Lecture</b> Introduction to Pathology <i>Aydın Sav</i>	<b>Lecture</b> Disorders Concerning Hemoglobin Metabolism <i>İnci Özden</i>	<b>Lecture</b> Adaptations <i>Aydın Sav</i>	<b>Lecture</b> Development of Circulatory Systems; Endocardial Tube Formation & Looping <i>Alev Cumbul</i>	
<b>17.00-17.50</b>	<b>Independent Learning</b>	<b>Lecture</b> Disorders Concerning Hemoglobin Metabolism <i>İnci Özden</i>	<b>Lecture</b> Adaptations <i>Aydın Sav</i>	<b>Lecture</b> Development of Circulatory Systems; Septation <i>Alev Cumbul</i>	

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

**COMMITTEE I - CARDIOVASCULAR SYSTEM**  
**III. WEEK / 19– 23 Oct 2020**

	<b>Monday 19-Oct-2020</b>	<b>Tuesday 20-Oct-2020</b>	<b>Wednesday 21-Oct-2020</b>	<b>Thursday 22-Oct-2020</b>	<b>Friday 23-Oct-2020</b>
<b>09.00- 09.50</b>	<b>PBL Session</b>	<b>Lecture</b> Hemorheology <i>Akif Maharramov</i>	<b>Lecture</b> Principles of Electrocardiography <i>Bayram Yılmaz</i>	<b>Independent Learning</b>	<b>Independent Learning</b>
<b>10.00- 10.50</b>		<b>Lecture</b> Hemorheology <i>Akif Maharramov</i>	<b>Lecture</b> Electrocardiographic Interpretation of Cardiac Abnormalities <i>Bayram Yılmaz</i>	<b>Lecture</b> Microcirculation and the Lymphatic System <i>Bayram Yılmaz</i>	<b>Independent Learning</b>
<b>11.00- 11.50</b>		<b>Lecture</b> Hyperemia & Congestion <i>Aydın Sav</i>	<b>Lecture</b> Coronary Circulation <i>Mehtap Kaçar</i>	<b>Lecture</b> Capillary Fluid Exchange, Interstitial Fluid, and Lymph Flow <i>Bayram Yılmaz</i>	<b>Lecture</b> Nervous Regulation of the Circulation <i>Bayram Yılmaz</i>
<b>12.00- 12.50</b>	<b>Lecture</b> Fetal Circulation <i>Aikaterini Panteli</i>	<b>Lecture</b> Hyperemia & Congestion <i>Aydın Sav</i>	<b>Lecture</b> Cardiac Failure <i>Mehtap Kaçar</i>	<b>Lecture</b> Circulatory Shock and Physiology of Its Treatment <i>Mehtap Kaçar</i>	<b>Lecture</b> Nervous Regulation of the Circulation <i>Bayram Yılmaz</i>
<b>13.00- 13.50</b>	<b>Lunch Break</b>				
<b>14.00- 14.50</b>	<b>Lecture</b> Congenital Heart Anomalies <i>Alev Cumbul</i>	<b>Lecture</b> Systemic Mycoses <i>Microbiology Lecturer</i>	<b>Lecture</b> <i>Akif Maharramov</i>	<b>Lecture</b> Development of Head; Splanchnocranium, Neurocranium <i>Aylin Yaba Uçar</i>	<b>ICP / CSL:</b> Hand Washing & Wearing Sterile Gloves <b>Özlem Tanrıöver / Serdar Özdemir</b> <b>Group B</b>
<b>15.00- 15.50</b>	<b>Lecture</b> Cardiac Arrhythmias <i>Bayram Yılmaz</i>	<b>Lecture</b> Superficial/Subcutaneous Mycosis <i>Microbiology Lecturer</i>	<b>Lecture</b> <i>Akif Maharramov</i>	<b>Lecture</b> Development of Neck; Pharyngeal Arches and Anomalies <i>Aylin Yaba Uçar</i>	
<b>16.00-16.50</b>	<b>Lecture</b> Cardiac Arrhythmias <i>Bayram Yılmaz</i>	<b>Lecture</b> Development of Circulatory Systems; Arteries and Anomalies <i>Alev Cumbul</i>	<b>Lecture</b> Immunology of Heart and Vessels <i>Gülderen Yanıkkaya Demirel</i>	<b>Lecture</b> Biophysics of Hemodynamics <i>Akif Maharramov</i>	
<b>17.00-17.50</b>	<b>Independent Learning</b>	<b>Lecture</b> Development of Circulatory Systems; Veins and Anomalies <i>Alev Cumbul</i>	<b>Lecture</b> Immunology of Heart and Vessels <i>Gülderen Yanıkkaya Demirel</i>	<b>Lecture</b> Measurements of Different Hemodynamic Parameters <i>Akif Maharramov</i>	<b>Independent Learning</b>

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

**COMMITTEE I - CARDIOVASCULAR SYSTEM**  
**IV. WEEK / 26 Oct – 30 Oct 2020**

	<b>Monday 26-Oct-2020</b>	<b>Tuesday 27-Oct-2020</b>	<b>Wednesday 28-Oct-2020</b>	<b>Thursday 29-Oct-2020</b>	<b>Friday 30-Oct-2020</b>
<b>09.00- 09.50</b>	<b>Lecture</b> Vascular Distensibility and Functions of Arterial and Venous Systems <i>Bayram Yılmaz</i>	<b>Lecture</b> Heart Valves and Heart Sounds <i>Bayram Yılmaz</i>	<b>Lecture</b> Regulation of Blood Pressure <i>Mehtap Kaçar</i>	<b>National Holiday</b>	<b>Lecture</b> Local and Humoral Control of Blood Flow by the Tissues <i>Bayram Yılmaz</i>
<b>10.00- 10.50</b>	<b>Lecture</b> Vascular Distensibility and Functions of Arterial and Venous Systems <i>Bayram Yılmaz</i>	<b>Lecture</b> Heart Valves and Heart Sounds <i>Bayram Yılmaz</i>	<b>Lecture</b> Regulation of Blood Pressure <i>Mehtap Kaçar</i>		<b>Lecture</b> Local and Humoral Control of Blood Flow by the Tissues <i>Bayram Yılmaz</i>
<b>11.00- 11.50</b>	<b>Lecture</b> Opportunistic Mycoses-I <i>Microbiology Lecturer</i>	<b>Lecture</b> Biological Basis of Cardiovascular Diseases; Death Begets Failure in the Heart <i>Turgay İsbir</i>	<b>Lecture</b> Introduction to Bioelectromagnetics: Electromagnetic Field <i>Akif Maharramov</i>		<b>Laboratory / Physiology</b> Hematocrit Determination and Blood Typing & Bleeding Time <i>Bayram Yılmaz &amp; Mehtap Kaçar &amp; Burcu Gemici Başol</i>
<b>12.00- 12.50</b>	<b>Lecture</b> Opportunistic Mycoses-II <i>Microbiology Lecturer</i>	<b>Lecture</b> Biological Basis of Cardiovascular Diseases; Death Begets Failure in the Heart <i>Turgay İsbir</i>	<b>Lecture</b> Bioelectromagnetic Effects on the Heart <i>Akif Maharramov</i>		
<b>13.00- 13.50</b>	<b>Lunch Break</b>	<b>Lunch Break</b>	<b>Lunch Break</b>		<b>Lunch Break</b>
<b>14.00- 14.50</b>	<b>Lecture</b> Diagnostic Methods in Mycology <i>Microbiology Lecturer</i>	<b>Lecture</b> Oxygen, Oxidative Stress, NO, Redox Disequilibrium in the Failing Heart and Cardiovascular System <i>Deniz Kırac</i>	<b>Independent Learning</b>		<div>ICP / CSL: Hand Washing &amp; Wearing Sterile Gloves <i>Arzu Akalın / Serdar Özdemir</i> Group C</div> <div><b>SRPC SGS Group B</b> <i>Deniz Kırac</i></div>
<b>15.00- 15.50</b>	<b>Laboratory / Microbiology</b> Principles and Procedures of Laboratory Safety <i>Microbiology Instructors</i>	<b>Lecture</b> Oxygen, Oxidative Stress, NO, Redox Disequilibrium in the Failing Heart and Cardiovascular System <i>Deniz Kırac</i>	<b>Independent Learning</b>		
<b>16.00- 16.50</b>	<b>Independent Learning</b>	<b>Lecture</b> Principles of Hemodynamics <i>Burcu Gemici Başol</i>	<b>Independent Learning</b>		
<b>17.00-17.50</b>	<b>Independent Learning</b>	<b>Lecture</b> Principles of Hemodynamics <i>Burcu Gemici Başol</i>	<b>Independent Learning</b>		<b>Independent Learning</b>

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

**COMMITTEE I - CARDIOVASCULAR SYSTEM**  
**V. WEEK / 02 – 06 Nov 2020**

	Monday 02-Nov-2020	Tuesday 03-Nov-2020	Wednesday 04-Nov-2020	Thursday 05-Nov-2020	Friday 06-Nov-2020	
09.00- 09.50	Laboratory / Anatomy Thoracic Wall, Cavity and Mediastinum <i>Aikaterini Panteli</i> Group 1	Laboratory / Anatomy Pericardium, Outer Surface and Chambers of the Heart <i>Aikaterini Panteli</i> Group 1	Independent Learning	Laboratory / Microbiology Collection, Storage and Transport of Specimens <i>Microbiology Instructors</i>	Laboratory / Anatomy Coronary Arteries, Cardiac Veins, Cardiac Conduction System, Great Vessels of Heart and Body Lymphatic System <i>Aikaterini Panteli</i>	
10.00- 10.50	Lecture Blood Coagulation, Primary Hemostasis <i>Inci Özden</i>	Lecture Secondary Hemostasis, Procoagulation, Anticoagulation, Fibrinolysis <i>Inci Özden</i>	Independent Learning	Independent Learning	Independent Learning	
11.00- 11.50	Laboratory/ Physiology ECG I <i>Bayram Yılmaz &amp; Mehtap Kaçar &amp; Burcu Gemici Başol</i>	Laboratory / Biochemistry Peripheral Blood Smear <i>Jale Çoban &amp; Müge Kopuz Alvarez Noval</i>	Laboratory / Physiology ECG-II <i>Bayram Yılmaz &amp; Mehtap Kaçar &amp; Burcu Gemici Başol</i>	Laboratory / Physiology Blood Pressure <i>Bayram Yılmaz &amp; Mehtap Kaçar &amp; Burcu Gemici Başol</i>	ICP / CSL: Hand Washing & Wearing Sterile Gloves <i>Arzu Akalın / Serdar Özdemir</i> Group D	SRPC SGS Group C <i>Deniz Kıraç</i>
12.00- 12.50						
13.00- 13.50	Lunch Break					
14.00-14.50	Laboratory / Histology &Embryology Histology of Cardiovascular System <i>Alev Cumbul &amp; Aylin Yaba Uçar</i>	Independent Learning	Laboratory / Histology&Embryology Histology of Lymphoreticular System <i>Alev Cumbul &amp; Aylin Yaba Uçar</i>	Laboratory / Physiology Heart Sounds <i>Bayram Yılmaz &amp; Mehtap Kaçar &amp; Burcu Gemici Başol</i>	Independent Learning	
15.00- 15.50		Independent Learning				
16.00- 16.50	Independent Learning	Independent Learning	Independent Learning	Independent Learning		
17.00-17.50						

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

**COMMITTEE I - CARDIOVASCULAR SYSTEM**  
**VI. WEEK / 09 – 13 Nov 2020**

	Monday 09-Nov-2020	Tuesday 10-Nov-2020	Wednesday 11-Nov-2020	Thursday 12-Nov-2020	Friday 13-Nov-2020
09.00- 09.50	Assessment Session (Physiology and Histology&Embryology Practical Exams)	Commemoration of Atatürk	Independent Learning	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		Lunch Break	Lunch Break	Lunch Break
14.00- 14.50	Assessment Session (Anatomy Practical Exam)		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					

**COMMITTEE II - RESPIRATORY SYSTEM**  
**DISTRIBUTION of LECTURE HOURS**  
**November 16– December 25, 2020**  
**COMMITTEE DURATION: 6 WEEKS**

MED 203	BASIC MEDICAL SCIENCES II	THEORETICAL	PRACTICAL	TOTAL
	<b>DISCIPLINE</b>			
	ANATOMY	11	1GX4H	15
	BIOPHYSICS	4	0	4
	BIOSTATISTICS	4	0	4
	HISTOLOGY & EMBRYOLOGY	6	1GX4H	10
	IMMUNOLOGY	7	0	7
	MEDICAL GENETIC	18	0	18
	MEDICAL MICROBIOLOGY	26	1GX4H	30
	PATHOLOGY	9	0	9
	PHYSIOLOGY	17	1GX4H	21
	SCIENTIFIC RESEARCH and PROJECT COURSE-II	0	4GX3H	3
	PBL	6	0	6
	<b>TOTAL</b>	<b>108</b>	<b>19</b>	<b>127</b>
	INDEPENDENT LEARNING HOURS	83		

**OTHER COURSES**

MED 202	INTRODUCTION to CLINICAL PRACTICE- II	1	4GrX3H	4
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<b>Coordination Committee</b>	<b>Head</b>	Mehtap KAÇAR, MD PhD. Assoc. Prof.
	<b>Secretary</b>	Deniz KIRAÇ, PhD. Assoc. Prof.
	<b>Member</b>	Çağatay ACUNER, MD. Assoc. Prof.
	<b>Member</b>	Alev CUMBUL, MD. Assist. Prof.



## COMMITTEE II - RESPIRATORY SYSTEM LECTURERS

MED 203 BASIC MEDICAL SCIENCES II	
DISCIPLINE	LECTURERS
ANATOMY	Erdem SÖZTUTAR, MD, Assist. Prof. Aikaterini PANTELİ, MD, Lecturer Mohammed ELGAZZAR, MD. Lecturer LAB: Edibe BİLİŞLİ, DVM LAB: Zeynep Büşra ODABAŞ, DMD
BIOPHYSICS	Akif MAHARRAMOV, PhD Assist. Prof. Bilge GÜVENÇ TUNA, PhD Assist. Prof.
BIOSTATISTICS	E. Çiğdem ALTUNOK, 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	İbrahim Çağatay ACUNER, MD. Assoc. Prof. Microbiology Lecturer/ Instructor
PATHOLOGY	Aydın SAV, MD Prof.
PHYSIOLOGY	Bayram YILMAZ, PhD Prof. Mehtap KAÇAR, MD PhD Assoc. Prof. Burcu GEMİCİ BAŞOL, PhD Assoc. Prof.
SCIENTIFIC RESEARCH AND PROJECT COURSE-II	Bayram YILMAZ, PhD Prof. Deniz KIRAÇ, PhD Assoc. Prof.

### OTHER COURSES

MED 202 INTRODUCTION to CLINICAL PRACTICE II	
DISCIPLINE	LECTURERS
CLINICAL SKILLS LAB	Serdar ÖZDEMİR, MD, PhD, Assist. Prof. Emin Gökhan GENCER, MD, Assist. Prof. Cem ŞİMŞEK, 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. For respiratory system;
  - 3.1. 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, 22.0	ANATOMY	Dr. A. Panteli	11	4	4	19
1.0, 22.0	BIOPHYSICS	Dr. A. Maharramov	4	1	1	6
20.0 - 21.0	BIOSTATISTICS	Dr. Ç. Altunok	4	1	1	6
3.0	HISTOLOGY & EMBRYOLOGY	Dr. A. Yaba Uçar Dr. A. Cumbul	6	2	2	10
12.0	IMMUNOLOGY	Dr. G. Yanikkaya Demirel	7	3	3	13
13.0	MEDICAL GENETIC	Dr. Ö.F. Bayrak	18	6	6	30
14.0-15.0	MEDICAL MICROBIOLOGY	Dr. İ. Ç. Acuner Microbiology Lecturer	24	9	9	42
16.0-17.0	PATHOLOGY	Dr. A. Sav	9	3	3	15
4.0-11.0, 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	
2.0	ANATOMY	40	
3.0	HISTOLOGY & EMBRYOLOGY	10	
14.0-15.0	MEDICAL MICROBIOLOGY	20	
4.0-11.0	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 / 16 - 20 Nov 2020

	Monday 16-Nov-2020	Tuesday 17-Nov-2020	Wednesday 18-Nov-2020	Thursday 19-Nov-2020	Friday 20-Nov-2020
09.00- 09.50	Independent Learning	<b>Lecture</b> Test Hypotheses and Significance in Large Samples <i>E. Çiğdem Altunok</i>	<b>Lecture</b> Introduction to Respiratory System <i>Aikaterini Panteli</i>	Independent Learning	Independent Learning
10.00- 10.50	Independent Learning	<b>Lecture</b> Test Hypotheses and Significance in Large Samples <i>E. Çiğdem Altunok</i>	<b>Lecture</b> Nasal Anatomy and Paranasal Sinuses <i>Aikaterini Panteli</i>	Independent Learning	Independent Learning
11.00- 11.50	Independent Learning	<b>Lecture</b> Histology of the Upper Respiratory Tract <i>Alev Cumbul</i>	Independent Learning	Lecture Cellular Injury and Necrosis <i>Aydın Sav</i>	Independent Learning
12.00- 12.50	Introduction to Committee II Secretary of Committee	<b>Lecture</b> Histology of the Upper Respiratory Tract <i>Alev Cumbul</i>	Independent Learning	Lecture Cellular Injury and Necrosis <i>Aydın Sav</i>	<b>Lecture</b> ICP/CSL: Vital Signs <i>Özlem Tanrıöver</i>
13.00- 13.50	Lunch Break				
14.00- 14.50	PBL Session	<b>Lecture</b> Introduction to Bacteriology <i>Microbiology Lecturer</i>	<b>Lecture</b> Infection and Immunity <i>Gülderen Yanıkkaya Demirel</i>	<b>Lecture</b> Bacterial Genetics <i>Microbiology Lecturer</i>	ICP/CSL: Vital Signs <i>E. Gökhan Gencer &amp; Serdar Özdemir</i> Group C
15.00- 15.50		<b>Lecture</b> Bacterial Genetics <i>Microbiology Lecturer</i>	<b>Lecture</b> Infection and Immunity <i>Gülderen Yanıkkaya Demirel</i>	<b>Lecture</b> Bacterial Pathogenesis <i>Microbiology Lecturer</i>	
16.00- 16.50		Independent Learning	Independent Learning	<b>Lecture</b> Bacterial Pathogenesis <i>Microbiology Lecturer</i>	
17.00-17.50	Independent Learning	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

II. WEEK / 23 - 27 Nov 2020

	Monday 23-Nov-2020	Tuesday 24-Nov-2020	Wednesday 25-Nov-2020	Thursday 26-Nov-2020	Friday 27-Nov-2020		
09.00- 09.50	Lecture The Pharynx <i>Aikaterini Panteli</i>	Independent Learning	Lecture Test Hypotheses and Significance in Large Samples <i>E. Çiğdem Altunok</i>	Independent Learning	Independent Learning		
10.00- 10.50	Lecture The Pharynx <i>Aikaterini Panteli</i>	Independent Learning	Lecture Test Hypotheses and Significance in Large Samples <i>E. Çiğdem Altunok</i>	Laboratory / Anatomy Upper Respiratory System <i>Aikaterini Panteli</i>	ICP/CSL: Vital Signs <i>E. Gökhan Gencer &amp; Serdar Özdemir</i> Group D	Group C SRPC SGS <i>Deniz Kırış</i>	Group A, B, IL
11.00- 11.50	Lecture Hemodynamics <i>Aydın Sav</i>	Lecture The Larynx <i>Aikaterini Panteli</i>	Lecture Introduction to Medical Genetics <i>Ömer Faruk Bayrak</i>	Laboratory /Histology& Embryology Histology of Respiratory System <i>Alev Cumbul, Aylin Yaba Uçar</i>			
12.00- 12.50	Lecture Hemodynamics <i>Aydın Sav</i>	Lecture The Larynx <i>Aikaterini Panteli</i>	Lecture Introduction to Medical Genetics <i>Ömer Faruk Bayrak</i>				
13.00- 13.50	Lunch Break	Lunch Break	Lunch Break	Lunch Break	Lunch Break		
14.00- 14.50	PBL Session	Lecture Gram Positive Cocci <i>Microbiology Lecturer</i>	Lecture Growth and Cultivation of Bacteria <i>Microbiology Lecturer</i>	Lecture Hemorrhage and Thrombosis <i>Aydın Sav</i>	Lecture The Human Genome and Chromosomal Basis of Heredity <i>Ömer Faruk Bayrak</i>		
15.00- 15.50		Lecture Gram Positive Cocci <i>Microbiology Lecturer</i>	Lecture Microbiome <i>Microbiology Lecturer</i>	Lecture Hemorrhage and Thrombosis <i>Aydın Sav</i>	Lecture Cytogenetics and Chromosomal Disorders <i>Ömer Faruk Bayrak</i>		
16.00- 16.50		Lecture Histology of The Respiratory Systems; Conducting Part <i>Alev Cumbul</i>	Independent Learning	Lecture Patterns of Single Gene Inheritance <i>Ömer Faruk Bayrak</i>	Independent Learning		
17.00-17.50	Independent Learning	Lecture Histology of the Respiratory Systems; Respiratory Part <i>Alev Cumbul</i>	Independent Learning	Lecture Patterns of Single Gene Inheritance <i>Ömer Faruk Bayrak</i>	Independent Learning		

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

# COMMITTEE II - RESPIRATORY SYSTEM

III. WEEK / 30 Nov – 4 Dec 2020

	Monday 30-Nov-2020	Tuesday 01-Dec-2020	Wednesday 02-Dec-2020	Thursday 03-Dec-2020	Friday 04-Dec-2020		
09.00- 09.50	Independent Learning	Independent Learning	Independent Learning	Independent Learning	Independent Learning		
10.00- 10.50	Independent Learning	Laboratory / Anatomy Larynx <i>Aikaterini Panteli</i>	Independent Learning	Laboratory / Anatomy Lower Respiratory <i>Aikaterini Panteli</i>	ICP/CSL : Vital Signs <i>Cem Şimşek &amp; Serdar Özdemir</i> Group B	Group A SRPC SGS <i>Deniz Kırış</i>	Group C, D IL
11:00-11:50	Lecture Pulmonary Ventilation <i>Bayram Yılmaz</i>	Lecture Development of the Respiratory Systems & Anomalies <i>Aylin Yaba Uçar</i>	Principle of Surface Tension & Alveolar Mechanic <i>Akif Maharramov</i>	Laboratory / Microbiology Microscopy Methods in Diagnostic <i>Microbiology Instructors</i>			
12:00-12:50	Lecture Pulmonary Ventilation <i>Bayram Yılmaz</i>	Lecture Development of the Respiratory Systems & Anomalies <i>Aylin Yaba Uçar</i>	Principle of Surface Tension & Alveolar Mechanic <i>Akif Maharramov</i>	Independent Learning			
13.00- 13.50	Lunch Break						
14.00- 14.50	Lecture Mycobacteria <i>Microbiology Lecturer</i>	Lecture Pulmonary Circulation, Pulmonary Edema, Pleural Fluid <i>Bayram Yılmaz</i>	Lecture The Trachea <i>Aikaterini Panteli</i>	Lecture Diffusion of Blood Gases <i>Bayram Yılmaz</i>	Lecture Non-fermenters <i>Microbiology Lecturer</i>		
15.00- 15.50	Lecture Aerobic Actinomycetes <i>Microbiology Lecturer</i>	Lecture Pulmonary Circulation, Pulmonary Edema, Pleural Fluid <i>Bayram Yılmaz</i>	Lecture The Lungs <i>Aikaterini Panteli</i>	Lecture Diffusion of Blood Gases <i>Bayram Yılmaz</i>	Lecture Injury by Endogenous Substances <i>Aydın Sav</i>		
16.00- 16.50	Lecture Developmental Genetics and Birth Defects <i>Ömer Faruk Bayrak</i>	Independent Learning	Lecture Pulmonary Innate Immune Response <i>Gülderen Yanıkkaya Demirel</i>	Lecture Cancer Genetics and Genomics <i>Ömer Faruk Bayrak</i>	Lecture The Human Genome and Chromosomal Basis of Heredity <i>Ömer Faruk Bayrak</i>		
17.00-17.50	Lecture Developmental Genetics and Birth Defects <i>Ömer Faruk Bayrak</i>	Independent Learning	Lecture Pulmonary Innate Immune Response <i>Gülderen Yanıkkaya Demirel</i>	Lecture Cancer Genetics and Genomics <i>Ömer Faruk Bayrak</i>	Lecture Cytogenetics and Chromosomal Disorders <i>Ömer Faruk Bayrak</i>		

**COMMITTEE II - RESPIRATORY SYSTEM**  
**IV. WEEK / 7 – 11 Dec 2020**

	Monday 07-Dec-2020	Tuesday 08-Dec-2020	Wednesday 09-Dec-2020	Thursday 10-Dec-2020	Friday 11-Dec-2020		
09.00- 09.50	Independent Learning	Independent Learning	Independent Learning	Independent Learning	Independent Learning		
10.00- 10.50	Independent Learning	Laboratory/ Anatomy Pleura and Diaphragm <i>Aikaterini Panteli</i>	Independent Learning	Lecture Pulmonary Adaptive Immune Response <i>Gülderen Yanıkkaya Demirel</i>	Group B SRPC SGS <i>Deniz Kırış</i>	ICP/CSL: Vital Signs <i>Cem Şimşek &amp; Serdar Özdemir</i> Group A	Group C, D IL
11.00- 11.50	Lecture Transport of Blood Gases <i>Bayram Yılmaz</i>	Lecture Regulation of Respiration <i>Burcu Gemici Başol</i>	Lecture Gram Negative Cocci <i>Microbiology Lecturer</i>	Lecture Pulmonary Adaptive Immune Response <i>Gülderen Yanıkkaya Demirel</i>			
12.00- 12.50	Lecture Transport of Blood Gases <i>Bayram Yılmaz</i>	Lecture Regulation of Respiration <i>Burcu Gemici Başol</i>	Lecture Gram Negative Cocci <i>Microbiology Lecturer</i>	Laboratory / Microbiology Culture Methods in Diagnostic Microbiology <i>Microbiology Instructors</i>			
13.00- 13.50	Lunch Break						
14.00- 14.50	Lecture Pleura and Diaphragm <i>Aikaterini Panteli</i>	Lecture Enterobacteriaceae <i>Microbiology Lecturer</i>	Lecture Molecular Basis of Genetic Diseases <i>Ömer Faruk Bayrak</i>	Laboratory / Physiology Spirometry <i>Bayram Yılmaz &amp; Mehtap Kaçar &amp; Burcu Gemici Başol</i>	Lecture Other Gram Negative Bacilli-I <i>Microbiology Lecturer</i>		
15.00- 15.50	Lecture Pleura and Diaphragm <i>Aikaterini Panteli</i>	Lecture Enterobacteriaceae <i>Microbiology Lecturer</i>	Lecture Tools of Human Molecular Genetics <i>Ömer Faruk Bayrak</i>		Lecture Other Gram Negative Bacilli-II <i>Microbiology Lecturer</i>		
16.00- 16.50	Lecture Review of the Respiratory System <i>Aikaterini Panteli</i>	Laboratory / Histology&Embryology Review Session <i>Alev Cumbul &amp; Aylin Yaba Uçar</i>	Lecture Sports Physiology <i>Mehtap Kaçar</i>	Independent Learning	Lecture Injury by Toxic Substances and Pneumoconiosis <i>Aydın Sav</i>		
17.00-17.50	Independent Learning		Lecture Sports Physiology <i>Mehtap Kaçar</i>	Independent Learning	Lecture Injury by Toxic Substances and Pneumoconiosis <i>Aydın Sav</i>		

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

## COMMITTEE II - RESPIRATORY SYSTEM

V. WEEK / 14 – 18 Dec 2020

	Monday 14-Dec-2020	Tuesday 15-Dec-2020	Wednesday 16-Dec-2020	Thursday 17-Dec-2020	Friday 18-Dec-2020
09.00- 09.50	Independent Learning	Independent Learning	Independent Learning	Independent Learning	Independent Learning
10.00- 10.50	Independent Learning	Independent Learning	Lecture Infection and Immunity <i>Gülderen Yanıkkaya Demirel</i>	Independent Learning	Independent Learning
11.00- 11.50	Lecture Anaerobic Bacteria <i>Microbiology Lecturer</i>	Lecture Mycoplasma, Chlamydia, Rickettsia <i>Microbiology Lecturer</i>	Lecture Introduction to Pathophysiology of Respiratory System <i>Mehtap Kaçar</i>	Laboratory / Microbiology Identification Methods in Diagnostic Microbiology <i>Microbiology Instructors</i>	Lecture Genetics of Complex Diseases <i>Ömer Faruk Bayrak</i>
12.00- 12.50	Lecture Anaerobic Bacteria <i>Microbiology Lecturer</i>	Lecture Mycoplasma, Chlamydia, Rickettsia <i>Microbiology Lecturer</i>	Lecture Introduction to Pathophysiology of Respiratory System <i>Mehtap Kaçar</i>	Laboratory / Microbiology Microscopy and Culture Methods in Diagnostic Mycobacteria <i>Microbiology Instructors</i>	Lecture Genetics of Complex Diseases <i>Ömer Faruk Bayrak</i>
13.00- 13.50	Lunch Break				
14.00- 14.50	Lecture Aviation, High-Altitude and Space Physiology <i>Bayram Yılmaz</i>	Laboratory / Physiology Exercise and Metabolism <i>Bayram Yılmaz &amp; Mehtap Kaçar &amp; Burcu Gemici Başol</i>	Lecture Miscellaneous Bacteria <i>Microbiology Lecturer</i>	Introduction to Elective Courses <i>Elective Course Lecturers</i>	Lecture Modeling in Circulatory & Respiratory Systems <i>Akif Maharramov</i>
15.00- 15.50	Lecture Physiology of Deep-Sea Diving and Hyperbaric Conditions <i>Bayram Yılmaz</i>		Lecture Diagnostic Methods in Bacteriology <i>Microbiology Lecturer</i>		Lecture Modeling in Circulatory & Respiratory Systems <i>Akif Maharramov</i>
16.00- 16.50	Lecture Physiology of Deep-Sea Diving and Hyperbaric Conditions-2 <i>Bayram Yılmaz</i>	Lecture Gram Positive Aerobic Bacilli <i>Microbiology Lecturer</i>	Lecture Treatment of Genetic Disease - Introduction to Gene Therapy <i>Ömer Faruk Bayrak</i>	Independent Learning	Independent Learning
17.00-17.50	Independent Learning	Lecture Other Gram Negative Bacilli-II <i>Microbiology Lecturer</i>	Lecture Treatment of Genetic Disease - Introduction to Gene Therapy <i>Ömer Faruk Bayrak</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**  
**VI. WEEK / 21 – 25 Dec 2020**

	Monday 21-Dec-2020	Tuesday 22-Dec-2020	Wednesday 23-Dec-2020	Thursday 24-Dec-2020	Friday 25-Dec-2020
09.00- 09.50	Independent Learning	Independent Learning	Assessment Session (Anatomy, Physiology and Histology&Embryology Practical Exams)	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 28, 2020– February 26, 2021**  
**COMMITTEE DURATION: 7 WEEKS**

MED 203	BASIC MEDICAL SCIENCES II	THEORETICAL	PRACTICAL	TOTAL
	<b>DISCIPLINE</b>			
	ANATOMY	20	1GX7H	27
	BIOCHEMISTRY	32	1GX2H	34
	BIOPHYSICS	10	0	10
	BIOSTATISTICS	4	0	4
	HISTOLOGY & EMBRYOLOGY	12	1GX6H	18
	IMMUNOLOGY	2	0	2
	MEDICAL BIOLOGY	6	0	6
	MEDICAL MICROBIOLOGY	10	1GX1H	11
	PATHOLOGY	6	0	6
	PHYSIOLOGY	17	1GX2H	19
	SCIENTIFIC RESEARCH and PROJECT COURSE-II	0	4Grx3H	3
	PBL	6	0	6
	<b>TOTAL</b>	<b>125</b>	<b>21</b>	<b>146</b>
	INDEPENDENT LEARNING HOURS	107		

**OTHER COURSES**

MED 202	INTRODUCTION to CLINICAL PRACTICE- II	5	4 GrX3H + 1 GrX3H	8
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<b>Coordination Committee</b>	<b>Head</b>	İnci ÖZDEN, Ph.D. Prof.
	<b>Secretary</b>	Müge KOPUZ ALVAREZ NOVAL, PhD Assist. Prof
	<b>Member</b>	Mehtap KAÇAR, MD. Ph.D. Assoc. 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 Mohammed ELGAZZAR, MD Lecturer LAB: Edibe BİLİŞLİ, DVM. LAB: Zeynep Büşra ODABAŞ, DDS
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 Assist. Prof.
BIOSTATISTICS	E. Çiğdem ALTUNOK, 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 Assoc. Prof. Deniz KIRAÇ, PhD Assoc. Prof. Seda GÜLEÇ YILMAZ, PhD, Assoc. Prof.
MEDICAL MICROBIOLOGY	Çağatay ACUNER, MD Assoc. Prof. Aynur EREN, MD Prof. Pınar ÇIRAGİL, MD Prof.
PATHOLOGY	Aydın SAV MD Prof.
PHYSIOLOGY	Bayram YILMAZ, PhD Prof. Mehtap KAÇAR, MD. PhD Assoc. Prof. Burcu GEMİCİ BAŞOL, PhD Assoc. Prof.
SCIENTIFIC RESEARCH AND PROJECT COURSE-II	Bayram YILMAZ, PhD. Prof. Deniz KIRAÇ, PhD. Assoc. Prof.

### OTHER COURSES

MED 202 INTRODUCTION TO CLINICAL PRACTICE II	
DISCIPLINE	LECTURERS
CLINICAL SKILLS LAB	Güldal İZBİRAK, MD Assoc. Prof. Özlem TANRIÖVER, MD MPH. Prof. A. Arzu AKALIN, MD Assist. Prof. Serdar ÖZDEMİR, MD Assist. Prof. Fatma Tuğba COŞKUN, 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 organism, using concepts of internal energy, work, temperature, entropy, free energy and enthalpy.
- 2.0. describe gastrointestinal system biology and basics of proper alimentation.
- 4.0. For oral cavity, temporomandibular joint, chewing muscles, pharynx, esophagus, stomach, small intestine, large intestine, liver, gall bladder and tracts, pancreas, spleen and peritoneum;
  - 4.1. describe the anatomy,
  - 4.2. associate with adjacent tissue and organs,
  - 4.3. 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. M.Elgazzar	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. Altunok	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. Ç. Acuner Dr. A. Eren Dr. P Çiragil	8	3	3	14
19.0	PATHOLOGY	Dr. A. Sav	5	2	2	9
7.0., 18.0.	PHYSIOLOGY	Dr. B. Yilmaz 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<sup>#</sup></b>	<b>40/200<sup>#</sup></b>	<b>180</b>

  

LEARNING OBJECTIVES	DISCIPLINE	DISTRUBITION of LAB ASSESSMENT POINTS
		LPE
3.0-4.0	ANATOMY	60
6.0, 8.0.-11.0.	BIOCHEMISTRY	5
5.0.	HISTOLOGY & EMBRYOLOGY	20
12.0.	MICROBIOLOGY	5
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 / 28 – 31 Dec 2020**

	Monday 28-Dec-2020	Tuesday 29-Dec-2020	Wednesday 30-Dec-2020	Thursday 31-Dec-2020	Friday 01-Jan-2021
09.00- 09.50	PBL	Lecture Digestion and Absorption of Lipids <i>Inci Özden</i>	Lecture Transport of Lipids in Plasma <i>Inci Özden</i>	Independent Learning	NEW YEAR
10.00- 10.50		Lecture Digestion and Absorption of Lipids <i>Inci Özden</i>	Lecture Transport of Lipids in Plasma <i>Inci Özden</i>	Independent Learning	
11.00- 11.50		Lecture Histology of Upper Gastrointestinal Tract; Oral Cavity <i>Alev Cumbul</i>	Lecture Histology of Alimentary Canal; Esophagus, Stomach <i>Alev Cumbul</i>	Independent Learning	
12.00- 12.50	Introduction to Committee III <i>Secretary of Committee</i>	Lecture Histology of Upper Gastrointestinal Tract; Tongue, Salivary Gland <i>Alev Cumbul</i>	Lecture Energy Transformation & Distribution in Bio-molecular Systems <i>Akif Maharramov</i>	Independent Learning	
13.00- 13.50	Lunch Break				
14.00- 14.50	Lecture GIT Development (Embryology) <i>Mohammed Elgazzar</i>	Lecture Oral Cavity <i>Mohammed Elgazzar</i>	Lecture Gastrointestinal Functions <i>Burcu Gemici Başol</i>	Independent Learning	NEW YEAR
15.00- 15.50	Lecture GIT Development (Embryology) <i>Mohammed Elgazzar</i>	Lecture Oral Cavity <i>Mohammed Elgazzar</i>	Lecture Gastrointestinal Functions <i>Burcu Gemici Başol</i>	Independent Learning	
16.00- 16.50	Independent Learning	Laboratory / Anatomy Oral Cavity <i>Mohammed Elgazzar</i>	Independent Learning	Independent Learning	
17.00-17.50	Independent Learning	Independent Learning	Independent Learning	Independent Learning	

**COMMITTEE III - GASTROINTESTINAL SYSTEM and METABOLISM**

**II. WEEK /04 – 08 Jan 2021**

	<b>Monday 04-Jan-2021</b>	<b>Tuesday 05-Jan-2021</b>	<b>Wednesday 06-Jan-2021</b>	<b>Thursday 07-Jan-2021</b>	<b>Friday 08-Jan-2021</b>
<b>09.00- 09.50</b>	<b>PBL Session</b>	<b>Lecture</b> Cholesterol Metabolism <i>İnci Özden</i>	<b>Lecture</b> Propulsion and Mixing Movements in the GI Tract <i>Burcu Gemici Başol</i>	<b>Lecture</b> Lipogenesis, Triacylglycerol Synthesis <i>İnci Özden</i>	<b>Lecture</b> Lipolysis <i>İnci Özden</i>
<b>10.00- 10.50</b>		<b>Lecture</b> Cholesterol Metabolism <i>İnci Özden</i>	<b>Lecture</b> Propulsion and Mixing Movements in the GI Tract <i>Burcu Gemici Başol</i>	<b>Lecture</b> Lipogenesis, Triacylglycerol Synthesis <i>İnci Özden</i>	<b>Lecture</b> Lipolysis <i>İnci Özden</i>
<b>11.00- 11.50</b>		<b>Lecture</b> Gland Associated with the Digestive System; Liver <i>Aylin Yaba Uçar</i>	<b>Lecture</b> Bio-thermodynamics, Laws of Thermodynamics <i>Akif Maharramov</i>	<b>Lecture</b> Introduction to Parasitology <i>Microbiology Lecturer</i>	<b>Lecture</b> Protozoa-I <i>Microbiology Lecturer</i>
<b>12.00- 12.50</b>	<b>Independent Learning</b>	<b>Lecture</b> Gland Associated with the Digestive System; Gall Bladder <i>Aylin Yaba Uçar</i>	<b>Lecture</b> The Zeroth and First Laws of Thermodynamics <i>Akif Maharramov</i>	<b>Lecture</b> Parasitic Pathogenesis <i>Microbiology Lecturer</i>	<b>Lecture</b> Protozoa-II <i>Microbiology Lecturer</i>
<b>13.00- 13.50</b>	<b>Lunch Break</b>				
<b>14.00- 14.50</b>	<b>Lecture</b> Esophagus & Stomach <i>Mohammed Elgazzar</i>	<b>Lecture</b> Duodenum <i>Mohammed Elgazzar</i>	<b>Lecture</b> Small Intestine <i>Mohammed Elgazzar</i>	<b>Lecture</b> Digestion and Absorption in the Gastrointestinal Tract <i>Burcu Gemici Başol</i>	<b>ICP</b> <b>CSL: Patient-Doctor Communication Skills Using SPs</b> <i>Özlem Tanrıöver / Gülden İzbirak &amp; Arzu Akalin &amp; Serdar Özdemir</i> <b>Group A</b>
<b>15.00- 15.50</b>	<b>Lecture</b> Esophagus & Stomach <i>Mohammed Elgazzar</i>	<b>Laboratory / Anatomy</b> Duodenum <i>Mohammed Elgazzar</i>	<b>Lecture</b> Small Intestine <i>Mohammed Elgazzar</i>	<b>Lecture</b> Digestion and Absorption in the Gastrointestinal Tract <i>Burcu Gemici Başol</i>	
<b>16.00- 16.50</b>	<b>Laboratory / Anatomy</b> Esophagus & Stomach <i>Mohammed Elgazzar</i>	<b>Independent Learning</b>	<b>Independent Learning</b>	<b>Lecture</b> Histology of Alimentary Canal; Small Intestine <i>Aylin Yaba Uçar</i>	
<b>17.00-17.50</b>	<b>Independent Learning</b>	<b>Independent Learning</b>	<b>Independent Learning</b>	<b>Lecture</b> Histology of Alimentary Canal; Large Intestine & Appendix <i>Aylin Yaba Uçar</i>	
					<b>Group B</b> <b>SRPC SGS</b> <i>Deniz Kırış</i> <b>Group C, D, I.L</b>

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 / 11 – 15 Jan 2021**

	<b>Monday</b> 11-Jan-2021	<b>Tuesday</b> 12-Jan-2021	<b>Wednesday</b> 13-Jan-2021	<b>Thursday</b> 14-Jan-2021	<b>Friday</b> 15-Jan-2021
<b>9.00- 09.50</b>	<b>Lecture</b> Digestion and Absorbtion in the Gastrointestinal Tract <i>Burcu Gemici Başol</i>	<b>Lecture</b> Energetics and Metabolic Rate <i>Bayram Yılmaz</i>	<b>Independent Learning</b>	<b>Lecture</b> Oxidation of Fatty Acids <i>Inci Özden</i>	<b>Lecture</b> Animalia – IV <i>Microbiology Lecturer</i>
<b>10.00- 10.50</b>	<b>Lecture</b> Digestion and Absorbtion in the Gastrointestinal Tract <i>Burcu Gemici Başol</i>	<b>Lecture</b> Energetics and Metabolic Rate <i>Bayram Yılmaz</i>	<b>Lecture</b> The Pancreas and Spleen <i>Mohammed Elgazzar</i>	<b>Lecture</b> Oxidation of Fatty Acids <i>Inci Özden</i>	<b>Lecture</b> Animalia – V <i>Microbiology Lecturer</i>
<b>11:00-11:50</b>	<b>Lecture</b> Animalia – I <i>Microbiology Lecturer</i>	<b>Lecture</b> Gland Associated with the Digestive System; Pancreas <i>Aylin Yaba Uçar</i>	<b>Laboratory / Anatomy</b> Pancreas and Spleen <i>Mohammed Elgazzar</i>	<b>Independent Learning</b>	<b>Lecture</b> Secretory Functions of the Alimentary Tract <i>Burcu Gemici Başol</i>
<b>12:00-12:50</b>	<b>Lecture</b> Animalia – II <i>Microbiology Lecturer</i>	<b>Lecture</b> Gland Associated with the Digestive System; APUD System <i>Aylin Yaba Uçar</i>	<b>Lecture</b> Energy Transformation & Distribution in Bio-molecular Systems <i>Akif Maharramov</i>	<b>Independent Learning</b>	<b>Lecture</b> Secretory Functions of the Alimentary Tract <i>Burcu Gemici Başol</i>
<b>13.00- 13.50</b>	<b>Lunch Break</b>				
<b>14.00- 14.50</b>	<b>Lecture</b> Large Intestine <i>Mohammed Elgazzar</i>	<b>Lecture</b> Liver <i>Mohammed Elgazzar</i>	<b>Lecture</b> Applications of the First Law to Isochoric, Isobaric Processes, Enthalpy <i>Akif Maharramov</i>	<b>Lecture</b> Development of Gastrointestinal Tract; Alimentary Canal <i>Alev Cumbul</i>	<div>ICP</div> <div>CSL: Patient-Doctor Communication Skills Using SPs</div> <div>Özlem Tanrıöver / Güldal İzbirak &amp; Arzu Akalin &amp; Serdar Özdemir Group B</div> <div>Gr A IL</div> <div>Gr C, D IL</div>
<b>15.00- 15.50</b>	<b>Lecture</b> Large Intestine <i>Mohammed Elgazzar</i>	<b>Lecture</b> Biliary System <i>Mohammed Elgazzar</i>	<b>Lecture</b> Applications of the First Law to Isochoric, Isobaric Processes, Enthalpy <i>Akif Maharramov</i>	<b>Lecture</b> Development of Gastrointestinal Tract; Glands <i>Alev Cumbul</i>	
<b>16.00- 16.50</b>	<b>Laboratory / Anatomy</b> Small and Large Intestine <i>Mohammed Elgazzar</i>	<b>Laboratory / Anatomy</b> Liver and Biliary System <i>Mohammed Elgazzar</i>	<b>Independent Learning</b>	<b>Independent Learning</b>	
<b>17.00-17.50</b>	<b>Independent Learning</b>	<b>Independent Learning</b>	<b>Independent Learning</b>	<b>Independent Learning</b>	
					<div>Group A SRPC SGS</div> <div>Deniz Kırış</div> <div>Group C, D IL</div>

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 / 18 – 22 Jan 2021**

	<b>Monday 18-Jan-2021</b>	<b>Tuesday 19-Jan-2021</b>	<b>Wednesday 20-Jan-2021</b>	<b>Thursday 21-Jan-2021</b>	<b>Friday 22-Jan-2021</b>
<b>09.00- 09.50</b>	<b>Lecture</b> Ketone Bodies <i>Inci Özden</i>	<b>Lecture</b> Test Hypotheses and Significance-Chi- Square Test <i>E. Çiğdem Altunok</i>	<b>Lecture</b> Digestion and Absorption of Proteins <i>Inci Özden</i>	<b>Laboratory / Histology &amp; Embryology</b> Histology of GIS I <i>Alev Cumbul &amp; Aylin Yaba Uçar</i>	<b>Lecture</b> Physiology of Gastrointestinal Disorders <i>Mehtap Kaçar</i>
<b>10.00- 10.50</b>	<b>Lecture</b> Ketone Bodies <i>Inci Özden</i>	<b>Lecture</b> Test Hypotheses and Significance-Chi- Square Test <i>E. Çiğdem Altunok</i>	<b>Lecture</b> Digestion and Absorption of Proteins <i>Inci Özden</i>		<b>Lecture</b> Physiology of Gastrointestinal Disorders <i>Mehtap Kaçar</i>
<b>11.00- 11.50</b>	<b>Lecture</b> Regulation of Feeding and Obesity <i>Bayram Yılmaz</i>	<b>Lecture</b> Body Temperature and Its Regulation <i>Bayram Yılmaz</i>	<b>Lecture</b> Inflammation <i>Aydın Sav</i>	<b>Lecture</b> Metabolisms of Individual Amino Acids <i>Inci Özden</i>	<b>Lecture</b> Urea Cycle <i>Inci Özden</i>
<b>12.00- 12.50</b>	<b>Lecture</b> Regulation of Feeding and Obesity <i>Bayram Yılmaz</i>	<b>Lecture</b> Body Temperature and Its Regulation <i>Bayram Yılmaz</i>	<b>Lecture</b> Wound Healing <i>Aydın Sav</i>	<b>Lecture</b> Metabolisms of Individual Amino Acids <i>Inci Özden</i>	<b>Lecture</b> Urea Cycle <i>Inci Özden</i>
<b>13.00- 13.50</b>	<b>Lunch Break</b>				
<b>14.00- 14.50</b>	<b>Lecture</b> Peritoneal and Abdominal Cavity <i>Mohammed Elgazzar</i>	<b>Lecture</b> Interrelationship of Biology of Major Organs <i>Soner Doğan</i>	<b>Lecture</b> Liver as Organ <i>Bayram Yılmaz</i>	<b>Lecture</b> Entropy, Free Energy, Boltzmann Distribution <i>Akif Maharramov</i>	<div>ICP</div> <div>CSL: Patient-Doctor Communication</div> <div>Skills</div> <div>Using SPs</div> <div>Özlem Tanrıöver /</div> <div>Güldal İzbrak &amp; Arzu Akalın &amp;</div> <div>Serdar Özdemir</div> <div>Group C</div> <div>Gr D IL:</div> <div>Group D SRPC SGS</div> <div>Deniz Kiraç</div> <div>Group A, B IL</div>
<b>15.00- 15.50</b>	<b>Lecture</b> Abdominal Wall Topographic Anatomy <i>Mohammed Elgazzar</i>	<b>Lecture</b> Interrelationship of Biology of Major Organs <i>Soner Doğan</i>	<b>Lecture</b> Congenital Anaomalies of Gastrointestinal Trac <i>Alev Cumbul</i>	<b>Lecture</b> The Second Law of Thermodynamics <i>Akif Maharramov</i>	
<b>16.00- 16.50</b>	<b>Laboratory / Anatomy</b> Peritoneal and Abdominal Cavity <i>Mohammed Elgazzar</i>	<b>Independent Learning</b>	<b>Independent Learning</b>	<b>Independent Learning</b>	
<b>17.00-17.50</b>		<b>Independent Learning</b>	<b>Independent Learning</b>	<b>Independent Learning</b>	

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 / 25 – 29 Jan 2021**

	Monday 25-Jan-2021	Tuesday 26-Jan-2021	Wednesday 27-Jan-2021	Thursday 28-Jan-2021	Friday 29-Jan-2021
09.00- 09.50	<b>Independent Learning</b>	<b>Lecture</b> Citric Acid Cycle <i>Inci Özden</i>	<b>Lecture</b> Metabolic Interrelationships and Provision of Tissue Fuels <i>Inci Özden</i>	<b>Laboratory / Histology&amp; Embryology</b> Histology of Gastrointestinal System II <i>Alev Cumbul &amp; Aylin Yaba Uçar</i>	<b>Lecture</b> Overview of Metabolism <i>Inci Özden</i>
10.00- 10.50	<b>Lecture</b> Metabolic Interrelationship and Provision of Tissue Fuels <i>Inci Özden</i>	<b>Lecture</b> Citric Acid Cycle <i>Inci Özden</i>	<b>Lecture</b> Metabolic Interrelationships and Provision of Tissue Fuels <i>Inci Özden</i>		<b>Lecture</b> Overview of Metabolism <i>Inci Özden</i>
11.00-11:50	<b>Lecture</b> Metabolic Interrelationship and Provision of Tissue Fuels <i>Inci Özden</i>	<b>Lecture</b> Interrelationship of Biology of Major Organs <i>Soner Doğan</i>	<b>Lecture</b> Nutrigenomics <i>Soner Doğan</i>	<b>Laboratory / Physiology</b> Digestive System <i>Bayram Yılmaz &amp; Mehtap Kaçar &amp; Burcu Gemici Başol</i>	<b>Lecture</b> Review of the Digestive System <i>Erdem Söztutar</i>
12.00-12:50	<b>Lecture</b> Animalia – III <i>Microbiology Lecturer</i>	<b>Lecture</b> Interrelationship of Biology of Major Organs <i>Soner Doğan</i>	<b>Lecture</b> Nutrigenomics <i>Soner Doğan</i>		<b>Lecture</b> Review of the Digestive System <i>Erdem Söztutar</i>
13.00- 13.50	<b>Lunch Break</b>				
14.00- 14.50	<b>Lecture</b> Nerves and vasculature <i>Mohammed Elgazzar</i>	<b>Lecture</b> Diagnostic Methods in Parasitology <i>Microbiology Lecturer</i>	<b>Lecture</b> Repetition all of the Material <i>Akif Maharramov</i>	<b>Laboratory / Biochemistry</b> Lipid Determination in Blood <i>Jale Çoban &amp; Müge Kopuz Alvarez Noval</i>	<b>ICP</b> Patient-Doctor Communication Skills Using SPs <i>Özlem Tanrıöver / Güldal İzbirak &amp; Arzu Akalın &amp; Serdar Özdemir</i> <b>Group D</b> <b>Group C SRPC SGS</b> <i>Deniz Kırış</i> <b>Group A, B IL</b>
15.00- 15.50	<b>Lecture</b> Nerves and vasculature <i>Mohammed Elgazzar</i>	<b>Laboratory / Microbiology</b> Parasitology <i>Microbiology Instructors</i>	<b>Lecture</b> Repetition all of the Material <i>Akif Maharramov</i>		
16.00- 16.50	<b>Independent Learning</b>	<b>Independent Learning</b>	<b>Independent Learning</b>	<b>Independent Learning</b>	
17.00-17.50	<b>Independent Learning</b>	<b>Independent Learning</b>	<b>Independent Learning</b>	<b>Independent Learning</b>	

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

**MIDTERM BREAK: 1 FEBRUARY – 14 FEBRUARY, 2021**

**COMMITTEE III - GASTROINTESTINAL SYSTEM and METABOLISM**  
**VI. WEEK / 15 – 19 Feb 2021**

	Monday 15-Feb-2021	Tuesday 16-Feb-2021	Wednesday 17-Feb-2021	Thursday 18-Feb-2021	Friday 19-Feb-2021	
09.00- 09.50	<b>Lecture</b> Purine and Pyrimidine Metabolism <i>Inci Özden</i>	<b>Lecture</b> Acute Inflammation <i>Aydın Sav</i>	<b>Lecture</b> Chronic Inflammation <i>Aydın Sav</i>	Independent Learning	Independent Learning	
10.00- 10.50	<b>Lecture</b> Purine and Pyrimidine Metabolism <i>Inci Özden</i>	<b>Lecture</b> Acute Inflammation <i>Aydın Sav</i>	<b>Lecture</b> Chronic Inflammation <i>Aydın Sav</i>	Independent Learning	Independent Learning	
11:00-11:50	<b>Lecture</b> Test Hypotheses and Significance- Z-Test <i>Çiğdem Altunok</i>	<b>Lecture</b> Xenobiotic Metabolism <i>Inci Özden</i>	<b>Lecture</b> Mucosal Immunity <i>Gülderen Yanıkkaya Demirel</i>	Laboratory / Histology& Embryology Review Session <i>Alev Cumbul &amp; Aylin Yaba Uçar</i>	Independent Learning	
12:00-12:50	<b>Lecture</b> Test Hypotheses and Significance- Z-Test <i>Çiğdem Altunok</i>	<b>Lecture</b> Xenobiotic Metabolism <i>Inci Özden</i>	<b>Lecture</b> Mucosal Immunity <i>Gülderen Yanıkkaya Demirel</i>		Independent Learning	
13.00- 13.50	Lunch Break					
14.00- 14.50	Independent Learning	Independent Learning	Independent Learning	Independent Learning	Elective Courses Week I	IL
15.00- 15.50	Independent Learning	Independent Learning	Independent Learning	Independent Learning		
16.00- 16.50	Independent Learning	Independent Learning	Independent Learning	Independent Learning	IL	Elective Course s Week I
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 III - GASTROINTESTINAL SYSTEM and METABOLISM**  
**VII. WEEK / 22 – 26 Feb 2021**

VII: WEEK 22 – 20 FEB 2021						
	Monday 22-Feb-2021	Tuesday 23-Feb-2021	Wednesday 24-Feb-2021	Thursday 25-Feb-2021	Friday 26-Feb-2021	
09.00- 09.50	Independent Learning	Independent Learning	Independent Learning	Independent Learning	Independent Learning	
10.00- 10.50			Assessment Session (Anatomy, Physiology, Biochemistry, Microbiology and Histology&Embryology Practical Exams)		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 <i>Secretary of the Committee</i>	
14.00- 14.50	Independent Learning	Independent Learning	Independent Learning	Independent Learning	Elective Courses Week II	IL
15.00- 15.50					IL	Elective Courses Week II
16.00- 16.50						
17.00-17.50						

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## COMMITTEE IV - NERVOUS SYSTEM DISTRIBUTION of LECTURE HOURS

**MARCH 1 – APRIL 22, 2021**  
**COMMITTEE DURATION: 8 WEEKS**

MED 203	BASIC MEDICAL SCIENCES II	THEORETICAL	PRACTICAL	TOTAL
	<b>DISCIPLINE</b>			
	ANATOMY	43	1GX14H	57
	BIOPHYSICS	3	0	3
	BIOSTATISTICS	4	0	4
	HISTOLOGY & EMBRYOLOGY	11	1GX5H	16
	IMMUNOLOGY	2	0	2
	MEDICAL BIOLOGY	4	0	4
	PHARMACOLOGY	9	1GX1H	10
	PHYSIOLOGY	34	1GX10H	44
	SCIENTIFIC RESEARCH and PROJECT COURSE-II	0	4GrX3H	3
	PBL	6	0	6
	<b>TOTAL</b>	<b>116</b>	<b>33</b>	<b>169</b>
	INDEPENDENT LEARNING HOURS	<b>96</b>		

### OTHER COURSES

<b>MED 202</b>	INTRODUCTION to CLINICAL PRACTICE- II	2	4GrX3H + 2GrX3H	6
<b>MED 614-631</b>	ELECTIVE COURSES	14	0	14

<b>Coordination Committee</b>	<b>Head</b>	Bayram YILMAZ, PhD Prof.
	<b>Secretary</b>	Sıtkı Tıplamaz, MD Assist. Prof
	<b>Member</b>	Mehtap KAÇAR, MD PhD Assoc. Prof.
	<b>Member</b>	Deniz KIRAÇ, PhD Assoc. Prof.

## COMMITTEE IV- NERVOUS SYSTEM LECTURERS

MED 203 BASIC MEDICAL SCIENCES II	
DISCIPLINE	LECTURERS
ANATOMY	Erdem SÖZTUTAR MD Assist. Prof. Aikaterini PANTELİ, MD Lecturer Mohammed ELGAZZAR, MD Lecturer LAB: Edibe BİLİŞLİ, DVM LAB: Zeynep Büşra ODABAŞ, DMD
BIOPHYSICS	Akif MAHARRAMOV, PhD Assist. Prof. Bilge GÜVENÇ TUNA, PhD Assist. Prof.
BIOSTATISTICS	Çiğdem ALTUNOK, 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 Assoc. Prof. Deniz KIRAÇ, PhD Assoc. Prof. Seda YILMAZ, PhD Assoc. Prof.
PHARMACOLOGY	Ece GENÇ, PhD Prof. Emine Nur ÖZDAMAR, MD, Assist. Prof.
PHYSIOLOGY	Bayram YILMAZ, PhD Prof. Mehtap KAÇAR, MD PhD Assoc. Prof. Burcu GEMİCİ, PhD Assoc. Prof.
SCIENTIFIC RESEARCH AND PROJECT COURSE-II	Bayram YILMAZ, PhD Prof. Deniz KIRAÇ, PhD Assoc. Prof.
PBL	

## OTHER COURSES

MED 202 INTRODUCTION TO CLINICAL PRACTICE II	
DISCIPLINE	LECTURERS
CLINICAL SKILLS LAB	Özlem TANRIÖVER, MD MPH. Prof. A. Arzu AKALIN, MD Assist. Prof. Pınar TÜRE, MD Assist. Prof. Alp KAYIRAN, MD Fatma Tuğba COŞKUN, 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. count biostatistical sampling methods.
- 19.0 explain the steps of a statistical hypothesis test according to the properties of a given data.
- 20.0 for statistical hypothesis,
  - 20.1 list the statistical hypothesis test according to the properties of given data
  - 20.2 choose the appropriate statistical hypothesis test according to the properties of given data.
- 21.0 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., 21.0	ANATOMY	Dr. A. Panteli	39	17	17	73
1.0.	BIOPHYSICS	Dr. B. Güvenç Tuna	3	1	1	5
18.0-20.0	BIOSTATISTICS	Dr. E.Ç. Altunok	3	1	1	5
4.0., 21.0	HISTOLOGY & EMBRYOLOGY	Dr. A. Yaba Uçar Dr. A. Cumbul	10	4	4	18
6.0	IMMUNOLOGY	Dr. G. Yanıkkaya Demirel	2	1	1	4
2.0.	MEDICAL BIOLOGY	Dr. T. İsbir Dr. S. Güleç Yılmaz	3	1	1	5
13.0-14.0.	PHARMACOLOGY	Dr. E. Genç Dr. Emine Nur Özdamar	8	3	3	14
5.0-12.0.,21.0	PHYSIOLOGY	Dr. B. Yılmaz Dr. M. Kaçar Dr. B. Gemici Başol	31	13	13	57
21.0	PBL		1	0	0	1
TOTAL			100	41/200#	41/200#	182
LEARNING OBJECTIVES	DISCIPLINE	POINTS of ASSESSMENT METHODS				
		LPE				
3.0.	ANATOMY	55				
4.0.	HISTOLOGY & EMBRYOLOGY	10				
13.0-14.0	PHARMACOLOGY	5				
5.0-12.0.	PHYSIOLOGY	30				
TOTAL		100				

Total value of LPE is equal to 100 points

**Committee Score (CS) = 90% CE (MCQ) + 10% (LPE)**

**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 val

**COMMITTEE IV - NERVOUS SYSTEM**  
**I. WEEK / 01 – 05 March 2021**

	Monday 1-Mar-2021	Tuesday 2-Mar-2021	Wednesday 3-Mar-2021	Thursday 4-Mar-2021	Friday 5-Mar-2021	
09.00- 09.50	PBL	Independent Learning	Independent Learning	Independent Learning	Independent Learning	
10.00- 10.50		Lecture Introduction to Neuroanatomy <i>Aikaterini Panteli</i>	Laboratory/ Anatomy Spinal Cord	Independent Learning	Independent Learning	
11.00- 11.50		Lecture Organization of Nervous System <i>Bayram Yilmaz</i>	Lecture Synapse and Neurotransmitters <i>Bayram Yilmaz</i>	Lecture Scope of Pharmacology and Passage of Drugs Across Membranes <i>Ece Genç</i>	ICP MIDTERM EXAM	
12.00- 12.50	Introduction to Committee IV Secretary of Committee	Lecture Neuron and Neuroglia <i>Bayram Yilmaz</i>	Lecture Synapse and Neurotransmitters <i>Bayram Yilmaz</i>	Lecture Drug Distribution <i>Ece Genç</i>	Independent Learning	
13.00- 13.50	Lunch Break					
14.00- 14.50	Program Improvement Sessions	Lecture Spinal Cord <i>Aikaterini Panteli</i>	Lecture Brainstem <i>Aikaterini Panteli</i>	Lecture Sensory Receptors and pathways <i>Bayram Yilmaz</i>	Elective Courses Week III	IL
15.00- 15.50	Independent Learning	Lecture Spinal Cord <i>Aikaterini Panteli</i>	Lecture Brainstem <i>Aikaterini Panteli</i>	Lecture Peripheral Nervous System <i>Bayram Yilmaz</i>		
16.00- 16.50	Independent Learning	Independent Learning	Lecture Brainstem <i>Aikaterini Panteli</i>	Independent Learning	IL	Elective Courses Week III
17.00-17.50	Independent Learning	Independent Learning	Independent Learning	Independent Learning		

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**COMMITTEE IV - NERVOUS SYSTEM**

**II. WEEK / 08 – 12 March 2021**

	Monday 08-Mar-2021	Tuesday 09-Mar-2021	Wednesday 10-Mar-2021	Thursday 11-Mar-2021	Friday 12-Mar-2021		
09.00- 09.50	PBL	Independent Learning	Lecture Test Hypotheses and Significance- Z-Test <i>Çiğdem Altunok</i>	Independent Learning	Independent Learning		
10.00- 10.50		Independent Learning	Lecture Test Hypotheses and Significance- Z-Test <i>Çiğdem Altunok</i>	Independent Learning	Lecture Cutaneous Senses <i>Bayram Yılmaz</i>		
11.00- 11.50		Lecture Cranial Nerves <i>Aikaterini Panteli</i>	Lecture Cerebellum <i>Aikaterini Panteli</i>	Laboratory/ Anatomy Cranial Nerves <i>Aikaterini Panteli</i>	Lecture Cutaneous Senses <i>Bayram Yılmaz</i>		
12.00- 12.50	Independent Learning	Lecture Cranial Nerves <i>Aikaterini Panteli</i>	Lecture Cerebellum <i>Aikaterini Panteli</i>	Laboratory / Pharmacology Drug Metabolism <i>Ece Genç &amp; Emine Özdamar</i>	Invited speaker		
13.00- 13.50	Lunch Break						
14.00- 14.50	Lecture Cranial Nerves <i>Aikaterini Panteli</i>	Laboratory/ Anatomy Brainstem <i>Aikaterini Panteli</i>	Lecture Drug Metabolism <i>Ece Genç</i>	ICP LECTURE Nasogastric Tube Administration <i>Arzu Akalın</i>		Elective Courses Week IV	IL
15.00- 15.50	Lecture Cranial Nerves <i>Aikaterini Panteli</i>	Lecture ICP-ECE Introduction Session <i>Özlem Tanrıöver</i>	Lecture Drug Metabolism <i>Ece Genç</i>	ICP Nasogastric Tube Administration <i>Özlem Tanrıöver / Arzu Akalın/ Gökhan Gençer</i> Group A	Group B SRPC SGS <i>Deniz Kiraç</i> Group C, D IL		
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 IV - NERVOUS SYSTEM**  
**III. WEEK / 15 – 19 March 2021**

	Monday 15-Mar-2021	Tuesday 16-Mar -2021	Wednesday 17-Mar -2021	Thursday 18-Mar-2021	Friday 19-Mar-2021	
09.00- 09.50	Independent Learning	Lecture Basal Ganglia <i>Aikaterini Panteli</i>	Lecture Telencephalon <i>Aikaterini Panteli</i>	Independent Learning	Independent Learning	
10.00- 10.50	Lecture Diencephalon <i>Aikaterini Panteli</i>	Lecture Basal Ganglia <i>Aikaterini Panteli</i>	Lecture Telencephalon <i>Aikaterini Panteli</i>	Laboratory / Anatomy Basal Ganglia <i>Aikaterini Panteli</i>	Independent Learning	
11.00- 11.50	Lecture Diencephalon <i>Aikaterini Panteli</i>	Lecture Physiology of Pain <i>Bayram Yılmaz</i>	Lecture Telencephalon <i>Aikaterini Panteli</i>	Laboratory / Physiology Reflexes <i>Bayram Yılmaz &amp; Mehtap Kaçar &amp; Burcu Gemici Başol</i>	Independent Learning	
12.00- 12.50	Lecture Diencephalon <i>Aikaterini Panteli</i>	Lecture Physiology of Pain <i>Bayram Yılmaz</i>	Lecture Histology of CNS; PNS, Meninges and Spinal Cord <i>Aylin Yaba Uçar</i>		Independent Learning	
13.00-13:50	Lunch Break					
14.00- 14.50	Lecture Biology of Nervous System <i>Turgay Isbir</i>	Laboratory / Anatomy Cerebellum and Diencephalon <i>Aikaterini Panteli</i>	Lecture Histology of CNS; Brain, Cerebellum <i>Aylin Yaba Uçar</i>	ICP Nasogastric Tube Administration <i>Özlem Tanrıöver/ Arzu Akalın Gökhan Gencer</i> Group B Group A SRPC SGS <i>Deniz Kiraç</i> Group Ç, D, IL	Elective Courses Week V	IL
15.00- 15.50	Lecture Biology of Nervous System <i>Turgay Isbir</i>	Independent Learning	Lecture Motor Functions of Spinal Cord <i>Bayram Yılmaz</i>			
16.00- 16.50	Independent Learning	Independent Learning	Lecture Motor Functions of Spinal Cord <i>Bayram Yılmaz</i>			
17.00-17.50	Independent Learning	Independent Learning	Independent Learning		Independent Learning	IL

**COMMITTEE IV - NERVOUS SYSTEM**

**IV. WEEK / 22 - 26 March 2021**

	Monday 22-Mar-2021	Tuesday 23-Mar-2021	Wednesday 24-Mar-2021	Thursday 25-Mar-2021	Friday 26-Mar-2021	
09.00- 09.50	<b>Lecture</b> Cortical and Brainstem Control of Motor Function <i>Bayram Yılmaz</i>	<b>Lecture</b> Functions of Cerebellum and Basal Ganglia in motor control <i>Bayram Yılmaz</i>	Independent Learning	Independent Learning	Independent Learning	
10.00- 10.50	<b>Lecture</b> Cortical and Brainstem Control of Motor Function <i>Bayram Yılmaz</i>	<b>Lecture</b> Functions of Cerebellum and Basal Ganglia in Motor Control <i>Bayram Yılmaz</i>	<b>Lecture</b> States of Brain Activity-Sleep and Brain Waves <i>Bayram Yılmaz</i>	<b>Laboratory / Anatomy</b> Eye and Visual Pathways <i>Aikaterini Panteli</i>	Independent Learning	
11.00- 11.50	<b>Lecture</b> Limbic System <i>Aikaterini Panteli</i>	<b>Lecture</b> Development of Central Nervous System; Early Stages <i>Aylin Yaba Uçar</i>	<b>Lecture</b> States of Brain Activity-Sleep and Brain Waves <i>Bayram Yılmaz</i>	<b>Laboratory / Physiology</b> Electroencephalography <i>Bayram Yılmaz &amp; Mehtap Kaçar &amp; Burcu Gemici Başol</i>	<b>Lecture</b> Biology of Nervous System <i>Seda Güleç Yılmaz</i>	
12.00- 12.50	<b>Lecture</b> Limbic System <i>Aikaterini Panteli</i>	<b>Lecture</b> Development of Central Nervous System; Late Stages <i>Aylin Yaba Uçar</i>	<b>Lecture</b> Congenital Anomalies of Nervous System <i>Aylin Yaba Uçar</i>		<b>Lecture</b> Biology of Nervous System <i>Seda Güleç Yılmaz</i>	
13.00-13:50	Lunch Break					
14.00- 14.50	<b>Lecture</b> Electrical Activity of Cortex and Evoked Potentials. Neural Coding <i>Bilge Güvenç Tuna</i>	<b>Laboratory / Anatomy</b> Limbic System <i>Aikaterini Panteli</i>	<b>Lecture</b> Orbit and Eye <i>Aikaterini Panteli</i>	ICP Nasogastric Tube Administration <i>Özlem Tanrıöver / Arzu Akalın / Eren Gökdağ</i> Group C Group D SRPC SGS <i>Deniz Kırış</i> Group A B IL	Elective Courses Week VI	IL
15.00- 15.50	<b>Lecture</b> Electrical Activity of Cortex and Evoked Potentials. Neural Coding <i>Bilge Güvenç Tuna</i>	<b>Lecture</b> Neuroimmunology <i>Gülderen Yanıkkaya Demirel</i>	<b>Lecture</b> Orbit and Eye <i>Aikaterini Panteli</i>			
16.00- 16.50	<b>Laboratory / Anatomy</b> Telencephalon <i>Aikaterini Panteli</i>	<b>Lecture</b> Neuroimmunology <i>Gülderen Yanıkkaya Demirel</i>	<b>Lecture</b> Visual Pathways <i>Aikaterini Panteli</i>		Independent Learning	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 IV – NERVOUS SYSTEM**  
**V. WEEK / 29 March – 02 April 2021**

	Monday 29-Mar-2021	Tuesday 30-Mar-2021	Wednesday 31-Mar-2021	Thursday 01-Apr-2021	Friday 02- Apr-2021			
09.00- 09.50	<b>Lecture</b> Ascending and Descending Pathways of the CNS <i>Aikaterini Panteli</i>	<b>Lecture</b> Physiology of Vision <i>Mehtap Kaçar</i>	<b>Lecture</b> Physiology of Vision <i>Mehtap Kaçar</i>	Independent Learning	Independent Learning			
10.00- 10.50	<b>Lecture</b> Ascending and Descending Pathways of the CNS <i>Aikaterini Panteli</i>	<b>Lecture</b> Physiology of Vision <i>Mehtap Kaçar</i>	<b>Lecture</b> Physiology of Vision <i>Mehtap Kaçar</i>	Laboratory / Anatomy Vasculature of the CNS <i>Aikaterini Panteli</i>	Independent Learning			
11.00- 11.50	<b>Lecture</b> Ascending and Descending Pathways of the CNS <i>Aikaterini Panteli</i>	<b>Lecture</b> Taste and Smell Pathways <i>Aikaterini Panteli</i>	<b>Lecture</b> Vasculature of the CNS <i>Aikaterini Panteli</i>	Laboratory / Physiology Visual Examination & Tests <i>Bayram Yılmaz &amp; Mehtap Kaçar &amp; Burcu Gemici Başol</i>	<b>Lecture</b> Meninges and Dural Venous Sinuses <i>Aikaterini Panteli</i>			
12.00- 12.50	<b>Lecture</b> Histology of Sensory Organs; Eye; Fibrous and Vascular Coat <i>Alev Cumbul</i>	<b>Lecture</b> Taste and Smell Pathways <i>Aikaterini Panteli</i>	<b>Lecture</b> Vasculature of the CNS <i>Aikaterini Panteli</i>		<b>Lecture</b> Meninges and Dural Venous Sinuses <i>Aikaterini Panteli</i>			
13.00- 13.50	Lunch Break							
14.00- 14.50	<b>Lecture</b> Histology of Sensory Organs; Eye; Nervous Coat and Appendix <i>Alev Cumbul</i>	<b>Lecture</b> Drug Application Routes and Pharmaceutical Forms of Drugs <i>Emine Nur Özdamar</i>	Independent Learning	ICP Nasogastric Tube Administration <i>Özlem Tannöver &amp; Arzu Akalın</i>	Group C SRPC SGS <i>Deniz Kırış</i>	Group A B IL	Elective Courses Week VII (Midterm Exam)	IL
15.00- 15.50	<b>Lecture</b> Cerebral Cortex, Intellectual Functions of the Brain <i>Bayram Yılmaz</i>	Independent Learning	Independent Learning					
16.00- 16.50	<b>Lecture</b> Learning and Memory <i>Bayram Yılmaz</i>	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 IV - NERVOUS SYSTEM**  
**VI.WEEK / 05 – 09 April 2021**

	Monday 05-Apr-2021	Tuesday 06-Apr-2021	Wednesday 07-Apr-2021	Thursday 08-Apr-2021	Friday 09-Apr-2021	
09.00-09.50	Independent Learning	Lecture Correlation Çiğdem Altunok	Independent Learning	Independent Learning	Independent Learning	
10.00- 10.50	Lecture Ear Aikaterini Panteli	Lecture Correlation Çiğdem Altunok	Lecture Introduction to Autonomic Nervous System Aikaterini Panteli	Lecture Auditory System Biophysics and Function Bilge Güvenç Tuna	Laboratory / Anatomy Sympathic Nervous System Aikaterini Panteli	
11.00- 11.50	Lecture Ear Aikaterini Panteli	Lecture Chemical Senses: Taste and Smell Burcu Gemici Başol	Lecture Sympathetic Nervous System Aikaterini Panteli	Lecture Development of Sensory Organs; Eye Alev Cumbul	Lecture Limbic System and the Hypothalamus Bayram Yılmaz	
12.00- 12.50	Lecture Physiology of Hearing Burcu Gemici Başol	Lecture Chemical Senses: Taste and Smell Burcu Gemici Başol	Lecture Sympathetic Nervous System Aikaterini Panteli	Lecture Development of Sensory Organs; Ear Alev Cumbul	Lecture Limbic System and the Hypothalamus Bayram Yılmaz	
13.00- 13.50	Lunch Break					
14.00- 14.50	Lecture Physiology of Hearing Burcu Gemici Başol	Lecture Auditory Pathways Aikaterini Panteli	Lecture Drug Excretion Ece Genç	ICP LECTURE Intramuscular/ Intradermal/ Subcutan Injection ÖzlemTannıöver	Elective Courses Week VIII	IL
15.00- 15.50	Laboratory / Anatomy Meninges and the Dural Venous Sinuses Aikaterini Panteli	Laboratory / Anatomy Ear and Auditory Pathways Aikaterini Panteli	Lecture Drug Excretion Ece Genç	ICP Intramuscular/ Intradermal/ Subcutan Injection Ö. Tannıöver& A. Akalın & F.T. Coşkun Group C Group D ECE-YUH Group A SRPC SGS Deniz Kıraç Group B ECE-FHC		
16.00- 16.50	Independent Learning	Independent Learning	Independent Learning		IL	Elective Courses Week VIII
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 IV - NERVOUS SYSTEM**  
**VII.WEEK / 12 – 16 April 2021**

	Monday 12-Apr -2021	Tuesday 13-Apr -2021	Wednesday 14-Apr -2021	Thursday 15-Apr -2021	Friday 16-Apr -2021			
09.00- 09.50	Lecture Autonomic Nervous System <i>Bayram Yılmaz</i>	Lecture Cerebrospinal Fluid and Brain Metabolism <i>Bayram Yılmaz</i>	Laboratory/ Physiology Hearing test <i>Bayram Yılmaz &amp; Mehtap Kaçar &amp; Burcu Gemici Başol</i>	Independent Learning	Independent Learning			
10.00- 10.50	Lecture Autonomic Nervous System <i>Bayram Yılmaz</i>	Lecture Cerebrospinal Fluid and Brain Metabolism <i>Bayram Yılmaz</i>		Independent Learning	Independent Learning			
11.00- 11.50	Lecture Parasympathetic Nervous System <i>Aikaterini Panteli</i>	Lecture Histology of Skin and Appendage; Epidermis, Dermis, Appendage <i>Aylin Yaba Uçar</i>	Laboratory / Histology& Embryology Histology of CNS and Skin <i>Alev Cumbul &amp; Aylin Yaba Uçar</i>	Laboratory / Physiology Galvanized Skin Response <i>Bayram Yılmaz &amp; Mehtap Kaçar &amp; Burcu Gemici Başol</i>	Independent Learning			
12.00- 12.50	Lecture Parasympathetic Nervous System <i>Aikaterini Panteli</i>	Lecture Development of Skin and Appendage <i>Aylin Yaba Uçar</i>		Independent Learning				
13.00- 13.50	Lunch Break							
14.00- 14.50	Lecture Dopamine and Drugs Effecting Dopaminergic System <i>Emine Nur Özdamar</i>	Lecture Skin, its derivatives and the Mammary Glands <i>Aikaterini Panteli</i>	Laboratory / Histology Review Session <i>Alev Cumbul &amp; Aylin Yaba Uçar</i>	<div>ICP</div> <div>Intramuscular/ Intradermal/ Subcutan Injection</div> <div><i>Özlem Tannöver&amp; Arzu Akalın &amp; F. Tuğba Coşkun</i></div> <div>Group A</div> <div>Group C ECE-YUH</div> <div>Group B SRPC SGS</div> <div><i>Deniz Kırış</i></div> <div>Group D ECE-FHC</div>	Elective Courses Week IX	IL		
15.00- 15.50	Lecture Serotonin and Drugs Effecting Serotonergic System of CNS <i>Emine Nur Özdamar</i>	Laboratory / Anatomy Skin, its derivatives and the Mammary Glands <i>Aikaterini Panteli</i>						
16.00- 16.50	Laboratory / Anatomy Parasympathetic Nervous System <i>Aikaterini Panteli</i>	Independent Learning			Independent Learning	Independent Learning	IL	Elective Courses Week IX
17.00-17.50	Independent Learning	Independent Learning						

**COMMITTEE IV - NERVOUS SYSTEM**  
**VIII.WEEK / 19 – 23 April 2021**

VIII.WEEK / 19 – 23 April 2021					
	Monday 19-Apr -2021	Tuesday 20-Apr -2021	Wednesday 21-Apr-2021	Thursday 22-Apr-2021	Friday 23-Apr-2021
09.00- 09.50	Independent Learning	Independent Learning	Independent Learning	Independent Learning	National Holiday
10.00- 10.50		Assessment Session (Physiology,Anatomy, Pharmacology and Histology&Embryology 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	
15.00- 15.50					
16.00- 16.50					
17.00-17.50					

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

**April 26 – June 25, 2021**  
**COMMITTEE DURATION: 8 WEEKS**

<b>MED 203</b>	<b>BASIC MEDICAL SCIENCES II</b>	<b>THEORETICAL</b>	<b>PRACTICAL</b>	<b>TOTAL</b>
	<b>DISCIPLINE</b>			
	ANATOMY	15	1Gr x 5H	20
	BIOCHEMISTRY	24	1Gr x 2H	26
	BIOPHYSICS	3	0	3
	BIOSTATISTICS	4	1Gr x 2H	6
	HISTOLOGY & EMBRYOLOGY	14	1Gr x 4H	19
	IMMUNOLOGY	1	0	1
	MEDICAL BIOLOGY	6	0	6
	MEDICAL MICROBIOLOGY	17	1Gr x 2H	19
	PATHOLOGY	7	1Gr x 1H	8
	PHARMACOLOGY	12	1Gr x 2H	14
	PHYSIOLOGY	30	1Gr x 6H	36
	SCIENTIFIC RESEARCH and PROJECT COURSE-II	0	1GrX3H	3
	PBL	6	0	6
	<b>TOTAL</b>	<b>139</b>	<b>28</b>	<b>167</b>
	INDEPENDENT LEARNING HOURS	83		

**OTHER COURSES**

<b>MED 202</b>	INTRODUCTION to CLINICAL PRACTICE- II	4 GrX 1	4 GrX4	5
<b>MED 614-631</b>	ELECTIVE COURSES	14	0	14

<b>Coordination Committee</b>	<b>Head</b>	Bayram YILMAZ, PhD Prof.
	<b>Secretary</b>	Burcu GEMİCİ BAŞOL, PhD Assoc. Prof.
	<b>Member</b>	Mehtap KAÇAR, MD PhD Assoc. Prof.
	<b>Member</b>	Aikaterini PANTELİ, MD, Lecturer

**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. Mohammed Elgazzar, MD. Lecturer. Aikaterini PANTELİ, MD, Lecturer LAB: Edibe BİLİŞLİ, DVM LAB: Zeynep Büşra ODABAŞ, DMD
BIOCHEMISTRY	İnci ÖZDEN, PhD, Prof. LAB: Jale ÇOBAN, MD Prof. LAB: Müge KOPUZ, PhD.
BIOPHYSICS	Akif MAHARRAMOV, PhD, Assist. Prof. Bilge GÜVENÇ TUNA, PhD, Assist. Prof.
BIOSTATISTIC	E. Çiğdem ALTUNOK, 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	Çağatay ACUNER, MD, Assoc. Prof.
PATHOLOGY	Aydın SAV MD, Prof.
PHARMACOLOGY	Ece GENÇ, PhD, Prof. Emine Nur ÖZDAMAR, MD, Assist. Prof.
PHYSIOLOGY	Bayram YILMAZ, PhD, Prof. Mehtap KAÇAR, MD, PhD, Assoc. 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 TANRIÖVER, MD, Assoc. Prof. A. Arzu AKALIN, MD, Assist. Prof. Alp KAYIRAN, MD. Assist. Prof. Pınar TURA, MD. Assist. Prof. F. Tuğba COŞKUN, MD Assist. Prof.

## 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.
- 2.0. In urogenital system, for male and female genital system organs, kidney, ureter, bladder, urethra, pelvis and perineum;
  - 2.1. Describe its anatomy,
  - 2.2. Associate with adjacent tissue and organs,
  - 2.3. Explain their functional and clinical reflections.
- 3.0. In endocrine system, for thyroid, parathyroid, suprarenal gland and thymus,
  - 3.1. Describe its anatomy,
  - 3.2. Associate with adjacent tissue and organs,
  - 3.3. Explain their functional and clinical reflections.
- 4.0. For endocrine system;
  - 4.1. classify embryological origins and explain developmental stages of Organs,
  - 4.2. Associate the relation between birth anomalies and developmental processes.
  - 4.3. Describe histological properties of endocrine system
- 5.0. For urogenital systems;
  - 5.1. Classify embryological origins and explain developmental stages of urogenital system organs,
  - 5.2. Associate the relation between birth anomalies and developmental processes.,
  - 5.3. Describe histological properties of Urinary system,
  - 5.4. Describe histological properties of Genital system.
- 6.0. In endocrine system;
  - 6.1. Describe endocrine, paracrine and neuroendocrine secretion,
  - 6.2. Explain the regulatory role of hypothalamus and pituitary gland,
  - 6.3. List secretions and functions of endocrine glands and organs.
- 7.0. In urinary system;
  - 7.1. Explain renal function and structure of nephrons,
  - 7.2. Explain renal blood flow and mechanisms of urine production,
  - 7.3. Explain liquid-electrolyte and acid-base equilibrium.
- 8.0. In genital system;
  - 8.1. Explain reproductive hormones and their functions in men and women,
  - 8.2. Describe changes in the maternal body in pregnancy and lactation.
- 9.0. For hormones;
  - 9.1. Classify according to mechanisms of action,
  - 9.2. 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, 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. M. Elgazzar	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. Altunok	3	1	1	5
4.0.-5.0-23	HISTOLOGY & EMBRYOLOGY	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. Kırar	4	2	2	8
17.0	MEDICAL MICROBIOLOGY	Dr. Ç. Acuner	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	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
2.0-3.0	ANATOMY	30
8.0-9.0	BIOCHEMISTRY	5
	BIOSTATISTICS	5
4.0.	HISTOLOGY & EMBRYOLOGY	10
16.0.	MEDICAL MICROBIOLOGY	10
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 / 26 – 30 April 2021**

	Monday 26-Apr-2021	Tuesday 27-Apr-2021	Wednesday 28-Apr-2021	Thursday 29-Apr-2021				Friday 30-Apr-2021					
09.00- 09.50	PBL	Lecture The Kidneys <i>Mohammed Elgazzar</i>	Lecture Mechanism of Drug Action 1 <i>Ece Genç</i>	Laboratory/ Physiology Glomerular Filtration <i>Bayram Yılmaz &amp; Mehtap Kaçar &amp; Burcu Gemici Başol</i>				Independent Learning					
10.00- 10.50		Lecture Urinary Tracts and Suprarenal Glands <i>Mohammed Elgazzar</i>	Lecture Mechanism of Drug Action 2 <i>Ece Genç</i>					Lecture DNA Viruses II <i>Çağatay Acuner</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>	Laboratory/ Biochemistry Urine Analysis <i>Jale Çoban &amp; Müge Kopuz Alvarez Noval</i>				Lecture Urine Formation: Tubular Processing <i>Bayram Yılmaz</i>					
12.00- 12.50	Introduction to Committee V Secretary of Committee	Lecture Micturition <i>Bayram Yılmaz</i>	Lecture Histology of Urinary System: Excretory Passage <i>Aylin Yaba Uçar</i>					Lecture Urine Formation: Tubular Processing <i>Bayram Yılmaz</i>					
13.00- 13.50	Lunch Break												
14.00- 14.50	Lecture Introduction to Urinary System <i>Mohammed Elgazzar</i>	Lecture Mechanisms of Hormone Actions, Intracellular and Cell Surface Receptors <i>İnci Özden</i>	Lecture Urine Formation and Renal Blood Flow <i>Bayram Yılmaz</i>	ICP Intramuscular / Intradermal / Subcutan Injection <i>F. Tuğba Coşkun / Alp Kayıran/ Arzu Akalın</i> Group B	SRPC SGS <i>Deniz Kırarç</i> Group D	ECE-YUH Group A	ECE-FHC Group C	Elective Courses Week X	IL				
15.00- 15.50	Lecture The Kidneys <i>Mohammed Elgazzar</i>	Lecture Mechanisms of Hormone Actions, Intracellular and Cell Surface Receptors <i>İnci Özden</i>	Lecture Urine Formation and Renal Blood Flow <i>Bayram Yılmaz</i>										
16.00- 16.50	Lecture Introduction to Viruses <i>Microbiology Lecturer</i>	Lecture DNA Viruses I <i>Çağatay Acuner</i>	Laboratory/Anatomy Urinary System <i>Mohammed Elgazzar</i>					Independent Learning				IL	Elective Courses Week X
			Independent Learning										
17.00-17.50	Lecture Viral Pathogenesis/ Oncogenesis <i>Microbiology Lecturer</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 / 03 – 07 May 2021**

	Monday 3-May-2021	Tuesday 4-May-2021	Wednesday 5-May-2021	Thursday 6-May-2021	Friday 7-May-2021		
09.00- 09.50	PBL	Lecture Fluid and Electrolyte Balance <i>Bayram Yılmaz</i>	Lecture Introduction to Neoplasia and Biologic Behaviors of Neoplasm <i>Aydın Sav</i>	Lecture Hormones of Hypothalamus and Pituitary <i>İnci Özden</i>	Independent Learning		
10.00- 10.50		Lecture Fluid and Electrolyte Balance <i>Bayram Yılmaz</i>	Lecture Introduction to Neoplasia and Biologic Behaviors of Neoplasm <i>Aydın Sav</i>	Lecture Thyroid Hormones <i>İnci Özden</i>	Independent Learning		
11.00- 11.50		Independent Learning	Lecture Regulation of Acid-Base Balance <i>Bayram Yılmaz</i>	Lecture Histology of Endocrine System: Hypophysis <i>Aylin Yaba Uçar</i>	Independent Learning		
12.00- 12.50	Independent Learning	Independent Learning	Lecture Regulation of Acid-Base Balance <i>Bayram Yılmaz</i>	Lecture Histology of Endocrine System: Thyroid and Parathyroid and Suprarenal Glands <i>Aylin Yaba Uçar</i>	Independent Learning		
13.00- 13.50	Lunch Break						
14.00- 14.50	Lecture Histology of Endocrine System: General Aspect, Hypothalamus, Epiphysis <i>Aylin Yaba Uçar</i>	Lecture Mechanisms of Hormone Actions, Intracellular and Cell Surface Receptors <i>İnci Özden</i>	Lecture Hormones of Hypothalamus and Pituitary <i>İnci Özden</i>	ICP Intramuscular / Intradermal / Subcutan Injection Özlem Tanrıöver/ F. Tuğba Coşkun / Arzu Akalin Group D SRPC SGS <i>Deniz Kırış</i> Group C ECE-FHC Group A ECE-YUH Group B	Elective Courses Week XI	IL	
15.00- 15.50	Lecture Introduction to Genital Systems <i>Mohammed Elgazzar</i>	Lecture Mechanisms of Hormone Actions, Intracellular and Cell Surface Receptors <i>İnci Özden</i>	Lecture Hormones of Hypothalamus and Pituitary <i>İnci Özden</i>				
16.00- 16.50	Lecture Male Genital Organs <i>Mohammed Elgazzar</i>	Laboratory/Anatomy Male Genital Organs <i>Mohammed Elgazzar</i>	Lecture DNA Viruses III <i>Çağatay Acuner</i>			IL	Elective Courses Week XI
17.00-17.50	Lecture Male Genital Organs <i>Mohammed Elgazzar</i>	Independent Learning	Lecture DNA Viruses IV <i>Çağatay Acuner</i>		Independent Learning		

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**COMMITTEE V – UROGENITAL and ENDOCRINE SYSTEMS**  
**III. WEEK / 10 – 14 May 2021**

	<b>Monday 10-May-2021</b>	<b>Tuesday 11-May-2021</b>	<b>Wednesday 12-May-2021</b>	<b>Thursday 13-May-2021</b>	<b>Friday 14-May-2021</b>
<b>09.00- 09.50</b>	<b>Independent Learning</b>	<b>Independent Learning</b>	<b>RELIGIOUS HOLIDAY</b>	<b>RELIGIOUS HOLIDAY</b>	<b>RELIGIOUS HOLIDAY</b>
<b>10.00- 10.50</b>					
<b>11.00- 11.50</b>					
<b>12.00- 12.50</b>					
<b>13.00- 13.50</b>					
<b>14.00- 14.50</b>					
<b>15.00- 15.50</b>					
<b>16.00- 16.50</b>					
<b>17.00-17.50</b>					

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**COMMITTEE V – UROGENITAL and ENDOCRINE SYSTEMS**  
**IV.WEEK / 17 – 21 May 2021**

	Monday 17-May-2021	Tuesday 18- May-2021	Wednesday 19- May-2021	Thursday 20- May-2021				Friday 21- May-2021	
09.00- 09.50	<b>Lecture</b> Development of Genital System; General Aspects <i>Alev Cumbul</i>	<b>Lecture</b> Hormones of Adrenal Cortex and Adrenal Medulla <i>İnci Özden</i>	NATIONAL HOLIDAY	Independent Learning				Independent Learning	
10.00- 10.50	<b>Lecture</b> Histology of Male Genital System: Testis <i>Alev Cumbul</i>	<b>Lecture</b> Hormones of Adrenal Cortex and Adrenal Medulla <i>İnci Özden</i>		Independent Learning				<b>Lecture</b> RNA Viruses I <i>Çağatay Acuner</i>	
11.00- 11.50	<b>Lecture</b> Introduction to Endocrinology <i>Mehtap Kaçar</i>	<b>Lecture</b> Posterior Pituitary Hormones <i>Mehtap Kaçar</i>		Independent Learning				<b>Lecture</b> RNA Viruses II <i>Çağatay Acuner</i>	
12.00- 12.50	<b>Lecture</b> Pituitary Gland and Hypothalamic Control <i>Mehtap Kaçar</i>	<b>Lecture</b> Thyroid Metabolic Hormones <i>Mehtap Kaçar</i>		Independent Learning				<b>Lecture</b> Post-receptor Events and Second Messengers <i>Ece Genç</i>	
13.00- 13.50	Lunch Break	Lunch Break		Lunch Break				Lunch Break	
14.00- 14.50	<b>Lecture</b> Female Genital Organs <i>Mohammed Elgazzar</i>	<b>Lecture</b> DNA Viruses V <i>Çağatay Acuner</i>		Lecture IV Cannulation <i>Arzu Akalın</i>				Elective Courses Week XII	IL
15.00- 15.50	<b>Lecture</b> Female Genital Organs <i>Mohammed Elgazzar</i>	<b>Laboratory/Anatomy</b> Female Genital Organs <i>Mohammed Elgazzar</i>		ICP IV Cannulation <i>Alp Kayıran &amp; Arzu Akalın &amp; Özlem Tanrıöver</i> Group A	SRPC SGS <i>Deniz Kırış</i> Group B	ECE-YUH Group C	ECE-FHC Group D		
16.00- 16.50	<b>Lecture</b> Biology of Endocrine System <i>Deniz Kırış</i>	<b>Laboratory/ Microbiology</b> Immunoassays in Diagnostic Microbiology <i>Çağatay Acuner</i>						IL	Elective Courses Week XII
17.00-17.50	<b>Lecture</b> Biology of Endocrine System <i>Deniz Kırış</i>	Independent Learning							

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**COMMITTEE V – UROGENITAL and ENDOCRINE SYSTEMS**  
**V.WEEK / 24 – 28 May 2021**

	Monday 24-May-2021	Tuesday 25-May-2021	Wednesday 26-May-2021	Thursday 27-May-2021	Friday 28-May-2021	
09.00- 09.50	Lecture Adrenocortical Hormones <i>Mehtap Kaçar</i>	Lecture Histology of Male Genital System: Excretory Parts <i>Alev Cumbul</i>	Laboratory/ Microbiology Molecular Methods in Diagnostic Microbiology <i>Microbiology instructors</i>	Lecture Oncogenesis, Incidence and Distribution of Cancer <i>Aydın Sav</i>	Lecture Linear Regression <i>E. Çiğdem Altunok</i>	
10.00- 10.50	Lecture Adrenocortical Hormones <i>Mehtap Kaçar</i>	Lecture Histology of the Female Genital System: Ovaries <i>Alev Cumbul</i>	Laboratory/ Physiology Metabolic Rate <i>Bayram Yılmaz &amp; Mehtap Kaçar &amp; Burcu Gemici Başol</i>	Lecture Oncogenesis, Incidence and Distribution of Cancer <i>Aydın Sav</i>	Lecture Linear Regression <i>E. Çiğdem Altunok</i>	
11.00- 11.50	Lecture Nerves of the Pelvis <i>Mohammed Elgazzar</i>	Lecture Introduction to Rational Pharmacotherapy <i>Emine Nur Özdamar</i>		Lecture Insulin, Diabetes Mellitus <i>Mehtap Kaçar</i>	Lecture Hormones Regulating Calcium Metabolism <i>İnci Özden</i>	
12.00- 12.50	Lecture Vasculature of the Pelvis <i>Mohammed Elgazzar</i>	Lecture Eicosanoids <i>Emine Nur Özdamar</i>	Independent Learning	Lecture Insulin, Diabetes Mellitus <i>Mehtap Kaçar</i>	Lecture Hormones Regulating Calcium Metabolism <i>İnci Özden</i>	
13.00- 13.50	Lunch Break	Lunch Break	Lunch Break	Lunch Break	Lunch Break	
14.00- 14.50	Lecture RNA Viruses III <i>Çağatay Acuner</i>	Lecture PTH, Calcitonin, Calcitriol <i>İnci Özden</i>	Lecture Regulation of Calcium & Phosphate Metabolism and Bone Formation <i>Bayram Yılmaz</i>	ICP IV Cannulation <i>Özlem Tanrıöver &amp; Arzu Akalın &amp; Pınar Tura</i> Group B ECE-FHC Group C ECE-YUH Group D SRPC SGS <i>Deniz Kırış</i> Group A	Elective Courses Week XIII	IL
15.00- 15.50	Lecture RNA Viruses IV <i>Çağatay Acuner</i>	Lecture PTH, Calcitonin, Calcitriol <i>İnci Özden</i>	Lecture Regulation of Calcium & Phosphate Metabolism and Bone Formation <i>Bayram Yılmaz</i>			
16.00- 16.50	Laboratory/Anatomy Nerves and Vasculature of the Pelvis <i>Mohammed Elgazzar</i>	Lecture Diagnostic Methods in Virology <i>Çağatay Acuner</i>	Lecture Specific Viruses <i>Çağatay Acuner</i>		Independent Learning	IL
17.00-17.50	Independent Learning	Independent Learning	Independent Learning			

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**COMMITTEE V – UROGENITAL and ENDOCRINE SYSTEMS**  
**VI. WEEK / 31 May – 4 June 2021**

	Monday 31-May-2021	Tuesday 1-June-2021	Wednesday 2-June 2021	Thursday 3-June-2021	Friday 4-June-2021	
09.00- 09.50	<b>Lecture</b> Physiology of Growth Hormones <i>Bayram Yılmaz / Mehtap Kaçar</i>	<b>Lecture</b> Insulin, Glucagon <i>İnci Özden</i>	<b>Laboratory/ Physiology</b> Dissection & Examination of Endocrine System <i>Bayram Yılmaz &amp; Mehtap Kaçar &amp; Burcu Gemici Başol</i>	<b>Laboratory Histology&amp; Embryology</b> Histology of Urinary & Endocrine Systems <i>Alev Cumbul &amp; Aylin Yaba Uçar</i>	<b>Independent Learning</b>	
10.00- 10.50	<b>Lecture</b> Pineal Gland & Melatonin <i>Bayram Yılmaz / Mehtap Kaçar</i>	<b>Lecture</b> Insulin, Glucagon <i>İnci Özden</i>			<b>Lecture</b> Seeing with Sound: Images from Echoes (Diagnostic Ultrasound Imaging) <i>Bilge Güvenç Tuna</i>	
11.00- 11.50	<b>Lecture</b> Viral Oncogenesis <i>Çağatay Acuner</i>	<b>Lecture</b> Male Reproductive Physiology <i>Mehtap Kaçar</i>	<b>Lecture</b> Introduction to Drug Development <i>Emine Nur Özdamar</i>	<b>Laboratory/ Pharmacology</b> Efficacy and Potency Concepts <i>Ece Genç</i>	<b>Lecture</b> Basics of MRI <i>Bilge Güvenç Tuna</i>	
12.00- 12.50	<b>Lecture</b> Prions <i>Çağatay Acuner</i>	<b>Lecture</b> Male Reproductive Physiology <i>Mehtap Kaçar</i>	<b>Lecture</b> Development of Biopharmaceuticals <i>Emine Nur Özdamar</i>		<b>Lecture</b> Basics of MRI <i>Bilge Güvenç Tuna</i>	
13.00- 13.50	<b>Lunch Break</b>					
14.00- 14.50	<b>Lecture</b> Perineum and Ischiorectal Fossa <i>Mohammed Elgazzar</i>	<b>Lecture</b> Analysis of Variance and Multiple Comparisons <i>E. Çiğdem Altunok</i>	<b>Lecture</b> Histology of the Female Genital System: Conducting Part <i>Alev Cumbul</i>	ICP IV Cannulation <i>Özlem Tanrıöver &amp; Arzu Akalin &amp; Pinar Tura</i> Group C ECE-YUH Group A ECE-FHC Group B SRPC SGS <i>Deniz Kırak</i> Grup D	<b>Elective Courses Week XIV</b>	IL
15.00- 15.50	<b>Lecture</b> Review of the Urinary System <i>Mohammed Elgazzar</i>	<b>Lecture</b> Analysis of Variance and Multiple Comparisons <i>E. Çiğdem Altunok</i>	<b>Lecture</b> Development of Urinary System and Anomalies <i>Alev Cumbul</i>		<b>Independent Learning</b>	IL
16.00- 16.50	<b>Independent Learning</b>	<b>Laboratory/Anatomy</b> Perineum and Ischiorectal Fossa <i>Mohammed Elgazzar</i>	<b>Independent Learning</b>	<b>Independent Learning</b>		
17.00-17.50	<b>Independent Learning</b>	<b>Independent Learning</b>	<b>Independent Learning</b>	<b>Independent Learning</b>		

**COMMITTEE V – UROGENITAL and ENDOCRINE SYSTEMS**  
**VII. WEEK / 07 – 11 June 2021**

	<b>Monday 7-June-2021</b>	<b>Tuesday 8-June-2021</b>	<b>Wednesday 9-June-2021</b>	<b>Thursday 10-June-2021</b>	<b>Friday 11-June-2021</b>
<b>09.00- 09.50</b>	<b>Lecture</b> Female Reproductive Physiology <i>Mehtap Kaçar</i>	<b>Lecture</b> Vitamins <i>İnci Özden</i>	<b>Lecture</b> Insulin, Glucagon <i>İnci Özden</i>	<b>Independent Learning</b>	<b>Independent Learning</b>
<b>10.00- 10.50</b>	<b>Lecture</b> Female Reproductive Physiology <i>Mehtap Kaçar</i>	<b>Lecture</b> Vitamins <i>İnci Özden</i>	<b>Lecture</b> Insulin, Glucagon <i>İnci Özden</i>	<b>Lecture</b> Minerals <i>İnci Özden</i>	
<b>11.00- 11.50</b>	<b>Lecture</b> Endocrine Organs <i>Mohammed Elgazzar</i>	<b>Lecture</b> Pharmacogenetics & Pharmacogenomics <i>Ece Genç</i>	<b>Lecture</b> Histogenesis and Nomenclature <i>Aydın Sav</i>	<b>Lecture</b> Minerals <i>İnci Özden</i>	<b>Independent Learning</b>
<b>12.00- 12.50</b>	<b>Lecture</b> Endocrine Organs <i>Mohammed Elgazzar</i>	<b>Lecture</b> Pharmacogenetics & Pharmacogenomics <i>Ece Genç</i>	<b>Lecture</b> Histogenesis and Nomenclature <i>Aydın Sav</i>	<b>Independent Learning</b>	<b>Independent Learning</b>
<b>13.00- 13.50</b>	<b>Lunch Break</b>				
<b>14.00- 14.50</b>	<b>Lecture</b> Vasoactive Peptides <i>Emine Nur Özdamar</i>	<b>Lecture</b> Pregnancy and Lactation <i>Mehtap Kaçar</i>	<b>Lecture</b> Hormones and Immunity <i>Gülderen Yanıkkaya Demirel</i>	<div>ICP</div> <div>IV Cannulation Özlem Tanrıöver &amp; Arzu Akalın &amp; Alp Kayıran</div> <div>Group D</div> <div>ECE-YUH Group B</div> <div>ECE-FHC Group A</div> <div>SRPC SGS Deniz Kırış Group C</div>	<b>Independent Learning</b>
<b>15.00- 15.50</b>	<b>Lecture</b> Histamine and Antihistamines <i>Emine Nur Özdamar</i>	<b>Lecture</b> Pregnancy and Lactation <i>Mehtap Kaçar</i>	<b>Laboratory/Pathology</b> Inflammation & Neoplasia		
<b>16.00- 16.50</b>	<b>Lecture</b> Biology of Sexual Differentiation and Development <i>Turgay İsbir</i>	<b>Laboratory/ Biostatistics</b> Computer Applications of Tests of Significance <i>Çiğdem Altunok</i>	<b>Independent Learning</b>		
<b>17.00-17.50</b>	<b>Independent Learning</b>		<b>Independent Learning</b>	<b>Independent Learning</b>	

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**COMMITTEE V – UROGENITAL and ENDOCRINE SYSTEMS**  
**VIII. WEEK / 14 – 18 June 2021**

	Monday 14-June-2021	Tuesday 15-June-2021	Wednesday 16-June-2021	Thursday 17-June-2021	Friday 18-June-2021
09.00- 09.50	<b>Lecture</b> Development of the Male Genital System and Anomalies <i>Alev Cumbul</i>	<b>Lecture</b> Fetal and Neonatal Physiology <i>Bayram Yılmaz</i>	<b>Laboratory/ Histology &amp; Embryology</b> Histology of Genital System <i>Alev Cumbul &amp; Aylin Yaba Uçar</i>	<b>Independent Learning</b>	<b>Independent study hour for ICP-II Group C and D</b>
10.00- 10.50	<b>Lecture</b> Development of the Female Genital System and Anomalies <i>Alev Cumbul</i>	<b>Lecture</b> Endocrine Distruptors <i>Bayram Yılmaz</i>		<b>Independent Learning</b>	
11.00- 11.50	<b>Lecture</b> Drug Toxicity 1 <i>Ece Genç</i>	<b>Lecture</b> Vitamins <i>İnci Özden</i>	<b>Lecture</b> Biology of Sexual Differentiation And Development <i>Turgay İsbir</i>	<b>Laboratory/ Hist. &amp; Embry.</b> Review Session <i>Alev Cumbul &amp; Aylin Yaba Uçar</i>	
12.00- 12.50	<b>Lecture</b> Drug Toxicity 2 <i>Ece Genç</i>	<b>Lecture</b> Vitamins <i>İnci Özden</i>	<b>Lecture</b> Biology of Sexual Differentiation And Development <i>Turgay İsbir</i>		
13.00- 13.50	<b>Lunch Break</b>				
14.00- 14.50	<b>Independent study hour for ICP-II Group A and B</b>	<b>Lecture</b> Vaccines <i>Çağatay Acuner</i>	<b>Lecture</b> Biology of Sexual Differentiation And Development <i>Turgay İsbir</i>	<b>Lecture</b> Tissue Damage by Eating Disorders and Diabetes Mellitus <i>Aydın Sav</i>	<b>Independent Learning</b>
15.00- 15.50		<b>Lecture</b> Prenatal Diagnosis, Teratology and Congenital Anomalies <i>Alev Cumbul</i>	<b>Independent Learning</b>	<b>Independent Learning</b>	
16.00- 16.50		<b>Independent Learning</b>	<b>Independent Learning</b>	<b>Independent Learning</b>	
17.00-17.50		<b>Independent Learning</b>	<b>Independent Learning</b>	<b>Independent Learning</b>	

**COMMITTEE V – UROGENITAL and ENDOCRINE SYSTEMS**  
**IX.WEEK / 21 – 25 June 2021**

	Monday 21-June -2021	Tuesday 22-June-2021	Wednesday 23-June-2021	Thursday 24-June-2021	Friday 25-June-2021
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					
16.00- 16.50					
17:00-17:50					Independent Learning



## 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.

NO	STUDENT NO	NAME	SURNAME	COUNSELOR
1	20190800117	ELMIRA	ABDULLAYEVA	DR. ÖĞR. ÜYESİ MOHAMMED ELSAYED MOHAMMED ELGAZZAR
2	20190800020	LIYAN	ABU SHETAYYAH	DR. ÖĞR. ÜYESİ MOHAMMED ELSAYED MOHAMMED ELGAZZAR
3	20190800103	ELİF	ACAR	DR. ÖĞR. ÜYESİ MÜGE KOPUZ ALVAREZ NOVAL
4	20190800013	ALİ	ADLI	PROF. DR. TURGAY İSBİR
5	20190800077	FUAT TUNCA	AKCAN	PROF. DR. ECE GENÇ
6	20200800013	DİLARA ECREN	ALAEDDİNOĞLU	PROF. DR. İNCİ ÖZDEN
7	20180800095	SERRA	ALARÇİN	PROF. DR. ECE GENÇ
8	20190800114	NOOR	ALWAISSI	DR. ÖĞR. ÜYESİ AIKATERİNİ PANTELİ
9	20190800036	AYŞE	ARICI	PROF. DR. TURGAY İSBİR
10	20190800016	RABİA AYBÜKE	ARIKAN	PROF. DR. RECEP EROL SEZER
11	20190800073	SEVGİ DEREN	ARSLAN	DR. ÖĞR. ÜYESİ MÜGE KOPUZ ALVAREZ NOVAL
12	20190800004	AYLIN	ATES	DR. ÖĞR. ÜYESİ ARZU AKALIN
13	20190800071	BİLGESU	AYDIN	DR. ÖĞR. ÜYESİ ARZU AKALIN
14	20180800127	LIAN	AZZAWI	DR. ÖĞR. ÜYESİ MOHAMMED ELSAYED MOHAMMED ELGAZZAR
15	20200800026	BARAN	BARIS	PROF. DR. RECEP EROL SEZER
16	20180800102	ELİF ASENA	BAŞ	DR. ÖĞR. ÜYESİ MÜGE KOPUZ ALVAREZ NOVAL
17	20190800024	ÇAĞIN	BEKTAŞ	DOÇ. DR. MEHTAP KAÇAR
18	20190800055	BERFİN ECE	BİNGÜL	PROF. DR. ECE GENÇ
19	20190800035	ALKIM	BÜYÜKAŞIK	DR. ÖĞR. ÜYESİ MÜGE KOPUZ ALVAREZ NOVAL
20	20180800117	DANIELA	CEDOLIN	DR. ÖĞR. ÜYESİ AIKATERİNİ PANTELİ
21	20190800093	EGE CELİL	CEVANİ	DOÇ. DR. MEHTAP KAÇAR
22	20200800022	DEFNE	ÇERKEŞ	DOÇ. DR. MEHTAP KAÇAR
23	20190800109	BUSE EYLÜL	ÇETİN	PROF. DR. GÜLDEREN YANIKKAYA DEMİREL
24	20190800087	İDİL	ÇETİN	PROF. DR. GÜLDEREN YANIKKAYA DEMİREL
25	20190800015	ZEYNEP	ÇOLAKOĞLU	DOÇ. DR. MEHTAP KAÇAR
26	20190800112	TOKA	DABOUL	DR. ÖĞR. ÜYESİ MÜGE KOPUZ ALVAREZ NOVAL
27	20190800038	BURCU SENA	DEMİRALP	PROF. DR. ÖZLEM TANRIÖVER
28	20180800110	AHMET	DEMİREZ	DR. ÖĞR. ÜYESİ ALEV CUMBUL
29	20190800062	KARAHAN	DEMİROĞLU	PROF. DR. ÖZLEM TANRIÖVER
30	20190800088	ZEYNEP	DENİZ	DR. ÖĞR. ÜYESİ MÜGE KOPUZ ALVAREZ NOVAL
31	20190800070	AHMET	DEVELİOĞLU	DOÇ. DR. ÇAĞATAY ACUNER
32	20190800025	BİLAL FIKRET	DİŞKAYA	DR. ÖĞR. ÜYESİ AIKATERİNİ PANTELİ
33	20190800106	AHMET	DOKUR	DR. ÖĞR. ÜYESİ MÜGE KOPUZ ALVAREZ NOVAL
34	20190800094	ASUDE ZEYNEP	DÖNMEZ	DOÇ. DR. SONER DOĞAN
35	20190800043	KEREM	DULUNDU	DOÇ. DR. SONER DOĞAN
36	20180800081	YAĞMUR NİSA	DURŞUN	DOÇ. DR. SONER DOĞAN
37	20180800065	ALPEREN	EDİŞ	DOÇ. DR. SONER DOĞAN
38	20190800001	MUHAMMED ALİ	EKİNCİ	DR. ÖĞR. ÜYESİ ARZU AKALIN
39	20190800127	NURAN	EMBABSHA	DR. ÖĞR. ÜYESİ MOHAMMED ELSAYED MOHAMMED ELGAZZAR
40	20190800046	DOĞA	ERGÜN	DR. ÖĞR. ÜYESİ ÇİÇDEM ALTUNOK
41	20190800072	GÖNÜL ECE	ERK	DOÇ. DR. AYLİN YABA UÇAR
42	20180800080	NADİN	ESEDOĞLU	DR. ÖĞR. ÜYESİ MÜGE KOPUZ ALVAREZ NOVAL
43	20180800062	FATMA DİLAY	ESEN	DOÇ. DR. AYLİN YABA UÇAR
44	20200800141	İRİS ASLI	GÖK	DR. ÖĞR. ÜYESİ MÜGE KOPUZ ALVAREZ NOVAL
45	20180800051	GÖKBERK	GÖKÇE	DR. ÖĞR. ÜYESİ HALE ARIK TAŞYIKAN
46	20180800093	DUYGU	GÖKHAN	DR. ÖĞR. ÜYESİ ALEV CUMBUL
47	20190800100	ÜMİT ENES	GÜLER	DOÇ. DR. DENİZ KIRAÇ
48	20190800044	SİMA	GÜLLÜ	DR. ÖĞR. ÜYESİ MÜGE KOPUZ ALVAREZ NOVAL
49	20190800027	SERHUN TAYLAN	GÜLSOY	DR. ÖĞR. ÜYESİ ALEV CUMBUL
50	20190800075	MERT YAVUZ	GÜNERİ	DR. ÖĞR. ÜYESİ ALEV CUMBUL
51	20190800031	DESTİNA	GÜREL	DR. ÖĞR. ÜYESİ MÜGE KOPUZ ALVAREZ NOVAL

52	20190800066	ELİF	GÜRKAN	DOÇ. DR. DENİZ KIRAÇ
53	20180800037	MELİKE	GÜRTEKİN	PROF. DR. İNCİ ÖZDEN
54	20190800017	SEMA	HAMAD AMEEN	DR.ÖĞR. ÜYESİ AIKATERİNİ PANTELI
55	20190800129	JANA	HAMDAN	DR. ÖĞR. ÜYESİ MÜGE KOPUZ ALVAREZ NOVAL
56	20180800085	YAKUP	HANTA	DR. ÖĞR. ÜYESİ ARZU AKALIN
57	20200800016	AHMET ONUR	HİZAN	DOÇ. DR. AYLİN YABA UÇAR
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59	20180800103	HİLAL İZEL	İNCE	DR. ÖĞR. ÜYESİ BİLGE GÜVENÇ TUNA
60	20190800021	NİGAR	JAHEDE	DR.ÖĞR. ÜYESİ AIKATERİNİ PANTELI
61	20190800090	IRMAK	KANLIÇAY	DR. ÖĞR. ÜYESİ SERDAR ÖZDEMİR
62	20190800037	KAYRA	KAPRAN	DR. ÖĞR. ÜYESİ ARZU AKALIN
63	20200800142	SİDİKA MELINDA	KARA	DR. ÖĞR. ÜYESİ SERDAR ÖZDEMİR
64	20190800105	UMUT	KARADENİZ	DR. ÖĞR. ÜYESİ ERDEM SÖZTUTAR
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66	20190800068	ALİ YİĞİT	KARAORMAN	DR. ÖĞR. ÜYESİ ERDEM SÖZTUTAR
67	20200800143	HANDENUR	KAYMAN	DOÇ. DR. ÇAĞATAY ACUNER
68	20190800069	DOĞAN CAN	KILIÇARSLAN	DR. ÖĞR. ÜYESİ MÜGE KOPUZ ALVAREZ NOVAL
69	20190800092	TAN	KORAL	DR. ÖĞR. ÜYESİ ERDEM SÖZTUTAR
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71	20190800084	EGEMEN	LAÇIN	DR. ÖĞR. ÜYESİ ERDEM SÖZTUTAR
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78	20180800111	ADEVİYE	ÖZSOY	DOÇ. DR. BURCU GEMİCİ
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