

**YEDİTEPE UNIVERSITY**  
**FACULTY of MEDICINE**  
**PHASE II**  
**ACADEMIC PROGRAM BOOK**  
**2017 – 2018**

**Student's**

**Name** :.....

**Number** :.....



**YEDİTEPE UNIVERSITY  
FACULTY OF MEDICINE**

**PHASE II**

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# 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.

**COORDINATION COMMITTEE  
(TEACHING YEAR 2017 – 2018)**

Mehtap KAÇAR, MD, PhD, Assoc. Prof. (Coordinator)  
Alev CUMBUL, PhD, Assist. Prof. (Co-Coordinator)  
Burcu GEMİCİ BAŞOL, PhD, Assist. Prof. (Co-Coordinator)  
Erdem SÖZTUTAR, MD, Assist. Prof. (Co-Coordinator)  
Deniz KIRAÇ, PhD, Assist. Prof. (Co-Coordinator)

**ICP-II COORDINATION COMMITTEE**

Özlem TANRIÖVER, MD, Assoc. Prof. (Coordinator)  
A. Arzu AKALIN, MD, Assist. Prof. (Co-Coordinator)

**PBL COORDINATION COMMITTEE**

Sabri KEMAHLI, MD, Prof. (Coordinator)  
İbrahim Çağatay ACUNER MD, Assoc. Prof. (Coordinator)  
Serdar ÖZDEMİR, MD, PhD, Assist. 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, Endocrine and Urogenital System, Nervous System, Tissue Damage and Neoplasia, Introduction to Clinical Practice- II (ICP- II), Scientific Projects-II, Elective Course

Anatomy, Physiology, Biochemistry, Histology & Embryology, Microbiology, Immunology, Biophysics, Medical Biology, Pathology, Pharmacology, Biostatistics, Family Medicine, Medical Education, Elective Courses, Scientific Projects.

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

### **AIM**

**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 scientific project preparation

**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. describe writing, reporting, presentation and submission to publication phases of a research project.
- 7.0. comprehend the biopsychosocial approach in medicine.
- 8.0. know how to proceed and complete a scientific project

#### **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 technics and use equipments.
- 3.0. realize a scientific project

## **AIM and LEARNING OBJECTIVES of BASIC MEDICAL SCIENCES II (BMS-II) (MED203)**

### **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 project preparation

### **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. describe writing, reporting, presentation and submission to publication phases of a research project
- 7.0. know how to proceed and complete a scientific project
- 8.0. comprehend the biopsychosocial approach in medicine.

#### **SKILLS**

- 1.0. apply basic laboratory technics and basic medical examination.
- 2.0. realize a scientific project

## 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.

## INTRODUCTION to CLINICAL PRACTICE (ICP MED 202)

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

### Credit Facility:

This course has 5 ECTS credits for 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.

The faculty participating in the ICP II Program is shown below.

<b>MED 202 INTRODUCTION TO CLINICAL PRACTICE II</b>	
<b>DISCIPLINE</b>	<b>LECTURERS</b>
CLINICAL SKILLS LAB	Güldal İZBIRAK, MD Assoc. Prof. Özlem TANRIÖVER, MD, MPH Assoc. Prof. A. Arzu AKALIN, MD Assist. Prof. Serdar ÖZDEMİR, MD, Ph.D, Assist. Prof.

## **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:**

- a) YÜ Hospital
  1. Outpatient Clinic
  2. Inpatient Clinic
  3. Emergency Department
- b) Bağdat Cad. Outpatient Clinic
  1. Outpatient Clinic
  2. Emergency Department
- c) 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;

#### **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 :**

- Develops 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.

Dates	Group A	Group B	Group C	Group D
02.March.2018	Scientific Project SGS	FHC	Yeditepe University Hospital	ICP
09.March.2018	Yeditepe University Hospital	Scientific Project SGS	ICP	FHC
16.March.2018	FHC	ICP	Scientific Project SGS	Yeditepe University Hospital
23.March.2018	ICP	Yeditepe University Hospital	FHC	Scientific Project SGS
20.April.2018	ICP	Scientific Project SGS	FHC	Bağdat Cad. Outpatient Clinic
27.April.2018	Scientific Project SGS	ICP	Bağdat Cad. Outpatient Clinic	FHC
04.May.2018	FHC	Bağdat Cad. Outpatient Clinic	ICP	Scientific Project SGS
11.May.2018	Bağdat Cad. Outpatient Clinic	FHC	Scientific Project SGS	ICP

**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 Assoc. Prof.

A. Arzu AKALIN, MD Assist. Prof.



## SCIENTIFIC PROJECTS – II

The purpose of Scientific Projects class is to teach the medical students how to write and run a scientific project. Throughout the year, each Phase Two student is expected to prepare a scientific project proposal. Students are free to choose their research area and advisor for their prospective research project. Students who wish to apply for a “TUBITAK 2209-A National Grant Program for University Students” has to send in their final proposals before February 2018. The rest should hand in their proposal drafts during the small group studies which will be held in parallel with ICP hours. Please see the program. The students lists for small group studies will be announced during the first week of educational year. It is mandatory to attend to small groups studies (SP SGS) on days assigned to your group. All projects will be presented as posters at Scientific Day of Yeditepe School of Medicine, during May, 2018. Scientific Projects course has 4% contribution to Term Score (TS).

**SCIENTIFIC PROJECTS ASSESSMENT TABLE**

CRITERIA	Unsatisfactory	Below Expectations	Meets Expectations	Above Expectations	Clearly Outstanding	Not Addressed / Observed
Is the question/ problem presented clearly?	1	2	3	4	5	0
Creativity/originality of the Project	1	2	3	4	5	0
Is set up of the Project suitable to obtain aims?	1	2	3	4	5	0
Presentation of aims in an easy to understand format	1	2	3	4	5	0
Review of project proposal in light of literature	1	2	3	4	5	0
Proposal presentation in correct format	1	2	3	4	5	0
Does proposal explain the project's significance and contributions well?	1	2	3	4	5	0
Project calendar presentation	1	2	3	4	5	0
<b>TOTAL POINTS</b>	<b>40 x 2,5=100 pts (if all criteria has 5 points)</b>					

## ELECTIVE COURSES

Elective courses aim to provide 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. For further information on elective course contents, please see: <http://med.yeditepe.edu.tr/ders-programlari>

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>NUMBER</b>	<b>PERCENTAGE</b>
<b>Assessment</b>	Assignments	1	50
	Final Examination	1	50
	<b>Total</b>		<b>100</b>

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

<b>Code</b>	<b>Subject</b>		
<b>MED 614</b>	<b>Personal Trademark Development</b>		
<b>Goals</b>	The aim of this course is to equip the students with skills in creating personal image for successful business life and with appropriate behavior in social platforms.		
<b>Content</b>	Business Etiquette creation techniques and personal image methodologies with case studies.		
<b>Course Learning Outcomes</b>	<p>At the end of this course, the student should be able to</p> <ul style="list-style-type: none"> <li>• create personal brand for successful business life.</li> <li>• use behavioral codes for business etiquette.</li> </ul>		
<b>Assessment</b>		<b>NUMBER</b>	<b>PERCENTAGE</b>

	Midterm Exam (MCQ, Fill in the Blanks, T/F Questions, mostly based on case studies)	1	25
	Presentations and Reports (Interactive Team Work, Social Skills Development, based on subjects studied during classes and applications of them on MED areas & discussions after each presentation)	1	25
	Attendance (Showing interest to classes, performance during discussion times, performance during pair works, attending classes etc.)		5
	Quiz ((Short quizzes to keep students updated about lectures, prepare them to midterm & final, based on subjects studied in the class, Essay or MCQ)	3	5
	Final Exam (MCQ, Fill in the Blanks, T/F Questions, mostly based on case studies)	1	40
	<b>Total</b>		<b>100</b>

<b>Code</b>	<b>Subject</b>		
<b>MED 615</b>	<b>Innovation Management</b>		
<b>Goals</b>	The aim of this course is to convey to the students knowledge on innovative approaches for visionary life, describe the philosophy of futurism.		
<b>Content</b>	Strategies for futurism and applied case studies for personal innovation.		
<b>Course Learning Outcomes</b>	At the end of this course, the student should be able to <ul style="list-style-type: none"> <li>• use futuristic strategies to create innovative approaches.</li> <li>• use innovative and creative thinking techniques in professional life.</li> </ul>		
<b>Assessment</b>		<b>NUMBER</b>	<b>PERCENTAGE</b>
	Midterm Exam (MCQ, Fill in the Blanks, T/F Questions, mostly based on case studies)	1	25
	Presentations and Reports (Interactive Team Work, Social Skills Development, based on subjects studied during classes and applications of them on MED areas & discussions after each presentation)	1	25
	Attendance (Showing interest to classes, performance during discussion times, performance during pair works, attending classes etc.)		5
	Quiz ((Short quizzes to keep students updated about lectures, prepare them to midterm & final,	5	5

	based on subjects studied in the class, Essay or MCQ)		
	Final Exam (MCQ, Fill in the Blanks, T/F Questions, mostly based on case studies)	1	40
	<b>Total</b>	<b>8</b>	<b>100</b>

<b>Code</b>	<b>Subject</b>
<b>MED 616</b>	<b>Medical Management and New Services Design Skills</b>
<b>Goals</b>	The aim of this course is to develop leadership skills to manage a team and organizational skills in the case of emergency and lack of crew. Moreover, empathy skills will be developed to create better relationship with the patients, coworkers and customers.
<b>Content</b>	Leadership Styles, Skills needed in Med, Strategies for New Generation Leadership, Empathy Techniques, Problem Solving with Empathy, and Conciliation with Empathy.
<b>Course Learning Outcomes</b>	At the end of this course, the student should be able to <ul style="list-style-type: none"> <li>• develop leadership skills to manage teams.</li> <li>• use empathy techniques for conciliation with their patients and co-workers.</li> </ul>

		<b>NUMBER</b>	<b>PERCENTAGE</b>
<b>Assessment</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>

<b>Code</b>	<b>Subject</b>
<b>MED 617</b>	<b>Personal Brand Management Skills</b>
<b>Goals</b>	This course aims to teach how to deal with stress under different conditions. Besides, effective production skills under stress and time constraints will be subject of the course. This course also will be very helpful for career development. The tools will be offered to students for better communication, presentation and managerial skills.
<b>Content</b>	In the content of this course; stress and time management for effective production, personal goal settings, motivation and effective communication will be used. Breathing techniques, diction exercises and body language will help to improve student's personal development. Moreover, managerial skills development subjects will be held. Presentations and homework will be used as effective learning tools in this course.

<b>Course Learning Outcomes</b>	At the end of this course, the student should be able to <ul style="list-style-type: none"> <li>apply stress and time management skills in their personal development and career.</li> </ul>		
<b>Assessment</b>		<b>NUMBER</b>	<b>PERCENTAGE</b>
	Midterm Exam (MCQ, Fill in the Blanks, T/F Questions, mostly based on case studies)	1	25
	Presentations and Reports (Interactive Team Work, Social Skills Development, based on subjects studied during classes and applications of them on MED areas & discussions after each presentation)	1	25
	Attendance (Showing interest to classes, performance during discussion times, performance during pair works, attending classes etc.)		5
	Quiz ((Short quizzes to keep students updated about lectures, prepare them to midterm & final, based on subjects studied in the class, Essay or MCQ)	4	5
	Final Exam (MCQ, Fill in the Blanks, T/F Questions, mostly based on case studies)	1	40
<b>Total</b>		<b>100</b>	

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

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

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

## **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 I 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>Example</i>	<i>Example</i>	<i>Example</i>	<i>Example</i>
<i>Fever Cough Pallor</i>	<i>Throat infection Pneumonia Anemia</i>	<i>Throat examination Chest examination Chest X-ray Blood count</i>	<i>Causes of fever How is body temperature controlled? Anatomy of the throat Anatomy of lungs What is anemia?</i>

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.

### PBL STUDENT ASSESSMENT FORM\*

Student Name							
Phase/Committee							
PBL Scenario Name							
Tutor Name							
INTERACTION WITH GROUP / PARTICIPATION TO GROUP	Not observed	Poor	Fair	Average	Good	Excellent	Total Point of the Part
	0	1	2	3	4	5	
1. Starts discussion							
2. Contributes with valid questions and ideas							
3. Balances listening and speaking roles							
4. Communicates effectively in group work							
GAINING KNOWLEDGE	Not observed	Poor	Fair	Average	Good	Excellent	Total Point of the Part
	0	1	2	3	4	5	
5. Determines valid learning issues							
6. Finds valid sources							
7. Makes independent research on learning issues							
8. Shows understanding of the concepts and relationships							
COMMUNICATION/SHARING KNOWLEDGE	Not observed	Poor	Fair	Average	Good	Excellent	Total Point of the Part
	0	1	2	3	4	5	
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	<b>Session 1</b>	<b>Session 2</b>	<b>Session 3</b>
	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'

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

- Exams:
  - Committee Exam (CE)
  - Mid-term Exam (MTE) o
  - Final Exam (FE)
  - Incomplete Exam (ICE)
  - Make-up Exams (MUE)
- Scores\*:
  - Committee Score (CS)
  - Committees Mean Score (CMS)
  - Introduction to Clinical Practice Score (ICPS)
    - Early Clinical Exposure Score (ECES)
  - Scientific Project Score (SPS)
  - Elective Course Score (ECsS)
  - 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
		SbMCQ: Scenario-based MCQs	CE, MTE, FE, ICE	CS, ICPS, FES, ICES
		FSAQ: Fill-in-the-Blank Short Answer Questions	MuE	CS
Competency-based Assessment	OSCE: Objective Structured Clinical Examination	OSCE Checklist		ICPS
	OSPE: Objective Structured Practical Examination	OSPE Checklist		CS
	LPE: Laboratory Practical Exam	LPE Checklist		CS
Performance-based Assessment	PWPE: Project Writing and Presenting Evaluation	PWPE Checklist		SPS, ECsS
	PA: Portfolio Assessment	PA Checklist		ECES (ICPS)
	PBL-P: Evaluation of PBL Student's Performance	PBL Student Evaluation Form		CS



Exams Information (MED 203, MED 202)	
<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 assessment matrix table/page.
<b>ICE</b>	ICE consists of 200 MCQs. For the proportional contribution of each committee, please see the committee's assessment matrix table/page.
<b>MUE<sub>BMS</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 203, MED 202)	
<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 III, IV and V is <b>5%</b> .
<b>CMS</b>	= Average of CSs
<b>ICPS</b>	= (OSCE 1 %45)+(OSCE2 %45)+(ECE %10)
<b>ECSSs</b>	= Score information is shown pages of Elective Courses in the APB.
<b>SPS</b>	= Score information is shown in below Scientific Projects Assessment Table.
<b>FES</b>	= Final Exam Score
<b>ICES</b>	= Incomplete Exam Score
<b>TS</b> <i>for students, who are exempted from FE</i>	= 96% of CMS + 4% of SPS
<b>TS</b> <i>for students, who are not exempted from FE</i>	= 96% of (60% of CMS + 40% of FES or ICES) + 4% of SPS

Pass or Fail Calculations of the Courses
<b>Basic Medical Sciences (BMS) II (MED 203)</b>
<b>Pass; TS ≥ 50</b>
<b>Fail; FES &lt; 50 (barrier point), ICES &lt; 50 (barrier point), or/and TS &lt; 50</b>
<i>The student is exempted from FE, if the CMS is ≥ 75 and all CSs are ≥ 50</i>
<i>The FE and ICE barrier point is not applied to the students whose all CSs are ≥ 50</i>
<b>Introduction to Clinical Practise (ICP) II (MED 202)</b>
<b>Pass; ICPS ≥ 50</b>
<b>Fail; ICPS &lt; 50</b>
<b>Elective Courses</b>
<b>Pass; ECSs ≥ 50</b>
<b>Fail; ECSs &lt; 50</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 testing 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'.

**Portfolio** is a collection of work developed as a cumulative 'body of evidence' to demonstrate the student's learning and achievements. It is not an assessment method in its own right, rather a receptacle containing a mixture of materials. Each piece may be assessed individually and/or a mark or grade is awarded to the portfolio as a whole.

## 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.

**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)
10:00-10:50	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)
12:00-12:50	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 203 (B 310)	MED 202 (B 310)
15:00-15:50	MED 203 (B 310)	MED 203 (B 310)	MED 203 (B 310)	MED 203 (B 310)	MED 202 (B 310)
16:00-16:50	MED 203 (B 310)	MED 203 (B 310)	MED 203 (B 310)	Elective Course (SPRING)	MED 202 (B 310)
17:00-17:50	MED 203 (B 310)	MED 203 (B 310)	MED 203 (B 310)	Elective Course (SPRING)	MED 202 (B 310)

**COURSE CODES**

**MED 203** Basic Medical Sciences II (B 310) or Laboratories\*  
**MED 202** Introduction to Clinical Practice II (CSL)\*\* or (B 310)

**ELECTIVE COURSE CODES**

**MED 611** Medical Anthropology  
**MED 612** Creative Drama  
**MED 613** Medical Humanities  
**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 619** Storytelling Techniques  
**MED 620** Art, Culture and Life Style for HealthCare Members  
**MED 621** Epidemiology Journal Club

**CLASSES**

**B 310** Ground Floor  
**Elective Course Classess** Will be announced later

\* MED 203 Laboratory sessions will be in laboratories of related departments  
 \*\* MED 202 Practical Lectures will be in Clinical Skills Laboratory (CSL) (Ground Floor)

## ACADEMIC CALENDAR 2017 – 2018

### Basic Medical Sciences II

#### COMMITTEE I CARDIOVASCULAR SYSTEM (7 Weeks)

Beginning of Committee : September 6, 2017 Wednesday

End of Committee : October 20, 2017 Friday

Committee Exam : October 16-20, 2017 (Theoretical and Practical Exams)

Committee Exam Discussion : October 20, 2017

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

Beginning of Committee : October 23, 2017 Monday

End of Committee : December 01, 2017 Friday

Committee Exam : 27 November– 01 December, 2017 (Theoretical and Practical Exams)

Committee Exam Discussion : December 01, 2017

Commemoration of Atatürk : November 10, 2017

National Holiday : October: 29, 2017 Saturday

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

Beginning of Committee : December 04, 2017 Monday

End of Committee : January 19 , 2018 Friday

Committee Exam : January 15-19, 2018 (Theoretical and Practical Exams)

Committee Exam Discussion : January 19, 2018

New Year : January 1, 2018 Monday

MIDTERM BREAK : 22 JANUARY – 02 FEBRUARY, 2018

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

Beginning of Committee : February 05, 2018 Monday

End of Committee : March 30, 2018 Friday

Committee Exam : March 26-30, 2018 (Theoretical and Practical Exams)

Committee Exam Discussion : March 30, 2018

Physicians' Day : March 14, 2018, Wednesday

#### COMMITTEE V ENDOCRINE and UROGENITAL SYSTEMS (8 Weeks)

Beginning of Committee : April 02, 2018 Monday

End of Committee : May 25, 2018 Friday

Committee Exam : May 21-25, 2018 (Theoretical and Practical Exams)

Committee Exam Discussion : May 25, 2018

National Holiday : April 23, 2018 Monday

Labor's Day : May 1, 2018 Tuesday

National Holiday : May 19, 2018 Saturday

### Basic Medical Sciences II:

Make-up Exam : June 05-06, 2018 Tuesday-Wednesday

Final Exam : June 22, 2018 Friday

Incomplete Exam : July 13, 2018 Friday

**ICP II :**

Midterm Exam : February 09, 2018, Friday  
Make-up Exam : May 22, 2018, Tuesday  
Final Exam : May 28-29, 2018, Monday-Tuesday  
Incomplete Exam : July 16, 2018, Monday

**Elective Courses:** (Spring 2017-2018)

Midterm Exam: Apr 5, 2018, Thursday  
Final Exam: May 28, 2018 Monday  
Incomplete Exam: June 20, 2018 Wednesday

**Coordination Committee Meetings:**

- I. Coordination Committee Meeting: October, 18, 2017 14:00 Wednesday
- II. Coordination Committee Meeting: January, 10, 2018 14:00 Wednesday (with student participation)
- III. Coordination Committee Meeting: May 9, 2018 14:00 Wednesday (with student participation)
- IV. Coordination Committee Meeting: July, 4, 2018 14:00 Wednesday

### RECOMMENDED TEXTBOOKS

NO	DEPARTMENT	TEXTBOOK	AUTHOR	PUBLISHER
1	ANATOMY	Gray's Anatomy for Students	R.L. Drake et al	Churchill Livingstone
		Last's Anatomy: Regional and Applied, 12 th Edition	Chummy S. Sinnatamby	Churchill Livingstone
		A Textbook of Neuroanatomy 1st Edition	Maria Patestas, Leslie P. Gartner	
		Hollinshead's Textbook of Anatomy Fifth Edition	Cornelius Rosse, Penelope Gaddum-Rosse	
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 5th edition,.	Elsevier 2016	
7	MEDICAL BIOLOGY	Molecular Biology of the Cell	Bruce Alberts et al	Garland Science
8	MEDICAL ETICS	Clinical Bioethics: Theory and Practice in Medical-Ethical Decision Making	James E. Drane	Sheed & Ward
	MEDICAL HISTORY	Medical History for Students	John R. Green	Thomas
9	MEDICAL MICROBIOLOGY	Medical Microbiology: with Student Consult	P. R. Murray et al	Saunders
10	ORGANIC CHEMISTRY	Organic Chemistry	John E. McMurry	Cengage Learning
11	PATHOLOGY	Robbins Basic Pathology, 9th Edition	Vinay Kumar, Abul K. Abbas, and Jon Aster. ISBN: 978-1-4377-1781-5	
12	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 Companies, New York
		Principles of Pharmacology	Golan, D.E et al	Lippincott Williams & Wilkins
13	PHYSIOLOGY	Guyton Physiology	John E. Hall	Saunders
		Human Physiology	Stuart Fox	Mc-Graw-Hill Science

## COMMITTEES

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 (7 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)



**COMMITTEE I - CARDIOVASCULAR SYSTEM**  
**DISTRIBUTION of LECTURE HOURS**  
**September 6 - October 20, 2017**  
**COMMITTEE DURATION: 7 WEEKS**

		THEORETICAL	PRACTICAL	TOTAL
<b>MED 203</b>	<b>BASIC MEDICAL SCIENCES II</b>	<b>119</b>	<b>27</b>	<b>146</b>
	<b>DISCIPLINE</b>			
	ANATOMY	14	2Grx4H	18
	BIOCHEMISTRY	14	3Grx2H	16
	BIOPHYSICS	10	0	10
	BIOSTATISTICS	2	0	2
	HISTOLOGY & EMBRYOLOGY	11	2Grx5H	16
	IMMUNOLOGY	16	0	16
	MEDICAL BIOLOGY	4	0	4
	PATHOLOGY	9	0	9
	PHYSIOLOGY	35	3Grx10H	45
	SCIENTIFIC PROJECTS-II	2	4GrX3H	5

<b>MED 202</b>	<b>INTRODUCTION TO CLINICAL PRACTICE- II</b>	4GrX 1H	4GrX 2H	3
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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, PhD. MD. Assoc. Prof.
	<b>Member</b>	Akif MAHARRAMOV, PhD. Assist. Prof.

**COMMITTEE I - CARDIOVASCULAR SYSTEM  
LECTURERS**

<b>MED 203 BASIC MEDICAL SCIENCES II</b>	
<b>DISCIPLINE</b>	<b>LECTURERS</b>
	ERDEM SÖZTUTAR, MD. Assist. Prof. Aikaterini PANTELİ, MD. Lecturer. LAB: Sinem GERGİN, MD LAB: Edibe BİLİŞLİ, DVM
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.
BIOSTATISTICS	E. Çiğdem ALTUNOK, PhD Assist. Prof.
HISTOLOGY & EMBRYOLOGY	Alev CUMBUL, PhD Assist. Prof. Oya ALAGÖZ, MD. Assist. Prof. Aylin YABA UÇAR, PhD Assist. Prof.
IMMUNOLOGY	Gülderen YANIKKAYA DEMİREL, MD PhD Assoc. Prof.
MEDICAL BIOLOGY	Turgay İSBİR, PhD Prof. Soner DOĞAN, PhD Assoc. Prof. Deniz KIRAÇ, PhD Assist. Prof.
PATHOLOGY	Ferda ÖZKAN, MD. Prof. Işın DOĞAN EKİCİ, MD. Prof.
PHYSIOLOGY	Bayram YILMAZ, PhD Prof. Mehtap KAÇAR, MD PhD Assoc. Prof . Burcu GEMİCİ BAŞOL, PhD Assist. Prof.
SCIENTIFIC PROJECTS-II	Gülderen YANIKKAYA DEMİREL, MD PhD Assoc. Prof.

<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. Serdar ÖZDEMİR, MD, 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 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.
- 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 including breast
  - 4.1. describe their anatomy,
  - 4.2. associate with adjacent tissue and organs,
  - 4.3. explain their functional and clinical reflections.
- 5.0. For cardiovascular system;
  - 5.1. explain developmental stages,
  - 5.2. list embryological origins of organs,
  - 5.3. associate the relation between major birth abnormalities and developmental process.
- 6.0. list lymphatic organs of cardiovascular system and histological properties of blood.
- 7.0. explain hemodynamics of cardiovascular system and electrical activity of heart by biophysical mechanisms.
- 8.0. describe the structure, functions, synthesis and degradation of hemoglobin.
- 9.0. describe erythrocyte-specific metabolisms.
- 10.0. describe formation, differentiation and functions of blood cells.
- 11.0. describe physiopathology of diseases, such as anemia, leukemia, hemophilia.
- 12.0. describe heart rhythm, cardiac output and cardiac cycle.
- 13.0. describe nervous (autonomous) control of cardiovascular system.
- 14.0. explain functions of cardiovascular system.
- 15.0. explain functions and dynamics of circulatory system.
- 16.0. explain measurements of hematocrit, blood group analysis, blood pressure and ECG methods.
- 17.0. For immune system;
  - 17.1. explain development and differentiation of immune cells,

- 17.2. relate changes with diseases,
- 17.3. describe the properties of immune response.
- 18.0. For hemodynamic changes;
  - 18.1. explain mechanisms of development,
  - 18.2. describe mechanisms for cellular damage,
  - 18.3. describe pathologies occurring due to cell and tissue damage.
- 19.0. describe the factors that determine pathology as a basic science.
- 20.0. explain the factors of tissue damage
- 21.0. describe the pathological consequences and interactions of cellular injury on the cell and tissue morphology with examples.
- 22.0. describe examples of pathological consequences of immune response.
- 23.0. explain the factors that affect the clinical course and outcome of cell injury
- 24.0. list disorders resulting from hemodynamic changes.
- 25.0. describe how to write a scientific project proposal
- 26.0. prepare a research project draft.
- 27.0. count biostatistical sampling methods.
- 28.0. count significance tests in biostatistics.

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

LEARNING OBJECTIVES	DISCIPLINE	LECTURER/ INSTRUCTOR	DISTRUBITION of MCQs			
			CE	FE	IE	TOTAL
3.0-4.0	ANATOMY	Dr. E. Söztutar Dr. A. Panteli	13	6	6	25
8.0-10.0	BIOCHEMISTRY	Dr. İ. Özden	12	5	5	22
1.0	BIOPHYSICS	Dr. A. Maharramov	9	3	3	15
27.0-28.0	BIostatISTICS	Dr. Ç. Altunok	1	0	0	1
5.0-6.0	HISTOLOGY & EMBRYOLOGY	Dr. A. Cumbul Dr. A. Yaba Uçar	10	4	4	18
17.0	IMMUNOLOGY	Dr. G. Yanıkkaya Demirel	14	6	6	26
2.0	MEDICAL BIOLOGY	Dr. T. İsbir Dr. D. Kıraç	3	1	1	5
18.0-24.0	PATHOLOGY	Dr. F. Özkan	8	3	3	14
7.0-16.0	PHYSIOLOGY	Dr. B. Yılmaz Dr. M. Kaçar Dr. B. Gemicci Başol	30	12	12	54
<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	30				
8.0-10.0	BIOCHEMISTRY	10				
5.0-6.0	HISTOLOGY & EMBRYOLOGY	20				
7.0-16.0	PHYSIOLOGY	40				
<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) = 90% CE (MCQ) + 10% (LPE)**

**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, **40** out of 200 FE and ICE MCQs will be from Committee I (Each question is 0.5 pt, equal value)

**COMMITTEE I - CARDIOVASCULAR SYSTEM**  
I. WEEK / 12 – 16 Sep 2017

	<b>Monday 04-Sep-2017</b>	<b>Tuesday 05-Sep-2017</b>	<b>Wednesday 06-Sep-2017</b>	<b>Thursday 07-Sep-2017</b>	<b>Friday 08-Sep-2017</b>
<b>09.00- 09.50</b>			<b>Introductory Session</b> Introduction to Phase II <i>Phase II Coordination Committee</i> Introduction to Committee I <i>Secretary of Committee</i>	<b>Independent Learning</b>	<b>Lecture</b> Functions of Hemoglobin <i>Inci Özden</i>
<b>10.00- 10.50</b>		<b>Lecture</b> Functions of blood <i>Burcu Gemici</i>	<b>Lecture</b> Functions of Hemoglobin <i>Inci Özden</i>		
<b>11.00- 11.50</b>		<b>Lecture</b> Porphin, Porphyrins, Heme, Hemoglobin, Structure of Hemoglobin <i>Inci Özden</i>	<b>Lecture</b> Erythrocytes <i>Burcu Gemici</i>		
<b>12.00- 12.50</b>		<b>Lecture</b> Porphin, Porphyrins, Heme, Hemoglobin, Structure of Hemoglobin <i>Inci Özden</i>	<b>Lecture</b> Erythrocytes <i>Burcu Gemici</i>		
<b>13.00- 13.50</b>	<b>Lunch Break</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> Introduction to Immunology <i>Gülderen Yanıkkaya Demirel</i>	<b>Lecture</b> Hematopoiesis and Development of Immune System <i>Gülderen Yanıkkaya Demirel</i>	<b>Lecture</b> Introduction to Bioelectromagnetics Electric Field <i>Akif Maharramov</i>
<b>15.00- 15.50</b>			<b>Independent Learning</b>	<b>Lecture</b> Hematopoiesis and Development of Immune System <i>Gülderen Yanıkkaya Demirel</i>	<b>Lecture</b> Introduction to Bioelectromagnetics Magnetic Field <i>Akif Maharramov</i>
<b>16.00- 16.50</b>			<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>	

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

**COMMITTEE I - CARDIOVASCULAR SYSTEM**  
**II. WEEK / 11 – 15 Sep 2017**

	<b>Monday 11-Sep-2017</b>	<b>Tuesday 12-Sep-2017</b>	<b>Wednesday 13-Sep-2017</b>	<b>Thursday 14-Sep-2017</b>	<b>Friday 15-Sep-2017</b>		
<b>09.00- 09.50</b>	<b>Lecture</b> Leukocytes <i>Burcu Gemici</i>	<b>Lecture</b> Introduction to Cardiovascular System <i>Aikaterini Panteli</i>	<b>Lecture</b> Innate Immunity <i>Gülderen Yanıkkaya Demirel</i>	<b>Laboratory / Physiology</b> Hematocrit Determination and Blood Typing & Bleeding Time <i>Bayram Yılmaz &amp; Mehtap Kaçar</i>	<b>Lecture</b> How to Write a Scientific Project <i>Gülderen Yanıkkaya Demirel</i>		
<b>10.00- 10.50</b>	<b>Lecture</b> Leukocytes <i>Burcu Gemici</i>	<b>Lecture</b> Pericardium and Outer Surface of the Heart <i>Aikaterini Panteli</i>	<b>Lecture</b> Innate Immunity <i>Gülderen Yanıkkaya Demirel</i>	<b>Group B</b>	<b>Group A, C I.L</b>	<b>Lecture</b> How to Write a Scientific Project <i>Gülderen Yanıkkaya Demirel</i>	
<b>11.00- 11.50</b>	<b>Lecture</b> Thoracic Cavity & Mediastinum <i>Aikaterini Panteli</i>	<b>Lecture</b> Lymphocytes and the Immune System <i>Bayram Yılmaz &amp; Mehtap Kaçar</i>	<b>Lecture</b> Blood Types and Transfusion Reactions <i>Bayram Yılmaz &amp; Mehtap Kaçar</i>	<b>Group B, C I.L</b>	<b>Group A</b>	<b>Lecture</b> Sampling, Data Collection and Data Processing <i>E. Çiğdem Altunok</i>	
<b>12.00- 12.50</b>	<b>Lecture</b> Thoracic Cavity & Mediastinum <i>Aikaterini Panteli</i>	<b>Lecture</b> Platelets and Coagulation <i>Bayram Yılmaz &amp; Mehtap Kaçar</i>	<b>Lecture</b> Blood Types and Transfusion Reactions <i>Bayram Yılmaz &amp; Mehtap Kaçar</i>			<b>Lecture</b> Statistical Decision Theory, Test of Hypothesis and Significance <i>E. Çiğdem Altunok</i>	
<b>13.00- 13.50</b>	<b>Lunch Break</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> Synthesis of Hemoglobin, Disorders Concerning Synthesis of Hemoglobin <i>Inci Özden</i>	<b>Laboratory / Anatomy</b> Thoracic Wall, Cavity and Mediastinum <i>Aikaterini Panteli</i>	<b>Lecture</b> Histology of Lymph Organs; General Aspects, Thymus and Lymph Node <i>Aylin Yaba Uçar</i>	<b>Laboratory / Physiology</b> Hematocrit Determination and Blood Typing & Bleeding Time <i>Bayram Yılmaz &amp; Mehtap Kaçar</i>	<b>ICP / CSL: Hand Washing &amp; Wearing Sterile Gloves Özlem Tanrıöver/ Serdar Özdemir Group A</b>	<b>Group B SP SGS</b>	<b>Group C, D I.L</b>
<b>15.00- 15.50</b>	<b>Lecture</b> Synthesis of Hemoglobin, Disorders Concerning Synthesis of Hemoglobin <i>Inci Özden</i>	<b>Group A IL</b>	<b>Group B</b>	<b>Lecture</b> Histology of Lymph Organs; Spleen and MALT (Tonsils) <i>Aylin Yaba Uçar</i>			
<b>16.00- 16.50</b>	<b>Lecture</b> Introduction to Pathology <i>Ferda Özkan</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>	<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**  
**III. WEEK / 18 – 22 Sep 2017**

	<b>Monday 18-Sep-2017</b>	<b>Tuesday 19-Sep-2017</b>	<b>Wednesday 20-Sep-2017</b>	<b>Thursday 21-Sep-2017</b>	<b>Friday 22-Sep-2017</b>		
<b>09.00- 09.50</b>	<b>Lecture</b> Chambers of the Heart <i>Aikaterini Panteli</i>	<b>Lecture</b> Coronary arteries, Cardiac Veins, and Cardiac Conduction System <i>Aikaterini Panteli</i>	<b>Lecture</b> Adaptations <i>Ferda Özkan</i>	<b>Laboratory / Histology</b> Histology of Lymph Organs <i>Alev Cumbul &amp; Aylin Yaba Uçar</i>	<b>Lecture</b> Adaptive Immunity <i>Gülderen Yanıkkaya Demirel</i>		
<b>10.00- 10.50</b>	<b>Lecture</b> Chambers of the Heart <i>Aikaterini Panteli</i>	<b>Lecture</b> Coronary arteries, Cardiac Veins, and Cardiac Conduction System <i>Aikaterini Panteli</i>	<b>Lecture</b> Adaptations <i>Ferda Özkan</i>	<b>Group A</b>	<b>Group B Independent Learning</b>	<b>Lecture</b> Adaptive Immunity <i>Gülderen Yanıkkaya Demirel</i>	
<b>11.00- 11.50</b>	<b>Lecture</b> Regulation of Cardiac Function <i>Bayram Yılmaz &amp; Mehtap Kaçar</i>	<b>Lecture</b> Rhythmical Excitation of the Heart <i>Bayram Yılmaz &amp; Mehtap Kaçar</i>	<b>Lecture</b> Principles of Electrocardiography <i>Bayram Yılmaz &amp; Mehtap Kaçar</i>	<b>Group A Independent Learning</b>	<b>Group B</b>	<b>Lecture</b> Principles of Hemodynamics <i>Bayram Yılmaz &amp; Mehtap Kaçar</i>	
<b>12.00- 12.50</b>	<b>Lecture</b> Regulation of Cardiac Function <i>Bayram Yılmaz &amp; Mehtap Kaçar</i>	<b>Lecture</b> Rhythmical Excitation of the Heart <i>Bayram Yılmaz &amp; Mehtap Kaçar</i>	<b>Lecture</b> Electrocardiographic Interpretation of Cardiac Abnormalities <i>Bayram Yılmaz &amp; Mehtap Kaçar</i>			<b>Lecture</b> Principles of Hemodynamics <i>Bayram Yılmaz &amp; Mehtap Kaçar</i>	
<b>13.00- 13.50</b>	<b>Lunch Break</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> Degradation of Hemoglobin <i>Inci Özden</i>	<b>Lecture</b> Great Vessels of the Heart <i>Aikaterini Panteli</i>	<b>Lecture</b> Histology of Circulatory Systems; Gn Spec. Arteries <i>Aylin Yaba Uçar</i>	<b>Lecture</b> Cardiac Arrhythmias <i>Bayram Yılmaz &amp; Mehtap Kaçar</i>	<b>ICP / CSL: Hand Washing &amp; Wearing Sterile Gloves Özlem Tannıöver/ Serdar Özdemir Group B</b>	<b>Group A SP SGS</b>	<b>Group C, D I.L</b>
<b>15.00- 15.50</b>	<b>Lecture</b> Degradation of Hemoglobin <i>Inci Özden</i>	<b>Lecture</b> Major Vessels of the Body <i>Aikaterini Panteli</i>	<b>Lecture</b> Histology of Circulatory Systems; Capillaries & Veins <i>Aylin Yaba Uçar</i>	<b>Lecture</b> Cardiac Arrhythmias <i>Bayram Yılmaz &amp; Mehtap Kaçar</i>			
<b>16.00-16.50</b>	<b>Laboratory / Anatomy</b> Pericardium, Outer Surface and Chambers of the Heart <i>Aikaterini Panteli</i>	<b>Laboratory / Anatomy</b> Coronary Arteries, Cardiac Veins, Cardiac Conduction System, Great Vessels of Heart and Body <i>Aikaterini Panteli</i>	<b>Lecture</b> Antigen Antibody Interaction <i>Gülderen Yanıkkaya Demirel</i>	<b>Independent Learning</b>			
	<b>Group B</b>	<b>Group A I.L</b>	<b>Group A</b>	<b>Group B I.L</b>			
<b>17.00-17.50</b>	<b>Group B I.L</b>	<b>Group A</b>	<b>Group A I.L</b>	<b>Group B</b>	<b>Lecture</b> Antigen Antibody Interaction <i>Gülderen Yanıkkaya Demirel</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**  
**IV. WEEK / 25 – 29 Sep 2017**

	<b>Monday 25-Sep-2017</b>	<b>Tuesday 26-Sep-2017</b>	<b>Wednesday 27-Sep-2017</b>	<b>Thursday 28-Sep-2017</b>		<b>Friday 29-Sep-2017</b>		
<b>09.00- 09.50</b>	<b>Lecture</b> Disorders Concerning Hemoglobin Metabolism <i>Inci Özden</i>	<b>Lecture</b> Vascular Distensibility and Functions of Arterial and Venous Systems <i>Bayram Yılmaz &amp; Mehtap Kaçar</i>	<b>Lecture</b> Hyperemia & Congestion <i>Ferda Özkan</i>	<b>Laboratory / Biochemistry</b> Peripheral Blood Smear <i>Jale Çoban &amp; Müge Kopuz</i> <b>Group B</b>	<b>Laboratory / Physiology</b> ECG I <i>Bayram Yılmaz &amp; Mehtap Kaçar</i> <b>Group A</b>	<b>Group C I.L</b>	<b>Lecture</b> Introduction to Bioelectromagnetics: Electromagnetic Field <i>Akif Maharramov</i>	
<b>10.00- 10.50</b>	<b>Lecture</b> Disorders Concerning Hemoglobin Metabolism <i>Inci Özden</i>	<b>Lecture</b> Vascular Distensibility and Functions of Arterial and Venous Systems <i>Bayram Yılmaz &amp; Mehtap Kaçar</i>	<b>Lecture</b> Hyperemia & Congestion <i>Ferda Özkan</i>				<b>Lecture</b> Bioelectromagnetic Effects on the Heart <i>Akif Maharramov</i>	
<b>11.00- 11.50</b>	<b>Lecture</b> Microcirculation and the Lymphatic System <i>Bayram Yılmaz &amp; Mehtap Kaçar</i>	<b>Lecture</b> Coronary Circulation <i>Bayram Yılmaz &amp; Mehtap Kaçar</i>	<b>Lecture</b> Cellular Immunity <i>Gülderen Yanıkkaya Demirel</i>	<b>Group A</b>	<b>Group B</b>		<b>Lecture</b> Regulation of Blood Pressure <i>Bayram Yılmaz &amp; Mehtap Kaçar</i>	
<b>12.00- 12.50</b>	<b>Lecture</b> Capillary Fluid Exchange, Interstitial Fluid, and Lymph Flow <i>Bayram Yılmaz &amp; Mehtap Kaçar</i>	<b>Invited Speaker</b>	<b>Lecture</b> Cellular Immunity <i>Gülderen Yanıkkaya Demirel</i>				<b>Lecture</b> Regulation of Blood Pressure <i>Bayram Yılmaz &amp; Mehtap Kaçar</i>	
<b>13.00- 13.50</b>	<b>Lunch Break</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> Ischemia and Infarction <i>Ferda Özkan</i>	<b>Laboratory/ Physiology</b> ECG I <i>Bayram Yılmaz &amp; Mehtap Kaçar</i>	<b>Lecture</b> Development of Circulatory System; Endocardial Tube Formation & Looping <i>Alev Cumbul</i>	<b>Lecture</b> Local and Humoral Control of Blood Flow by the Tissues <i>Bayram Yılmaz &amp; Mehtap Kaçar</i>		<b>ICP / CSL: Hand Washing &amp; Wearing Sterile Gloves</b> <i>Arzu Akalin / Serdar Özdemir</i> <b>Group C</b>	<b>Group D SP SGS</b>	<b>Group A, B I.L</b>
<b>15.00- 15.50</b>	<b>Lecture</b> Ischemia and Infarction <i>Ferda Özkan</i>	<b>Group C</b>	<b>Group A, B I.L</b>	<b>Lecture</b> Development of Circulatory Systems; Septation <i>Alev Cumbul</i>	<b>Lecture</b> Local and Humoral Control of Blood Flow by the Tissues <i>Bayram Yılmaz &amp; Mehtap Kaçar</i>			
<b>16.00- 16.50</b>	<b>Independent Learning</b>	<b>Independent Learning</b>	<b>Independent Learning</b>	<b>Laboratory / Biochemistry</b> Peripheral Blood Smear <i>Jale Çoban &amp; Müge Kopuz</i>		<b>Independent Learning</b>		
<b>17.00-17.50</b>	<b>Independent Learning</b>	<b>Independent Learning</b>	<b>Independent Learning</b>	<b>Group C</b>	<b>Group A, B I.L</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 Oct 2017**

	Monday 02-Oct-2017	Tuesday 03-Oct-2017	Wednesday 04-Oct-2017	Thursday 05-Oct-2017	Friday 06-Oct-2017
09.00- 09.50	<b>Lecture</b> Humoral Immunity <i>Gülderen Yanıkkaya Demirel</i>	Lymphatic System <b>Laboratory / Anatomy</b> <i>Aikaterini Panteli</i>	<b>Lecture</b> Congenital Heart Anomalies <i>Alev Cumbul</i>	<b>Laboratory / Physiology</b> ECG-II <i>Bayram Yılmaz &amp; Mehtap Kaçar</i>	<b>Lecture</b> Erythrocytes <i>İnci Özden</i>
		Group A	Group B I.L		
10.00- 10.50	<b>Lecture</b> Humoral Immunity <i>Gülderen Yanıkkaya Demirel</i>	Group A I.L	Group B	Group A	Group B I.L
11.00- 11.50	<b>Lecture</b> Heart Valves and Heart Sounds <i>Bayram Yılmaz &amp; Mehtap Kaçar</i>	<b>Lecture</b> Oxygen, Oxidative Stress, NO, Redox Disequilibrium in the Failing Heart and Cardiovascular System <i>Deniz Kıraç</i>	<b>Lecture</b> Nervous Regulation of the Circulation <i>Bayram Yılmaz &amp; Mehtap Kaçar</i>	<b>Laboratory / Physiology</b> ECG-II <i>Bayram Yılmaz &amp; Mehtap Kaçar</i>	<b>Lecture</b> Cardiac Failure <i>Bayram Yılmaz &amp; Mehtap Kaçar</i>
12.00- 12.50	<b>Lecture</b> Heart Valves and Heart Sounds <i>Bayram Yılmaz &amp; Mehtap Kaçar</i>	<b>Lecture</b> Oxygen, Oxidative Stress, NO, Redox Disequilibrium in the Failing Heart and Cardiovascular System <i>Deniz Kıraç</i>	<b>Lecture</b> Nervous Regulation of the Circulation <i>Bayram Yılmaz &amp; Mehtap Kaçar</i>	Group C	Group A,B I.L
13.00- 13.50	<b>Lunch Break</b>	<b>Lunch Break</b>	<b>Lunch Break</b>	<b>Lunch Break</b>	<b>Lunch Break</b>
14.00- 14.50	<b>Lecture</b> Introduction to Lymphatic System <i>Aikaterini Panteli</i>	<b>Lecture</b> Fetal circulation <i>Aikaterini Panteli</i>	<b>Laboratory / Physiology</b> ECG-II <i>Bayram Yılmaz &amp; Mehtap Kaçar</i>	<b>Lecture</b> Biophysics of Hemodynamics <i>Akif Maharramov</i>	ICP / CSL: ICP Hand Washing & Wearing Sterile Gloves <i>Arzu Akalin/ Serdar Özdemir</i> Group D
15.00- 15.50	<b>Lecture</b> Circulation of Lymph <i>Aikaterini Panteli</i>	<b>Lecture</b> Review of the Cardiovascular System <i>Aikaterini Panteli</i>	Group A, C I.L	Group B	
16.00- 16.50	<b>Independent Learning</b>	<b>Independent Learning</b>	<b>Independent Learning</b>	<b>Independent Learning</b>	Group A, B I.L
17.00-17.50	<b>Independent Learning</b>	<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.

**COMMITTEE I - CARDIOVASCULAR SYSTEM**  
**VI. WEEK / 09 – 13 Oct 2017**

	<b>Monday 09-Oct-2017</b>	<b>Tuesday 10-Oct-2017</b>	<b>Wednesday 11-Oct-2017</b>	<b>Thursday 12-Oct-2017</b>	<b>Friday 13-Oct-2017</b>				
<b>09.00- 09.50</b>	<b>Lecture</b> Leucocyte Circulation and Migration into Tissues <i>Gülderen Yanıkkaya Demirel</i>	<b>Lecture</b> Biophysics of Cardiac Muscle Contraction <i>Akif Maharramov</i>	<b>Lecture</b> Immunology of Heart and Vessels <i>Gülderen Yanıkkaya Demirel</i>	<b>Laboratory / Histology</b> Histology of the Cardiovascular System <i>Alev Cumbul &amp; Aylin Yaba Uçar</i>	<b>Lecture</b> Hemorheology <i>Akif Maharramov</i>				
<b>10.00- 10.50</b>	<b>Lecture</b> Development of Circulatory Systems; Veins and Anomalies <i>Alev Cumbul</i>	<b>Lecture</b> Biophysics of Blood Pressure <i>Akif Maharramov</i>	<b>Lecture</b> Immunology of Heart and Vessels <i>Gülderen Yanıkkaya Demirel</i>	<b>Group A</b> I.L	<b>Group B</b>	<b>Lecture</b> Hemorheology <i>Akif Maharramov</i>			
<b>11.00- 11.50</b>	<b>Lecture</b> Blood Coagulation, Primary Hemostasis <i>Inci Özden</i>	<b>Lecture</b> Hemodynamics <i>Ferda Özkan</i>	<b>Lecture</b> Development of Head; Splanchnocranium, Neurocranium <i>Aylin Yaba Uçar</i>	<b>Group A</b>	<b>Group B I.L</b>	<b>Lecture</b> Hemorrhage and Thrombosis <i>Ferda Özkan</i>			
<b>12.00- 12.50</b>	<b>Lecture</b> Secondary hemostasis, Procoagulation, Anticoagulation, Fibrinolysis <i>Inci Özden</i>	<b>Lecture</b> Hemodynamics <i>Ferda Özkan</i>	<b>Lecture</b> Development of Neck; Pharyngeal Arches and Anomalies <i>Aylin Yaba Uçar</i>			<b>Lecture</b> Hemorrhage and Thrombosis <i>Ferda Özkan</i>			
<b>13.00- 13.50</b>	<b>Lunch Break</b>	<b>Lunch Break</b>	<b>Lunch Break</b>	<b>Lunch Break</b>	<b>Lunch Break</b>				
<b>14.00-14.50</b>	<b>Laboratory / Physiology</b> Blood Pressure <i>Bayram Yılmaz &amp; Mehtap Kaçar</i>	<b>Laboratory / Physiology</b> Blood Pressure <i>Bayram Yılmaz &amp; Mehtap Kaçar</i>	<b>Laboratory / Physiology</b> Heart Sounds <i>Bayram Yılmaz &amp; Mehtap Kaçar</i>	<b>Laboratory / Physiology</b> Heart Sounds <i>Bayram Yılmaz &amp; Mehtap Kaçar</i>	<b>Lecture</b> Biological Basis of Cardiovascular Diseases; Death Begets Failure in the Heart <i>Turgay İsbir</i>				
<b>15.00- 15.50</b>	<b>Group A</b>	<b>Group B, C</b> I.L	<b>Group C</b>	<b>Group A, B</b> I.L	<b>Group A, C</b> I.L	<b>Group B</b>	<b>Group C</b>	<b>Group A, B</b> I.L	<b>Lecture</b> Biological Basis of Cardiovascular Diseases; Death Begets Failure in the Heart <i>Turgay İsbir</i>
<b>16.00- 16.50</b>	<b>Group A, C</b> I.L	<b>Group B</b>	<b>Independent Learning</b>	<b>Group A</b>	<b>Group B, C I.L</b>	<b>Laboratory / Histology Review Session</b> <i>Alev Cumbul &amp; Aylin Yaba Uçar</i>		<b>Independent Learning</b>	
<b>17.00-17.50</b>						<b>Independent Learning</b>	<b>Group A</b> I.L		<b>Group B</b>

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**COMMITTEE I - CARDIOVASCULAR SYSTEM  
VII. WEEK / 16 – 20 Oct 2017**

	Monday 16-Oct-2017	Tuesday 17-Oct-2017	Wednesday 18-Oct-2017	Thursday 19-Oct-2017	Friday 20-Oct-2017
09.00- 09.50	<b>Assessment Session (Practical Exam)</b>	<b>Independent Learning</b>	<b>Independent Learning</b>	<b>Independent Learning</b>	<b>Independent Learning</b>
10.00- 10.50					<b>Assessment Session Committee I (MCQ)</b>
11.00- 11.50					
12.00- 12.50					
13.00- 13.50	<b>Lunch Break</b>	<b>Lunch Break</b>	<b>Lunch Break</b>	<b>Lunch Break</b>	<b>Lunch Break</b>
14.00- 14.50	<b>Assessment Session (Practical Exam)</b>	<b>Independent Learning</b>	<b>Independent Learning</b>	<b>Independent Learning</b>	<b>Program Evaluation Session</b> Review of the Exam Questions, Evaluation of the Committee I Program <i>Secretary of Committee</i>
15.00- 15.50					<b>Independent Learning</b>
16.00- 16.50					
17.00-17.50					

**COMMITTEE II - RESPIRATORY SYSTEM**  
**DISTRIBUTION of LECTURE HOURS**  
**October 23– December 01, 2017**  
**COMMITTEE DURATION: 6 WEEKS**

		THEORETICAL	PRACTICAL	TOTAL
<b>MED 203</b>	<b>BASIC MEDICAL SCIENCES II</b>	<b>96</b>	<b>28</b>	<b>124</b>
	<b>DISCIPLINE</b>			
	ANATOMY	12	2Grx3H	15
	BIOPHYSICS	4	0	4
	BIOSTATISTICS	4	0	4
	HISTOLOGY & EMBRYOLOGY	6	2Grx3H	9
	IMMUNOLOGY	8	0	8
	MEDICAL GENETIC	16	0	16
	MEDICAL MICROBIOLOGY	25	2GRx14H	39
	PATHOLOGY	5	0	5
	PHYSIOLOGY	16	3Grx2H	18
	SCIENTIFIC PROJECTS-II	0	4GrX3H	3

<b>MED 202</b>	<b>INTRODUCTION TO CLINICAL PRACTICE- II</b>	4GrX1H	4GrX2H	3
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<b>Coordination Committee</b>	<b>Head</b>	Mehtap KAÇAR, MD PhD. Assoc. Prof.
	<b>Secretary</b>	Alev CUMBUL, PhD. Assist.Prof.
	<b>Member</b>	Bariş Ata BORSA, MD. Assist. Prof.
	<b>Member</b>	Deniz YAT KIRAÇ, PhD. Assist. Prof.

**COMMITTEE II - RESPIRATORY SYSTEM  
LECTURERS**

<b>MED 203 BASIC MEDICAL SCIENCES II</b>	
<b>DISCIPLINE</b>	<b>LECTURERS</b>
	Erdem SÖZTUTAR, MD, Assist. Prof. Aikaterini PANTELİ, MD. Lecturer LAB: Sinem GERGİN, MD LAB: Edibe BİLİŞLİ, DVM
BIOPHYSICS	Akif MAHARRAMOV, PhD Assist. Prof. Bilge GÜVENÇ TUNA, PhD Assist. Prof.
BIOSTATISTICS	E.Çiğdem ALTUNOK, PhD Assist. Prof.
HISTOLOGY & EMBRYOLOGY	Alev CUMBUL, PhD Assist. Prof. Oya ALAGÖZ, MD Assist. Prof. Aylin YABA UÇAR PhD Assist. Prof.
IMMUNOLOGY	Gülderen YANIKKAYA DEMIREL, MD, PhD Assoc. Prof.
MEDICAL GENETIC	Ömer Faruk BAYRAK, PhD Assoc. Prof.
MEDICAL MICROBIOLOGY	İbrahim Çağatay ACUNER MD. Assoc. Prof. Barış Ata BORSA MD. Assist. Prof.
PATHOLOGY	Ferda ÖZKAN, MD Prof. Işın DOĞAN EKİCİ, MD Prof.
PHYSIOLOGY	Bayram YILMAZ, PhD Prof. Mehtap KAÇAR, MD PhD Assoc. Prof. Burcu GEMİCİ BAŞOL, PhD Assist. Prof.
SCIENTIFIC PROJECTS-II	Gülderen YANIKKAYA DEMIREL, MD PhD Assoc. Prof.

<b>MED 202 INTRODUCTION TO CLINICAL PRACTICE II</b>	
<b>DISCIPLINE</b>	<b>LECTURERS</b>
CLINICAL SKILLS LAB	Serdar ÖZDEMİR, MD, PhD, Assist. Prof. M. Ferudun ÇELİKMEN, MD, Assist. Prof. Pınar TURA, MD, Assist. Prof. Barış Murat AYVACI, MD 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 about microbiology 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,
  - 3.2. list embryological origins of organs,
  - 3.3. associate the relation between major birth abnormalities and developmental process.
- 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. For human flora;
  - 14.1 describe the flora,
  - 14.2 explain its relation to clinical conditions.
- 15.0. Describe the structural/biological features and pathogenesis of bacteria.
- 16.0. list methods used in protection from microorganisms.
- 17.0. For endogenous and exogenous harmful agents;
  - 17.1. describe their mechanisms of cell and tissue damage,
  - 17.2. describe adaptation process of cells.

- 18.0. list pathologies resulting from endogenous and exogenous harmful agents and consequently emerging diseases.
- 19.0. describe how to write a scientific project proposal.
- 20.0. prepare a research project draft.
- 21.0. count significance tests in biostatistics.
- 22.0. count biostatistical sampling methods.
- 23.0. choose significance tests according to the properties of biostatistical data.
- 24.0. 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			
			CE	FE	IE	TOTAL
2.0, 24.0.	ANATOMY	Dr. E. Söztutar Dr. A. Panteli	14	4	4	22
1.0, 24.0	BIOPHYSICS	Dr. A. Maharramov	4	1	1	6
21.0 - 23.0	BIOSTATISTICS	Dr. Ç. Altunok	4	1	1	6
3.0	HISTOLOGY & EMBRYOLOGY	Dr. A. Cumbul	6	2	2	10
12.0	IMMUNOLOGY	Dr. G. Yanıkkaya Demirel	8	3	3	14
13.0	MEDICAL GENETIC	Dr. Ö.F. Bayrak	16	6	6	28
14.0-16.0	MEDICAL MICROBIOLOGY	Dr. İ. Ç. Acuner	26	9	9	44
17.0-18.0	PATHOLOGY	Dr. I. Ekici	5	2	2	9
4.0-11.0, 24.0.	PHYSIOLOGY	Dr. B. Yılmaz Dr. M. Kaçar Dr. B. G. Başol	16	6	6	28
24.0	PBL		1	0	0	1
<b>TOTAL</b>			<b>100</b>	<b>34/200<sup>#</sup></b>	<b>34/200<sup>#</sup></b>	<b>168</b>
LEARNING OBJECTIVES			DISTRUBITION of LAB ASSESSMENT POINTS			
DISCIPLINE			LPE			
2.0	ANATOMY		25			
3.0	HISTOLOGY & EMBRYOLOGY		15			
14.0-16.0	MEDICAL MICROBIOLOGY		45			
4.0-11.0	PHYSIOLOGY		15			
<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**

**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, **34** out of 200 FE and ICE MCQs will be from Committee I (Each question is 0.5 pt, equal value)

**COMMITTEE II - RESPIRATORY SYSTEM**  
I. WEEK / 23 – 27 Oct 2017

	Monday 23-Oct-2017	Tuesday 24-Oct-2017	Wednesday 25-Oct-2017	Thursday 26-Oct-2017	Friday 27-Oct-2017	
09.00- 09.50	<b>PBL Session</b>	<b>Lecture</b> Pulmonary Ventilation <i>Bayram Yılmaz &amp; Mehtap Kaçar</i>	<b>Lecture</b> Signal Transduction in Immune System <i>Gülderen Yanıkkaya Demirel</i>	<b>Laboratory / Microbiology</b> Principles and Procedures of Laboratory Safety <i>Microbiology Instructors</i>	<b>Lecture</b> Introduction to Medical Genetics <i>Ömer Faruk Bayrak</i>	
10.00- 10.50		<b>Lecture</b> Pulmonary Ventilation <i>Bayram Yılmaz &amp; Mehtap Kaçar</i>	<b>Lecture</b> Bacterial Classification <i>İ. Çağatay Acuner</i>	<b>Group A</b>	<b>Group B I.L</b>	<b>Lecture</b> Introduction to Medical Genetics <i>Ömer Faruk Bayrak</i>
11.00- 11.50		<b>Lecture</b> The Pharynx <i>Erdem Söztutar</i>	<b>Lecture</b> Bacterial Classification <i>İ. Çağatay Acuner</i>	<b>Group A I.L</b>	<b>Group B</b>	<b>Lecture</b> Pulmonary Circulation, Pulmonary Edema, Pleural Fluid <i>Bayram Yılmaz &amp; Mehtap Kaçar</i>
12.00- 12.50	Introduction to Committee II Secretary of Committee	<b>Lecture</b> The Pharynx <i>Erdem Söztutar</i>	<b>Lecture</b> Histology of The Upper Respiratory Tract <i>Alev Cumbul</i>			<b>Lecture</b> Pulmonary Circulation, Pulmonary Edema, Pleural Fluid <i>Bayram Yılmaz &amp; Mehtap Kaçar</i>
13.00- 13.50	<b>Lunch Break</b>	<b>Lunch Break</b>	<b>Lunch Break</b>	<b>Lunch Break</b>	<b>Lunch Break</b>	
14.00- 14.50	<b>Lecture</b> Introduction to Respiratory System <i>Erdem Söztutar</i>	<b>Lecture</b> The Larynx <i>Erdem Söztutar</i>	<b>Lecture</b> Histology of the Upper Respiratory Tract <i>Alev Cumbul</i>	<b>Lecture</b> Principle of Surface Tension & Alveolar Mechanic <i>Akif Maharramov</i>	<b>ICP</b> <i>CSL: Vital Signs M Ferudun Çelikmen &amp; Serdar Özdemir</i> <b>Group C</b> <b>Group D SP SGS</b> <b>Group A, B I.L</b>	
15.00- 15.50	<b>Lecture</b> Nasal Anatomy and Paranasal Sinuses <i>Erdem Söztutar</i>	<b>Lecture</b> The Larynx <i>Erdem Söztutar</i>	<b>Independent Learning</b>	<b>Lecture</b> Principle of Surface Tension & Alveolar Mechanic <i>Akif Maharramov</i>		
16.00- 16.50	<b>Lecture</b> Introduction to Medical Microbiology <i>İ. Çağatay Acuner</i>	<b>Laboratory / Anatomy</b> Upper Respiratory System: Nose, Paranasal Sinuses, Pharynx and Larynx <i>Erdem Söztutar</i>	<b>Independent Learning</b>	<b>Independent Learning</b>		
17.00-17.50	<b>Lecture</b> Sterilization and Disinfection <i>İ. Çağatay Acuner</i>	<b>Group A</b>			<b>Group B I.L</b>	<b>Independent Learning</b>
		<b>Group A I.L</b>	<b>Group B</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 II - RESPIRATORY SYSTEM  
II. WEEK / 30 Oct– 03 Nov 2017**

	Monday 30-Oct-2017	Tuesday 31-Oct-2017	Wednesday 01-Nov-2017	Thursday 02-Nov-2017	Friday 03-Nov-2017	
09.00- 09.50	Independent Learning	PBL Session	Lecture Bacterial Pathogenesis <i>Çağatay Acuner</i>	Laboratory / Microbiology Collection, Storage and Transport of Specimens <i>Microbiology Instructors</i>	Lecture Regulation of Respiration <i>Bayram Yılmaz &amp; Mehtap Kaçar</i>	
10.00- 10.50	Lecture Transport of Blood Gases <i>Bayram Yılmaz &amp; Mehtap Kaçar</i>		Lecture Bacterial Pathogenesis <i>Çağatay Acuner</i>	Group B	Group A I.L	Lecture Regulation of Respiration <i>Bayram Yılmaz &amp; Mehtap Kaçar</i>
11.00- 11.50	Lecture Transport of Blood Gases <i>Bayram Yılmaz &amp; Mehtap Kaçar</i>		Lecture Diffusion of Blood Gases <i>Bayram Yılmaz &amp; Mehtap Kaçar</i>	Group B I.L	Group A	Lecture Growth and Cultivation of Bacteria <i>Barış Ata Borsa</i>
12.00- 12.50	Lecture The Trachea <i>Erdem Söztutar</i>	PBL PANEL	Lecture Diffusion of Blood Gases <i>Bayram Yılmaz &amp; Mehtap Kaçar</i>			Lecture Microbiome <i>Barış Ata Borsa</i>
13.00- 13.50	Lunch Break	Lunch Break	Lunch Break	Lunch Break	Lunch Break	
14.00- 14.50	Lecture Bacterial Genetics <i>Çağatay Acuner</i>	Lecture The lungs <i>Erdem Söztutar</i>	Lecture Histology of The Respiratory Systems; Conducting Part <i>Alev Cumbul</i>	Lecture The Human Genome and Chromosomal Basis of Heredity <i>Ömer Faruk Bayrak</i>	ICP CSL:Vital Signs <i>Barış Murat Ayyavacı &amp; Serdar Özdemir</i> Group D Group C SP SGS Group A, B, I.L	
15.00- 15.50	Lecture Bacterial Genetics <i>Çağatay Acuner</i>	Lecture The Lungs <i>Erdem Söztutar</i>	Lecture Histology of The Respiratory Systems; Respiratory Part <i>Alev Cumbul</i>	Lecture Cytogenetics and Chromosomal Disorders <i>Ömer Faruk Bayrak</i>		
16.00- 16.50	Independent Learning	Laboratory / Anatomy Lower respiratory system: Trachea and lungs <i>Erdem Söztutar</i>	Lecture Test Hypotheses and Significance in Large Samples <i>E. Çiğdem Altunok</i>	Lecture Test Hypotheses and Significance in Large Samples <i>E. Çiğdem Altunok</i>		
17.00-17.50	Independent Learning	Group A	Group I.L	Lecture Test Hypotheses and Significance in Large Samples <i>E. Çiğdem Altunok</i>	Lecture Test Hypotheses and Significance in Large Samples <i>E. Çiğdem Altunok</i>	Independent Learning

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**COMMITTEE II - RESPIRATORY SYSTEM**  
**III. WEEK / 06 – 10 Nov 2017**

	Monday 06-Nov-2017	Tuesday 07-Nov-2017	Wednesday 08-Nov-2017	Thursday 09-Nov-2017	Friday 10-Nov-2017		
09.00- 09.50	<b>Independent Learning</b>	<b>Lecture</b> Cellular Injury and Necrosis <i>Işın Doğan Ekici</i>	<b>Lecture</b> Mycobacteria <i>Bariş Ata Borsa</i>	<b>Laboratory / Histology</b> Histology of Respiratory System <i>Alev Cumbul &amp; Aylin Yaba Uçar</i>	<b>Commemoration of Atatürk</b>		
10.00- 10.50	<b>Lecture</b> Aviation, High-Altitude and Space Physiology <i>Bayram Yılmaz &amp; Mehtap Kaçar</i>	<b>Lecture</b> Cellular Injury and Necrosis <i>Işın Doğan Ekici</i>	<b>Lecture</b> Aerobic Actinomycetes <i>Bariş Ata Borsa</i>	<b>Group A Independent Learning</b>		<b>Group B</b>	
11:00-11:50	<b>Lecture</b> Physiology of Deep-Sea Diving and Hyperbaric Conditions <i>Bayram Yılmaz &amp; Mehtap Kaçar</i>	<b>Lecture</b> Gram Positive Cocci <i>Çağatay Acuner</i>	<b>Lecture</b> Pulmonary Innate Immune Response <i>Gülderen Yanıkkaya Demirel</i>	<b>Group A</b>		<b>Group B Independent Learning</b>	
12:00-12:50	<b>Lecture</b> Pleura and Diaphragm <i>Erdem Söztutar</i>	<b>Lecture</b> Gram Positive Cocci <i>Çağatay Acuner</i>	<b>Lecture</b> Pulmonary Innate Immune Response <i>Gülderen Yanıkkaya Demirel</i>				
13.00- 13.50	<b>Lunch Break</b>	<b>Lunch Break</b>	<b>Lunch Break</b>	<b>Lunch Break</b>		<b>Lunch Break</b>	
14.00- 14.50	<b>Lecture</b> Pleura and Diaphragm <i>Erdem Söztutar</i>	<b>Lecture</b> Introduction to Pathophysiology of Respiratory System <i>Bayram Yılmaz &amp; Mehtap Kaçar</i>	<b>Lecture</b> Development of The Respiratory Systems & Anomalies <i>Alev Cumbul</i>	<b>Lecture</b> Gram Positive Aerobic Bacilli <i>Bariş Ata Borsa</i>	<b>ICP</b> <b>CSL: Vital Signs</b> <b>Pinar Tura &amp; Serdar Özdemir</b> <b>Group B</b>	<b>Group A SP SGS</b>	<b>Group C, D I.L</b>
15.00- 15.50	<b>Lecture</b> Review of the Respiratory System <i>Erdem Söztutar</i>	<b>Lecture</b> Introduction to Pathophysiology of Respiratory System <i>Bayram Yılmaz &amp; Mehtap Kaçar</i>	<b>Lecture</b> Development of The Respiratory Systems & Anomalies <i>Alev Cumbul</i>	<b>Lecture</b> Non-fermenters <i>Bariş Ata Borsa</i>			
16.00- 16.50	<b>Laboratory / Anatomy</b> Pleura and Diaphragm <i>Erdem Söztutar</i>	<b>Independent Learning</b>	<b>Independent Learning</b>	<b>Independent Learning</b>			
	<b>Group A</b>	<b>Group B I.L</b>					
17.00-17.50	<b>Group A I.L</b>	<b>Group B</b>	<b>Independent Learning</b>	<b>Independent Learning</b>	<b>Independent Learning</b>	<b>Independent Learning</b>	

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**COMMITTEE II - RESPIRATORY SYSTEM**  
**IV. WEEK / 13 – 17 Nov 2017**

	<b>Monday 13-Nov-2017</b>	<b>Tuesday 14-Nov-2017</b>	<b>Wednesday 15-Nov-2017</b>	<b>Thursday 16-Nov-2017</b>	<b>Friday 17-Nov-2017</b>		
<b>09.00- 09.50</b>	<b>Lecture</b> Enterobacteriaceae <i>Bariş Ata Borsa</i>	<b>Lecture</b> Developmental Genetics and Birth Defects <i>Ömer Faruk Bayrak</i>	<b>Lecture</b> Other Gram Negative Bacilli-I <i>Bariş Ata Borsa</i>	<b>Laboratory / Physiology</b> Spirometry <i>Bayram Yılmaz &amp; Mehtap Kaçar</i>	<b>Lecture</b> Pulmonary Adaptive Immune Response <i>Gülderen Yanıkkaya Demirel</i>		
<b>10.00- 10.50</b>	<b>Lecture</b> Enterobacteriaceae <i>Bariş Ata Borsa</i>	<b>Lecture</b> Developmental Genetics and Birth Defects <i>Ömer Faruk Bayrak</i>	<b>Lecture</b> Other Gram Negative Bacilli- II <i>Bariş Ata Borsa</i>	<b>Group A</b>	<b>Group B, C I.L</b>	<b>Lecture</b> Pulmonary Adaptive Immune Response <i>Gülderen Yanıkkaya Demirel</i>	
<b>11.00- 11.50</b>	<b>Lecture</b> Patterns of Single Gene Inheritance <i>Ömer Faruk Bayrak</i>	<b>Lecture</b> Gram Negative Cocci <i>Bariş Ata Borsa</i>	<b>Lecture</b> Injury by Endogenous Substances <i>Işın Doğan Ekici</i>	<b>Group A, C I.L</b>	<b>Group B</b>	<b>Lecture</b> Molecular Basis of Genetic Diseases <i>Ömer Faruk Bayrak</i>	
<b>12.00- 12.50</b>	<b>Lecture</b> Patterns of Single Gene Inheritance <i>Ömer Faruk Bayrak</i>	<b>Lecture</b> Gram Negative Cocci <i>Bariş Ata Borsa</i>	<b>Independent Learning</b>			<b>Lecture</b> Tools of Human Molecular Genetics <i>Ömer Faruk Bayrak</i>	
<b>13.00- 13.50</b>	<b>Lunch Break</b>	<b>Lunch Break</b>	<b>Lunch Break</b>	<b>Lunch Break</b>	<b>Lunch Break</b>		
<b>14.00- 14.50</b>	<b>Laboratory / Microbiology</b> Microscopy Methods in Diagnostic Microbiology <i>Microbiology Instructors</i>	<b>Laboratory / Microbiology</b> Culture Methods in Diagnostic Microbiology <i>Microbiology Instructors</i>	<b>Lecture</b> Anaerobic Bacteria <i>Bariş Ata Borsa</i>	<b>Laboratory / Physiology</b> Spirometry <i>Bayram Yılmaz &amp; Mehtap Kaçar</i>	<b>ICP: Vital Signs CSL: Şimşek &amp; Serdar Özdemir Group A</b>	<b>Group B SP SGS</b>	
<b>15.00- 15.50</b>	<b>Group A</b>	<b>Group B I.L</b>	<b>Group B</b>	<b>Group A I.L</b>	<b>Lecture</b> Anaerobic Bacteria <i>Bariş Ata Borsa</i>	<b>Group C</b>	<b>Group A, B I.L</b>
<b>16.00- 16.50</b>	<b>Group A I.L</b>	<b>Group B</b>	<b>Group B I.L</b>	<b>Group A</b>	<b>Independent Learning</b>	<b>Laboratory / Histology</b> Review Session <i>Alev Cumbul &amp; Aylin Yaba Uçar</i>	<b>Group B I.L</b>
<b>17.00-17.50</b>				<b>Independent Learning</b>	<b>Group A I.L</b>	<b>Group B</b>	<b>Independent Learning</b>

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**COMMITTEE II - RESPIRATORY SYSTEM**  
**V. WEEK / 20 – 24 Nov 2017**

	<b>Monday 20-Nov-2017</b>	<b>Tuesday 21-Nov-2017</b>	<b>Wednesday 22-Nov-2017</b>	<b>Thursday 23-Nov-2017</b>	<b>Friday 24-Nov-2017</b>			
<b>09.00- 09.50</b>	<b>Lecture</b> Sports Physiology <i>Mehtap Kaçar</i>	<b>Lecture</b> Injury by Toxic Substances and Pneumoconiosis <i>Işın D. Ekici</i>	<b>Lecture</b> Infection and Immunity <i>Gülderen Yanıkkaya Demirel</i>	<b>Laboratory / Microbiology</b> Microscopy and Culture Methods in Diagnostic Mycobacteria <i>Microbiology Instructors</i>	<b>Lecture</b> Modeling in Circulatory & Respiratory Systems <i>Akif Maharramov</i>			
<b>10.00- 10.50</b>	<b>Lecture</b> Sports Physiology <i>Mehtap Kaçar</i>	<b>Lecture</b> Injury by Toxic Substances and Pneumoconiosis <i>Işın D. Ekici</i>	<b>Lecture</b> Diagnostic Methods in Microbiology <i>Çağatay Acuner</i>	<b>Group B</b>	<b>Group A I.L</b>	<b>Lecture</b> Modeling in Circulatory & Respiratory Systems <i>Akif Maharramov</i>		
<b>11.00- 11.50</b>	<b>Lecture</b> Cancer Genetics and Genomics <i>Ömer Faruk Bayrak</i>	<b>Lecture</b> Mycoplasma, Chlamydia, Rickettsia <i>Bariş Ata Borsa</i>	<b>Lecture</b> Treatment of Genetic Disease - Introduction to Gene Therapy <i>Ömer Faruk Bayrak</i>	<b>Group B I.L</b>	<b>Group A</b>	<b>Lecture</b> Infection and Immunity <i>Gülderen Yanıkkaya Demirel</i>		
<b>12.00- 12.50</b>	<b>Lecture</b> Cancer Genetics and Genomics <i>Ömer Faruk Bayrak</i>	<b>Lecture</b> Mycoplasma, Chlamydia, Rickettsia <i>Bariş Ata Borsa</i>	<b>Lecture</b> Treatment of Genetic Disease - Introduction to Gene Therapy <i>Ömer Faruk Bayrak</i>			<b>Lecture</b> Infection and Immunity <i>Gülderen Yanıkkaya Demirel</i>		
<b>13.00- 13.50</b>	<b>Lunch Break</b>	<b>Lunch Break</b>	<b>Lunch Break</b>	<b>Lunch Break</b>	<b>Lunch Break</b>			
<b>14.00- 14.50</b>	<b>Laboratory / Microbiology</b> Identification Methods in Diagnostic Microbiology <i>Microbiology Instructors</i>	<b>Laboratory / Physiology</b> Exercise and Metabolism <i>Mehtap Kacar &amp; Burcu Gemici</i>	<b>Laboratory / Physiology</b> Exercise and Metabolism <i>Mehtap Kacar &amp; Burcu Gemici</i>	<b>Lecture</b> Genetics of Complex Diseases <i>Ömer Faruk Bayrak</i>	<b>Invited Speaker</b>			
<b>15.00- 15.50</b>	<b>Group A</b>	<b>Group B I.L</b>	<b>Group C</b>	<b>Group B, A I.L</b>	<b>Group A</b>	<b>Group B, C I.L</b>	<b>Lecture</b> Genetics of Complex Diseases <i>Ömer Faruk Bayrak</i>	<b>Independent Learning</b>
<b>16.00- 16.50</b>	<b>Group A I.L</b>	<b>Group B</b>	<b>Group A, C I.L</b>	<b>Group B</b>	<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>	

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**COMMITTEE II - RESPIRATORY SYSTEM  
VI. WEEK / 27 Nov – 01 Dec 2017**

	<b>Monday 27-Nov-2017</b>	<b>Tuesday 28-Nov-2017</b>	<b>Wednesday 29-Nov-2017</b>	<b>Thursday 30-Nov-2017</b>	<b>Friday 01-Dec-2017</b>
09.00- 09.50	<b>Assessment Session (Practical Exam)</b>	<b>Independent Learning</b>	<b>Independent Learning</b>	<b>Independent Learning</b>	<b>Independent Learning</b>
10.00- 10.50					<b>Assessment Session Committee II (MCQ)</b>
11.00- 11.50					
12.00- 12.50					
13.00- 13.50	<b>Lunch Break</b>	<b>Lunch Break</b>	<b>Lunch Break</b>	<b>Lunch Break</b>	<b>Lunch Break</b>
14.00- 14.50	<b>Assessment Session (Practical Exam)</b>	<b>Independent Learning</b>	<b>Independent Learning</b>	<b>Independent Learning</b>	<b>Program Evaluation Session</b> Review of the Exam Questions, Evaluation of the Committee II Program <i>Secretary of Committee</i>
15.00- 15.50					
16.00- 16.50					
17.00- 17.50					<b>Independent Learning</b>

**COMMITTEE III - GASTROINTESTINAL SYSTEM and METABOLISM**  
**DISTRIBUTION of LECTURE HOURS**  
**December 4, 2017 – January 19, 2018**  
**COMMITTEE DURATION: 7 WEEKS**

		THEORETICAL	PRACTICAL	TOTAL
<b>MED 203</b>	<b>BASIC MEDICAL SCIENCES II</b>	<b>115</b>	<b>25</b>	<b>140</b>
	<b>DISCIPLINE</b>			
	ANATOMY	20	2Grx7H	27
	BIOCHEMISTRY	32	3Grx3H	35
	BIOPHYSICS	10	0	10
	BIostatISTICS	4	0	4
	HISTOLOGY & EMBRYOLOGY	9	2Grx5H	14
	IMMUNOLOGY	2	0	2
	MEDICAL BIOLOGY	6	0	6
	MEDICAL MICROBIOLOGY	16	2Grx2H	18
	PHYSIOLOGY	16	3Grx2H	18
	SCIENTIFIC PROJECTS-II	0	6Grx3H	3

<b>MED 202</b>	<b>INTRODUCTION TO CLINICAL PRACTICE- II</b>	4 GrX1 + 2 GrX1	4 GrX2 + 2 GrX2	6 / 3
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<b>Coordination Committee</b>	<b>Head</b>	İnci ÖZDEN, PhD. Prof.
	<b>Secretary</b>	Burcu GEMİCİ BAŞOL, PhD. Assist.Prof.
	<b>Member</b>	Erdem SÖZTUTAR, MD. Assist. Prof.
	<b>Member</b>	Oya ALAGÖZ, MD Assist. Prof.



**COMMITTEE III - GASTROINTESTINAL SYSTEM and METABOLISM  
LECTURERS**

<b>MED 203 BASIC MEDICAL SCIENCES II</b>	
<b>DISCIPLINE</b>	<b>LECTURERS</b>
	Erdem SOZTUTAR,MD. Assist. Prof. Aikaterini PANTELİ, Lecturer. Dr LAB: Sinem GERGİN, MD LAB: Edibe BİLİŞLİ, DVM
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.
BIOSTATISTICS	E.Çiğdem ALTUNOK, PhD. Assist. Prof.
HISTOLOGY & EMBRYOLOGY	Alev CUMBUL, PhD. Assist. Prof. Oya ALAGÖZ, MD. Assist. Prof. Aylin YABA UÇAR, PhD. Assist. Prof.
IMMUNOLOGY	Gülderen YANIKKAYA DEMIREL, MD, PhD. Assoc. Prof.
MEDICAL BIOLOGY	Turgay İSBİR, PhD. Prof. Soner DOĞAN, PhD. Assoc. Prof. Deniz KIRAÇ, PhD. Assist. Prof.
MICR BIOLOGY	Çağatay ACUNER, MD. Assoc.Prof. Barış Ata BORSA, MD. Assist. Prof.
PHYSIOLOGY	Bayram YILMAZ, PhD. Prof. Mehtap KAÇAR, MD. PhD. Assoc. Prof. Burcu GEMİCİ BAŞOL, PhD. Assist. Prof.
SCIENTIFIC PROJECTS-II	Gülderen YANIKKAYA DEMIREL, MD, PhD. Assoc. Prof.

<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.

## 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 fungi and 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.
- 3.0. For oral cavity, temporomandibular joint, chewing muscles, pharynx, esophagus, stomach, small intestine, large intestine, liver, gall bladder and tracts, pancreas, spleen and peritoneum;
  - 3.1. describe the anatomy,
  - 3.2. associate with adjacent tissue and organs,
  - 3.3. explain their functional and clinical reflections.
- 4.0. For abdominal wall, inguinal canal and portal system;
  - 4.1. describe anatomy,
  - 4.2. associate with adjacent tissue and organs,
  - 4.3. explain their functional and clinical reflections.
- 5.0. For digestive system and related glands;
  - 5.1. classify embryological origins, developmental stages and histological properties,
  - 5.2. associate the relation between birth abnormalities and developmental processes.
- 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 fungi and parasites.
- 13.0 describe the properties of mucosal immunity
- 14.0 describe how to write a scientific project proposal.
- 15.0 prepare a research project draft.
- 16.0 count significance tests in biostatistics.
- 17.0 count biostatistical sampling methods.
- 18.0 choose significance tests according to the properties of biostatistical data.
- 19.0 explain case scenario related basic medical science topics in a clinical context.

**COMMITTEE III - GASTROINTESTINAL SYSTEM and METABOLISM**

**COMMITTEE ASSESSMENT MATRIX**

LEARNING OBJECTIVES	DISCIPLINE	LECTURER/ INSTRUCTOR	DISTRUBITION of MCQs			
			CE	FE	IE	TOTAL
3.0.-4.0.	ANATOMY	Dr. E. Söztutar Dr. A. Panteli	18	8	8	34
6.0, 8.0.-11.0., 19.0	BIOCHEMISTRY	Dr. İ. Özden	25	10	10	45
1.0., 19.0	BIOPHYSICS	Dr. A. Maharramov	8	3	3	14
16.0-18.0	BIOSTATISTICS	Dr. E.Ç. Altunok	3	1	1	5
5.0.	HISTOLOGY & EMBRYOLOGY	Dr. A. Cumbul Dr. A. Yaba Uçar	8	3	3	14
13.0.	IMMUNOLOGY	Dr. G. Yanikkaya Demirel	2	1	1	4
2.0.	MEDICAL BIOLOGY	Dr. S.Doğan	4	1	1	6
12.0.	MEDICAL MICROBIOLOGY	Dr. Ç. Acuner Dr. B. A. Borsa	15	6	6	27
7.0, 19.0	PHYSIOLOGY	Dr. B. Yilmaz Dr. M. Kaçar Dr. B.Gemici Başol	16	7	7	30
19.0	PBL		1	0	0	1
TOTAL			100	40/200 <sup>#</sup>	40/200 <sup>#</sup>	180

LEARNING OBJECTIVES	DISCIPLINE	DISTRUBITION of LAB ASSESSMENT POINTS	
		LPE	
3.0-4.0	ANATOMY	40	
6.0, 8.0.-11.0.	BIOCHEMISTRY	15	
5.0.	HISTOLOGY & EMBRYOLOGY	25	
12.0.	MICROBIOLOGY	10	
7.0.	PHYSIOLOGY	10	
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) + 10% (LPE)] + 5% of PBL-P**

**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, 40 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 / 04 – 08 Dec 2017

	<b>Monday 04-Dec-2017</b>	<b>Tuesday 05-Dec-2017</b>	<b>Wednesday 06-Dec-2017</b>	<b>Thursday 07-Dec-2017</b>	<b>Friday 08-Dec-2017</b>
<b>09.00- 09.50</b>	<b>PBL</b>	<b>Lecture</b> Oral Cavity <i>Yüksel Aydar</i>	<b>Lecture</b> Histology of Upper Gastrointestinal Tract; Oral Cavity, Tongue <i>Alev Cumbul</i>	<b>Independent Learning</b>	<b>Lecture</b> Cholesterol metabolism <i>İnci Özden</i>
<b>10.00- 10.50</b>		<b>Lecture</b> Oral Cavity <i>Yüksel Aydar</i>	<b>Lecture</b> Histology of Alimentary Canal; Intestines <i>Alev Cumbul</i>	<b>Independent Learning</b>	<b>Lecture</b> Cholesterol metabolism <i>İnci Özden</i>
<b>11.00- 11.50</b>		<b>Lecture</b> Digestion and Absorption of Lipids <i>İnci Özden</i>	<b>Lecture</b> Introduction to Mycology <i>Çağatay Acuner</i>	<b>Laboratory / Biochemistry</b> Lipid Determination in Blood <i>Jale Çoban &amp; Müge Kopuz</i>	<b>Lecture</b> Energy Transformation & Distribution in Bio-molecular Systems <i>Akif Maharramov</i>
<b>12.00- 12.50</b>	Introduction to Committee III Secretary of Committee	<b>Lecture</b> Digestion and Absorption of Lipids <i>İnci Özden</i>	<b>Lecture</b> Fungal and Parasitic Pathogenesis <i>Çağatay Acuner</i>	<b>Group A</b>	<b>Group B, C I.L.</b>
<b>13.00- 13.50</b>	<b>Lunch Break</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> Overall Developmental Anatomy of the Digestive System <i>Erdem Söztutar</i>	<b>Laboratory / Anatomy</b> Oral cavity <i>Erdem Söztutar</i>	<b>Lecture</b> Gastrointestinal Functions <i>Burcu Gemici Başol</i>	<b>Lecture</b> Transport of Lipids in Plasma <i>İnci Özden</i>	<b>ICP</b> <b>CSL: Nasogastric Administration</b> <b>Özlem Tannırover &amp; Arzu Akalin</b>
<b>15.00- 15.50</b>	<b>Lecture</b> Overall Developmental Anatomy of the Digestive System <i>Erdem Söztutar</i>	<b>Group A, I.L.</b>   <b>Group B</b>	<b>Lecture</b> Gastrointestinal Functions <i>Burcu Gemici Başol</i>	<b>Lecture</b> Transport of Lipids in Plasma <i>İnci Özden</i>	
<b>16.00- 16.50</b>	<b>Independent Learning</b>	<b>Independent Learning</b>	<b>Independent Learning</b>	<b>Lecture</b> Bio-thermodynamics, Laws of Thermodynamics <i>Akif Maharramov</i>	<b>Group B SP SGS</b>
<b>17.00-17.50</b>			<b>Independent Learning</b>	<b>Lecture</b> The Zeroth and First Laws of Thermodynamics <i>Akif Maharramov</i>	

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

**COMMITTEE III - GASTROINTESTINAL SYSTEM and METABOLISM**  
**II. WEEK / 11 – 15 Dec 2017**

	<b>Monday 11-Dec-2017</b>	<b>Tuesday 12-Dec-2017</b>	<b>Wednesday 13-Dec-2017</b>	<b>Thursday 14-Dec-2017</b>	<b>Friday 15-Dec-2017</b>	
09.00- 09.50	<b>PBL Session</b>	<b>Lecture</b> Lipogenesis, Triacylglycerol Synthesis <i>Inci Özden</i>	<b>Lecture</b> Superficial/ Subcutaneous Mycosis <i>Çağatay Acuner</i>	<b>Independent Learning</b>		<b>Lecture</b> Small Intestine <i>Yüksel Aydar</i>
10.00- 10.50		<b>Lecture</b> Lipogenesis, Triacylglycerol Synthesis <i>Inci Özden</i>	<b>Lecture</b> Systemic Mycosis <i>Çağatay Acuner</i>	<b>Independent Learning</b>		<b>Lecture</b> Small Intestine <i>Yüksel Aydar</i>
11.00- 11.50		<b>Lecture</b> The Esophagus <i>Yüksel Aydar</i>	<b>Lecture</b> Secretary Functions of the Alimentary Tract <i>Burcu Gemici Başol</i>	<b>Laboratory / Physiology / Digestive System</b> <i>Burcu Gemici Başol</i> <b>Group C</b>	<b>Laboratory / Biochemistry / Lipid Determination in Blood</b> <i>Jale Çoban Jale Çoban &amp; Müge Kopuz</i> <b>Group B</b>	<b>Group A I.L</b>
12.00- 12.50	<b>PBL Panel</b>	<b>Independent Learning</b>	<b>Lecture</b> Secretary Functions of the Alimentary Tract <i>Burcu Gemici Başol</i>			
13.00- 13.50	<b>Lunch Break</b>	<b>Lunch Break</b>	<b>Lunch Break</b>	<b>Lunch Break</b>		<b>Lunch Break</b>
14.00- 14.50	<b>Lecture</b> The Stomach <i>Yüksel Aydar</i>	<b>Lecture</b> Propulsion and Mixing Movements in the GI tract <i>Burcu Gemici Başol</i>	<b>Laboratory /Physiology</b> Digestive System <i>Burcu Gemici Başol</i>	<b>Invited Speaker</b>		<b>ICP</b> Nasogastric Administration <i>Özlem Tanrıöver &amp; Arzu Akalın</i> <b>Group B</b>  <b>Group A SP SGS</b>  <b>Group C, D I.L</b>
15.00- 15.50	<b>Lecture</b> Duodenum <i>Yüksel Aydar</i>	<b>Lecture</b> Gastrointestinal Motility and Nervous Control <i>Burcu Gemici Başol</i>	<b>Group A</b>	<b>Group B, C I.L</b>	<b>Independent Learning</b>	
16.00- 16.50	<b>Laboratory / Anatomy</b> The Stomach and Duodenum <i>Erdem Söztutar</i>	<b>Laboratory / Anatomy</b> Esophagus <i>Erdem Söztutar</i>	<b>Group A, C I.L</b>	<b>Group B</b>	<b>Independent Learning</b>	
	<b>Group A</b>	<b>Group B I.L</b>			<b>Group A I.L</b>	<b>Group B</b>
17.00-17.50	<b>Group A I.L</b>	<b>Group B</b>	<b>Group A</b>	<b>Group B I.L</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**  
**III. WEEK / 18 – 22 Dec 2017**

	<b>Monday 1 8-Dec-2017</b>	<b>Tuesday 19-Dec-2017</b>	<b>Wednesday 20-Dec-2017</b>	<b>Thursday 21-Dec-2017</b>	<b>Friday 22-Dec-2017</b>	
<b>09.00- 09.50</b>	<b>Lecture</b> Oxidation of Fatty acids <i>Inci Özden</i>	<b>Lecture</b> Ketone Bodies <i>Inci Özden</i>	<b>Lecture</b> Digestion and Absorption of Proteins <i>Inci Özden</i>	<b>Laboratory / Histology</b> Histology of GIS I	<b>Laboratory / Microbiology</b> Mycology <i>Çağatay Acuner</i> <b>Group B</b>	<b>Independent Learning</b>
<b>10.00- 10.50</b>	<b>Lecture</b> Oxidation of Fatty acids <i>Inci Özden</i>	<b>Lecture</b> Ketone Bodies <i>Inci Özden</i>	<b>Lecture</b> Digestion and Absorption of Proteins <i>Inci Özden</i>	<i>Alev Cumbul &amp; Aylin Yaba Uçar</i> <b>Group A</b>		
<b>11:00-11:50</b>	<b>Lecture</b> Large Intestine <i>Yüksel Aydar</i>	<b>Lecture</b> Energetics and Metabolic Rate <i>Bayram Yılmaz</i>	<b>Lecture</b> Opportunistic mycoses-1 <i>Çağatay Acuner</i>	<b>Group B</b>	<b>Group A</b>	<b>Lecture</b> Urea Cycle <i>Inci Özden</i>
<b>12:00-12:50</b>	<b>Lecture</b> Large Intestine <i>Yüksel Aydar</i>	<b>Lecture</b> Energetics and Metabolic Rate <i>Bayram Yılmaz</i>	<b>Independent Learning</b>			<b>Lecture</b> Urea Cycle <i>Inci Özden</i>
<b>13.00- 13.50</b>	<b>Lunch Break</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> Digestion and Absorption in the Gastrointestinal Tract <i>Burcu Gemici Başol</i>	<b>Lecture</b> Histology of Alimentary Canal; Small Intestine <i>Aylin Yaba Uçar</i>	<b>Lecture</b> Gland Associated with the Digestive System; Salivary Glands <i>Aylin Yaba Uçar</i>	<b>Lecture</b> Metabolisms of Individual Amino Acids <i>Inci Özden</i>	<b>ICP</b> <b>CSL: Nasogastric Administration</b> <i>Özlem Tanrıöver &amp; Arzu Akalin</i> <b>Group C</b> <b>Group D SP SGS</b> <b>Group A,B I.L</b>	
<b>15.00- 15.50</b>	<b>Laboratory / Anatomy</b> Small and Large Intestine <i>Erdem Söztutar</i> <b>Group A</b> <b>Group B I.L</b>	<b>Lecture</b> Histology of Alimentary Canal; Large Intestine & Appendix <i>Aylin Yaba Uçar</i>	<b>Lecture</b> Glands Associated with the Digestive System; Liver <i>Aylin Yaba Uçar</i>	<b>Lecture</b> Metabolisms of Individual Amino Acids <i>Inci Özden</i>		
<b>16.00- 16.50</b>	<b>Group A I.L</b> <b>Group B</b>	<b>Laboratory / Biochemistry</b> Lipid Determination in Blood <i>Jale Çoban &amp; Müge Kopuz</i>	<b>Independent Learning</b>	<b>Independent Learning</b>		
<b>17.00-17.50</b>	<b>Independent Learning</b>	<b>Group C</b> <b>Group A, B I.L</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**  
**IV. WEEK / 25 – 29 Dec 2017**

	<b>Monday 25-Dec-2017</b>	<b>Tuesday 26-Dec-2017</b>	<b>Wednesday 27-Dec-2017</b>	<b>Thursday 28-Dec-2017</b>	<b>Friday 29-Dec-2017</b>		
<b>09.00- 09.50</b>	<b>Lecture</b> Opportunistic Mycoses-1 <i>Çağatay Acuner</i>	<b>Lecture</b> Regulation of Feeding and Obesity <i>Bayram Yılmaz</i>	<b>Lecture</b> Overview of Metabolism <i>İnci Özden</i>	<b>Laboratory / Histology / Histology of Gastrointestinal System II</b> <i>Alev Cumbul &amp; Aylin Yaba Uçar</i> <b>Group A</b>	<b>Laboratory / Microbiology / Parasitology / Microbiology</b> <i>instructors</i> <b>Group B</b>	<b>Lecture</b> Body Temperature and Its Regulation <i>Bayram Yılmaz</i>	
<b>10.00- 10.50</b>	<b>Lecture</b> Liver <i>Erdem Söztutar</i>	<b>Lecture</b> Regulation of Feeding and Obesity <i>Bayram Yılmaz</i>	<b>Lecture</b> Overview of Metabolism <i>İnci Özden</i>			<b>Lecture</b> Body Temperature and Its Regulation <i>Bayram Yılmaz</i>	
<b>11.00- 11.50</b>	<b>Lecture</b> Biliary System <i>Erdem Söztutar</i>	<b>Lecture</b> Mycotoxins/ Diagnostic Methods in Mycology <i>Çağatay Acuner</i>	<b>Lecture</b> Liver as Organ <i>Bayram Yılmaz</i>	<b>Group B</b>	<b>Group A</b>	<b>Lecture</b> Metabolic interrelationships and Provision of Tissue Fuels <i>İnci Özden</i>	
<b>12.00- 12.50</b>	<b>Lecture</b> The Pancreas and Spleen <i>Erdem Söztutar</i>	<b>Independent Learning</b>	<b>Lecture</b> Glands Associated with the Digestive System; Pancreas & APUDs <i>Aylin Yaba Uçar</i>			<b>Lecture</b> Metabolic Interrelationships and Provision of Tissue Fuels <i>İnci Özden</i>	
<b>13.00- 13.50</b>	<b>Lunch Break</b>	<b>Lunch Break</b>	<b>Lunch Break</b>	<b>Lunch Break</b>	<b>Lunch Break</b>		
<b>14.00- 14.50</b>	<b>Laboratory / Anatomy</b> Liver and Biliary System <i>Erdem Söztutar</i>	<b>Lecture</b> Citric Acid Cycle <i>İnci Özden</i>	<b>Lecture</b> Development of Gastrointestinal Tract; Alimentary Canal & Glands <i>Alev Cumbul</i>	<b>Lecture</b> Metabolic Interrelationships and Provision of Tissue Fuels <i>İnci Özden</i>	<b>ICP</b> CSL: Nasogastric Administration <i>Özlem Tanrıöver &amp; Arzu Akalin</i> <b>Group D</b>	<b>Group C</b> SP SGS	
	<b>Group A</b> I.L	<b>Group B</b>					<b>Group A, B I.L</b>
<b>15.00- 15.50</b>	<b>Group A</b>	<b>Group B I.L</b>	<b>Lecture</b> Congenital Anomalies of Gastrointestinal Tract <i>Alev Cumbul</i>	<b>Lecture</b> Metabolic Interrelationships and Provision of Tissue Fuels <i>İnci Özden</i>			
<b>16.00- 16.50</b>	<b>Laboratory / Anatomy</b> Pancreas and Spleen <i>Erdem Söztutar</i>	<b>Independent Learning</b>	<b>Introduction to Elective Courses</b>	<b>Independent Learning</b>			
	<b>Group A</b> I.L	<b>Group B, I.L</b>					
<b>17.00-17.50</b>	<b>Group A</b> I.L	<b>Group B</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 / 01 – 05 Jan 2016**

	<b>Monday 01-Jan-2018</b>	<b>Tuesday 02-Jan-2018</b>	<b>Wednesday 03-Jan-2018</b>	<b>Thursday 04-Jan-2018</b>	<b>Friday 05-Jan-2018</b>
<b>09.00- 09.50</b>	<b>NEW YEAR</b>	<b>Lecture</b> Clinical and topographic anatomy of the anterior abdominal wall <i>Erdem Söztutar</i>	<b>Lecture</b> Purine and Pyrimidine Metabolism <i>İnci Özden</i>	<b>Laboratory / Microbiology</b> Make Up Session <i>Microbiology instructors</i>	<b>Lecture</b> Lipolysis <i>İnci Özden</i>
<b>10.00- 10.50</b>		<b>Lecture</b> Abdominal Cavity and Peritoneum <i>Erdem Söztutar</i>	<b>Lecture</b> Purine and Pyrimidine Metabolism <i>İnci Özden</i>	<b>Group A</b> <b>Group B I.L</b>	<b>Lecture</b> Lipolysis <i>İnci Özden</i>
<b>11.00- 11.50</b>		<b>Lecture</b> Abdominal Cavity and Peritoneum <i>Erdem Söztutar</i>	<b>Lecture</b> Protozoa-I <i>Bariş Ata Borsa</i>	<b>Laboratory / Histology</b> Review Session <i>Alev Cumbul &amp; Aylin Yaba Uçar</i>	<b>Lecture</b> Test Hypotheses and Significance-Chi-Square Test <i>E. Çiğdem Altunok</i>
<b>12.00- 12.50</b>		<b>Lecture</b> Nerves and vasculature of the Abdominal Cavity <i>Erdem Söztutar</i>	<b>Lecture</b> Protozoa-II <i>Bariş Ata Borsa</i>	<b>Group A</b> <b>Group B I.L</b>	<b>Lecture</b> Test Hypotheses and Significance-Chi-Square Test <i>E. Çiğdem Altunok</i>
<b>13.00- 13.50</b>		<b>Lunch Break</b>	<b>Lunch Break</b>		<b>Lunch Break</b>
<b>14.00- 14.50</b>		<b>Lecture</b> Introduction to Parasitology <i>Bariş Ata Borsa</i>	<b>Lecture</b> Review of the Digestive System <i>Erdem Söztutar</i>	<b>Lecture</b> Interrelationship of Biology of Major Organ <i>Soner Doğan</i>	<b>ICP</b> Intramuscular/ Intradermal/ Subcutan Injection <i>Özlem Tanrıöver &amp; Ayzu Akalin</i> Group C  <b>Group D SP SGS</b>  <b>Group A,B</b> Independent Learning
<b>15.00- 15.50</b>		<b>Lecture</b> Diagnostic Methods in Parasitology <i>Bariş Ata Borsa</i>	<b>Lecture</b> Review of the Digestive System <i>Erdem Söztutar</i>	<b>Lecture</b> Interrelationship of Biology of Major Organ <i>Soner Doğan</i>	
<b>16.00- 16.50</b>		<b>Independent Learning</b>	<b>Laboratory / Anatomy</b> Abdominal Cavity and Peritoneum <i>Erdem Söztutar</i>	<b>Independent Learning</b>	
<b>17.00-17.50</b>			<b>Group A I.L</b> <b>Group B</b>		<b>Independent Learning</b>
		<b>Group A</b> <b>Group B I.L</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**  
**VI. WEEK / 08 – 12 Jan 2018**

	<b>Monday 08-Jan-2018</b>	<b>Tuesday 09-Jan-2018</b>	<b>Wednesday 10-Jan-2018</b>	<b>Thursday 11-Jan-2018</b>	<b>Friday 12-Jan-2018</b>
<b>09.00- 09.50</b>	<b>Independent Learning</b>	<b>Lecture</b> The Second Law of Thermodynamics <i>Akif Maharramov</i>	<b>Lecture</b> Nutrigenomics <i>Soner Doğan</i>	<b>Independent Learning</b>	<b>Lecture</b> Xenobiotic Metabolism <i>İnci Özden</i>
<b>10.00- 10.50</b>	<b>Lecture</b> Animalia – I <i>Bariş Ata Borsa</i>	<b>Lecture</b> Entropy, Free Energy, Boltzmann Distribution <i>Akif Maharramov</i>	<b>Lecture</b> Nutrigenomics <i>Soner Doğan</i>	<b>Independent Learning</b>	<b>Lecture</b> Xenobiotic Metabolism <i>İnci Özden</i>
<b>11.00- 11.50</b>	<b>Lecture</b> Interrelationship of Biology of Major Organs <i>Soner Doğan</i>	<b>Lecture</b> Animalia-II <i>Bariş Ata Borsa</i>	<b>Lecture</b> Animalia-IV <i>Bariş Ata Borsa</i>	<b>Independent Learning</b>	<b>Lecture</b> Mucosal Immunity <i>Gülderen Yanıkkaya. Demirel</i>
<b>12.00- 12.50</b>	<b>Lecture</b> Interrelationship of Biology of Major Organs <i>Soner Doğan</i>	<b>Lecture</b> Animalia – III <i>Bariş Ata Borsa</i>	<b>Lecture</b> Animalia-V <i>Bariş Ata Borsa</i>	<b>Independent Learning</b>	<b>Lecture</b> Mucosal Immunity <i>Gülderen Yanıkkaya. Demirel</i>
<b>13.00- 13.50</b>	<b>Lunch Break</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> Test Hypotheses and Significance-Chi-Square Test <i>E. Çiğdem Altunok</i>	<b>Lecture</b> Physiology of Gastrointestinal Disorders <i>Mehtap Kaçar</i>	<b>Lecture</b> Repetition all of the Material <i>Akif Maharramov</i>	<b>Independent Learning</b>	<b>ICP Intramuscular/ Intradermal/ Subcutan Injection</b> <b>Özlem Tanrıöver &amp; Arzu Akalin</b> <b>Group D</b> <b>Group C SP Workshop</b> <b>Group A,B I.L</b>
<b>15.00- 15.50</b>	<b>Lecture</b> Test Hypotheses and Significance-Chi-Square Test <i>E. Çiğdem Altunok</i>	<b>Lecture</b> Physiology of Gastrointestinal Disorders <i>Mehtap Kaçar</i>	<b>Lecture</b> Repetition all of the Material <i>Akif Maharramov</i>	<b>Independent Learning</b>	
<b>16.00- 16.50</b>	<b>Independent Learning</b>	<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>	<b>Independent Learning</b>	<b>Independent Learning</b>

**COMMITTEE III - GASTROINTESTINAL SYSTEM and METABOLISM  
VII. WEEK / 15 – 19 Jan 2018**

	<b>Monday 15-Jan-2018</b>	<b>Tuesday 16-Jan-2018</b>	<b>Wednesday 17-Jan-2018</b>	<b>Thursday 18-Jan-2018</b>	<b>Friday 19-Jan-2018</b>
<b>09.00- 09.50</b>	<b>Assessment Session (Practical Exam)</b>	<b>Independent Learning</b>	<b>Independent Learning</b>	<b>Independent Learning</b>	<b>Independent Learning</b>
<b>10.00- 10.50</b>					<b>Assessment Session Committee III (MCQ)</b>
<b>11.00- 11.50</b>					
<b>12.00- 12.50</b>					
<b>13.00- 13.50</b>	<b>Lunch Break</b>	<b>Lunch Break</b>	<b>Lunch Break</b>	<b>Lunch Break</b>	<b>Lunch Break</b>
<b>14.00- 14.50</b>	<b>Assessment Session (Practical Exam)</b>	<b>Independent Learning</b>	<b>Independent Learning</b>	<b>Independent Learning</b>	<b>Program Evaluation Session</b> Review of the Exam Questions, Evaluation of the Committee III Program <i>Secretary of Committee</i>
<b>15.00- 15.50</b>					
<b>16.00- 16.50</b>					
<b>17.00-17.50</b>					<b>Independent Learning</b>

**MIDTERM BREAK 22 JAN 2018 - 02 FEB 2018**

**COMMITTEE IV - NERVOUS SYSTEM  
DISTRIBUTION of LECTURE HOURS**

**February 5 – March 30, 2018**

**COMMITTEE DURATION: 8 WEEKS**

		THEORETICAL	PRACTICAL	TOTAL
<b>MED 203</b>	<b>BASIC MEDICAL SCIENCES II</b>	<b>121</b>	<b>31</b>	<b>152</b>
	<b>DISCIPLINE</b>			
	ANATOMY	45	2 Gr x 14H	59
	BIOPHYSICS	3	0	3
	BIOSTATISTICS	4	1 Gr x 2H	6
	HISTOLOGY & EMBRYOLOGY	12	2 Gr x 3H	15
	IMMUNOLOGY	2	0	2
	MEDICAL BIOLOGY	4	0	4
	PATHOLOGY	6	0	6
	PHARMACOLOGY	9	2 Gr x 1H	10
	PHYSIOLOGY	36	3 Gr x 8H	44
SCIENTIFIC PROJECTS-II	0	6GrX3H	3	

<b>MED 202</b>	<b>INTRODUCTION TO CLINICAL PRACTICE- II</b>	4 GrX1 + 2 GrX1	4 GrX2 + 2 GrX2	6 / 3
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<b>Coordination Committee</b>	<b>Head</b>	Bayram YILMAZ, PhD, Prof.
	<b>Secretary</b>	Deniz KIRAÇ, PhD, Assist. Prof
	<b>Member</b>	Mehtap KAÇAR, PhD, MD, Assoc. Prof.
	<b>Member</b>	Erdem SÖZTUTAR, MD, Assist. Prof.

**COMMITTEE IV- NERVOUS SYSTEM  
LECTURERS  
February 5 – 30 March , 2018**

<b>MED 203 BASIC MEDICAL SCIENCES II</b>	
<b>DISCIPLINE</b>	<b>LECTURERS</b>
	Erdem Söztutar MD, Assist. Prof. Aikaterini PANTELİ, MD. Lecturer LAB. Sinem GERGIN, MD LAB: Edibe BİLİŞLİ, DVM
BIOPHYSICS	Akif MAHARRAMOV, PhD Assist. Prof. Bilge GÜVENÇ TUNA, PhD Assist. Prof.
BIOSTATISTICS	Çiğdem ALTUNOK, PhD, Assist. Prof.
HISTOLOGY & EMBRYOLOGY	Alev CUMBUL, PhD Assist. Prof. Oya ALAGÖZ, MD Assist. Prof. Aylin YABA UÇAR PhD Assist. Prof.
IMMUNOLOGY	Gülderen YANIKKAYA DEMIREL, MD PhD Assoc. Prof.
MEDICAL BIOLOGY	Turgay İSBİR, PhD Prof. Soner DOĞAN, PhD Assoc. Prof. Deniz KIRAÇ, PhD Assist. Prof.
PATHOLOGY	Ferda ÖZKAN MD, Prof. Işın EKİCİ MD, Prof.
PHARMACOLOGY	Ece GENÇ, PhD Prof.
PHYSIOLOGY	Bayram YILMAZ, PhD Prof. Mehtap KAÇAR, MD PhD Assoc. Prof. Burcu GEMİCİ, PhD Assist. Prof.
SCIENTIFIC PROJECTS-II	Gülderen YANIKKAYA DEMIREL, MD PhD Assoc. Prof.

<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. Mustafa YAZICIOĞLU, MD Emin Gökhan GENCER, MD

## **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 descending and ascending pathways,
  - 3.5. associate with adjacent tissue and organs,
  - 3.6. explain functional and clinical reflections.
- 4.0. For central and peripheral nervous system and special senses;
  - 4.1. classify embryological origins,
  - 4.2. explain developmental stages,
  - 4.3. describe histological properties.
- 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. explain inflammatory processes, termination pathways, effects on tissues and mechanisms for inducing diseases.
- 16.0. describe the properties of neuroimmunology
- 17.0. describe how to write a scientific project proposal.
- 18.0. prepare a research project draft.
- 19.0. count biostatistical sampling methods.
- 20.0. count significance tests in biostatistics.
- 21.0. choose significance tests according to the properties of biostatistical data.

**COMMITTEE IV - NERVOUS SYSTEM  
COMMITTEE ASSESSMENT MATRIX**

LEARNING OBJECTIVES	DISCIPLINE	LECTURER/ INSTRUCTOR	DISTRUBITION of MCQs			
			CE	FE	IE	TOTAL
3.0.	ANATOMY	Dr. E. Söztutar Dr. A. Panteli	38	16	16	70
1.0.	BIOPHYSICS	Dr. B.G.Tuna	2	1	1	4
19.0-21.0	BIOSTATISTICS	Dr. E.Ç. Altunok	3	1	1	5
4.0.	HISTOLOGY & EMBRYOLOGY	Dr. A. Cumbul Dr. A. Yaba Uçar	10	4	4	18
16.0	IMMUNOLOGY	Dr. G. Yanikkaya Demirel	1	0	0	1
2.0.	MEDICAL BIOLOGY	Dr. T. İsbir	3	1	1	5
15.0.	PATHOLOGY	Dr. F. Özkan Dr. I. Ekici	5	2	2	9
13.0-14.0.	PHARMACOLOGY	Dr. E. Genç	7	3	3	13
5.0-12.0.	PHYSIOLOGY	Dr. B. Yılmaz Dr. M. Kaçar Dr. B. Gemici Başol	31	12	12	55
<b>TOTAL</b>			<b>100</b>	<b>40/200#</b>	<b>40/200#</b>	<b>180</b>
LEARNING OBJECTIVES	DISCIPLINE	POINTS of ASSESSMENT METHODS				
		LPE				
3.0.	ANATOMY	50				
4.0.	HISTOLOGY & EMBRYOLOGY	15				
13.0-14.0	PHARMACOLOGY	5				
5.0-12.0.	PHYSIOLOGY	30				
<b>TOTAL</b>		<b>100</b>				

Total value of LPE is equal to 100 points

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

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



**COMMITTEE IV - NERVOUS SYSTEM**  
**I. WEEK / 05 – 09 Feb 2018**

	<b>Monday 05-Feb-2018</b>	<b>Tuesday 06-Feb-2018</b>	<b>Wednesday 07-Feb-2018</b>	<b>Thursday 08-Feb-2018</b>	<b>Friday 09-Feb-2018</b>	
<b>09.00- 09.50</b>	Introduction to Committee IV Secretary of Committee	<b>Lecture</b> Synapse and Neurotransmitters <i>Bayram Yılmaz &amp; Mehtap Kaçar</i>	<b>Lecture</b> Spinal Cord <i>Aikaterini Panteli</i>	<b>Independent Learning</b>	<b>ICP MIDTERM EXAM</b>	
<b>10.00- 10.50</b>	<b>Lecture</b> Introduction to Neuroanatomy <i>Aikaterini Panteli</i>	<b>Lecture</b> Synapse and Neurotransmitters <i>Bayram Yılmaz &amp; Mehtap Kaçar</i>	<b>Lecture</b> Spinal Cord <i>Aikaterini Panteli</i>			
<b>11.00- 11.50</b>	<b>Lecture</b> Organization of the Nervous System <i>Bayram Yılmaz &amp; Mehtap Kaçar</i>	<b>Lecture</b> Brainstem <i>Aikaterini Panteli</i>	<b>Lecture</b> Sensory Receptors and Pathways <i>Bayram Yılmaz &amp; Mehtap Kaçar</i>	<b>Laboratory / Anatomy</b> Spinal Cord <i>Aikaterini Panteli</i>		
				<b>Group A</b> IL		<b>Group B</b>
<b>12.00- 12.50</b>	<b>Lecture</b> Neuron and Neuroglia <i>Bayram Yılmaz &amp; Mehtap Kaçar</i>	<b>Lecture</b> Brainstem <i>Aikaterini Panteli</i>	<b>Lecture</b> Peripheral Nervous System <i>Bayram Yılmaz &amp; Mehtap Kaçar</i>	<b>Group A</b>		<b>Group B</b> IL
<b>13.00- 13.50</b>	<b>Lunch Break</b>	<b>Lunch Break</b>	<b>Lunch Break</b>	<b>Lunch Break</b>		<b>Lunch Break</b>
<b>14.00- 14.50</b>	<b>Program Improvements Sessions</b>	<b>Lecture</b> Brainstem <i>Aikaterini Panteli</i>	<b>Lecture</b> Histology of Central Nervous System; PNS, Meninges and Spinal Cord <i>Aylin Yaba Uçar</i>	<b>Elective Courses I</b>	<b>Independent Learning</b>	
<b>15.00- 15.50</b>	<b>Independent Learning</b>	<b>Laboratory / Anatomy</b> Brainstem <i>Aikaterini Panteli</i>	<b>Lecture</b> Histology of Central Nervous System; Brain, Cerebellum <i>Aylin Yaba Uçar</i>			
		<b>Group B</b>		<b>Group A, IL</b>		
<b>16.00- 16.50</b>	<b>Independent Learning</b>	<b>Group B, IL</b>	<b>Independent Learning</b>	<b>Independ. Learning</b>	<b>Elective Courses I</b>	
<b>17.00-17.50</b>	<b>Independent Learning</b>	<b>Independent Learning</b>		<b>Independ. Learning</b>	<b>Elective Courses I</b>	

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

**COMMITTEE IV - NERVOUS SYSTEM**  
**II. WEEK / 12 – 16 Feb 2018**

	<b>Monday 12-Feb-2018</b>	<b>Tuesday 13-Feb-2018</b>	<b>Wednesday 14-Feb-2018</b>	<b>Thursday 15-Feb-2018</b>	<b>Friday 16-Feb-2018</b>
<b>09.00- 09.50</b>	<b>Lecture</b> Cranial Nerves I-III <i>Aikaterini Panteli</i>	<b>Lecture</b> Motor Functions of the Spinal Cord <i>Bayram Yılmaz &amp; Mehtap Kaçar</i>	<b>Lecture</b> The Cerebellum <i>Aikaterini Panteli</i>	<b>Laboratory / Physiology</b> Reflexes <i>Bayram Yılmaz &amp; Mehtap Kaçar</i>	<b>ICP</b> CSL: Intramuscular / Intradermal / Subcutan Injection <i>Mustafa Yazicioğlu &amp; Arzu Akalın</i>
<b>10.00- 10.50</b>	<b>Lecture</b> Cranial Nerves IV-VI <i>Aikaterini Panteli</i>	<b>Lecture</b> Motor Functions of the Spinal Cord <i>Bayram Yılmaz &amp; Mehtap Kaçar</i>	<b>Lecture</b> The Cerebellum <i>Aikaterini Panteli</i>	<b>Group B</b>	<b>Group A, C IL</b>
<b>11.00- 11.50</b>	<b>Lecture</b> Cranial Nerves VII-XII <i>Aikaterini Panteli</i>	<b>Lecture</b> Diencephalon <i>Aikaterini Panteli</i>	<b>Lecture</b> Cortical and Brain Stem Control of Motor Function <i>Bayram Yılmaz &amp; Mehtap Kaçar</i>	<b>Invited Speakers</b>	<b>Group A ICP</b>
<b>12.00- 12.50</b>	<b>Lecture</b> Cranial Nerves X-XII <i>Aikaterini Panteli</i>	<b>Lecture</b> Diencephalon <i>Aikaterini Panteli</i>	<b>Lecture</b> Cortical and Brain Stem Control of Motor Function <i>Bayram Yılmaz &amp; Mehtap Kaçar</i>	<b>Lunch Break</b>	<b>Group B SP SGS</b>
<b>13.00- 13.50</b>	<b>Lunch Break</b>	<b>Lunch Break</b>	<b>Lunch Break</b>	<b>Lecture</b> Telencephalon <i>Aikaterini Panteli</i>	<b>Group C, D IL</b>
<b>14.00- 14.50</b>	<b>Laboratory / Anatomy</b> Cranial Nerves <i>Aikaterini Panteli</i>	<b>Lecture</b> Diencephalon <i>Aikaterini Panteli</i>	<b>Laboratory / Anatomy</b> Cerebellum and Diencephalon <i>Aikaterini Panteli</i>	<b>Lecture</b> Telencephalon <i>Aikaterini Panteli</i>	<b>Independent Learning</b>
	<b>Group A</b>		<b>Group B</b>		<b>Lunch Break</b>
			<b>Group A IL</b>		<b>Laboratory / Physiology</b> Reflexes <i>Bayram Yılmaz &amp; Mehtap Kaçar</i>
<b>15.00- 15.50</b>	<b>Group A I.L</b>	<b>Group B</b>	<b>ICP-ECE Introduction Session</b> <i>Özlem Tanrıöver</i>	<b>Group B IL</b>	<b>Group A</b>
				<b>Group A</b>	<b>Lecture</b> Telencephalon <i>Aikaterini Panteli</i>
<b>16.00- 16.50</b>	<b>Independent Learning</b>	<b>Independent Learning</b>	<b>Independent Learning</b>	<b>Laboratory / Anatomy</b> Telencephalon <i>Aikaterini Panteli</i>	<b>Group A</b>
				<b>Group A</b>	<b>Group B, C IL</b>
				<b>Group B I.L</b>	<b>Independent Learning</b>
<b>17.00-17.50</b>	<b>Independent Learning</b>	<b>Independent Learning</b>	<b>Independent Learning</b>	<b>Group A, IL</b>	<b>Group B</b>
					<b>Group A,B IL</b>
					<b>Group C</b>

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

**COMMITTEE IV - NERVOUS SYSTEM**  
**III. WEEK / 19 –23 Feb 2018**

	<b>Monday 19-Feb-2018</b>	<b>Tuesday 20-Feb-2018</b>	<b>Wednesday 21-Feb-2018</b>	<b>Thursday 22-Feb-2018</b>	<b>Friday 23-Feb-2018</b>	
<b>09.00- 09.50</b>	<b>Lecture</b> Development of Central Nervous System; Early Stages <i>Aylin Yaba Uçar</i>	<b>Lecture</b> Scope of Pharmacology <i>Ece Genç</i>	<b>Lecture</b> Physiology of Vision <i>Bayram Yılmaz &amp; Mehtap Kaçar</i>	<b>Laboratory / Physiology</b> Visual Examination & Tests <i>Bayram Yılmaz &amp; Mehtap Kaçar</i>	<b>ICP</b> CSL: Intramuscular / Intradermal / Subcutan Injection <i>Emin Gökhan Gencer &amp; Arzu Akalın</i>	
<b>10.00- 10.50</b>	<b>Lecture</b> Development of Central Nervous System; Late Stages <i>Aylin Yaba Uçar</i>	<b>Lecture</b> Drug Distribution <i>Ece Genç</i>	<b>Lecture</b> Physiology of Vision <i>Bayram Yılmaz &amp; Mehtap Kaçar</i>	<b>Group A</b>	<b>Group B, C, IL</b>	
<b>11.00- 11.50</b>	<b>Lecture</b> Functions of Cerebellum and Basal Ganglia for Motor Control <i>Bayram Yılmaz &amp; Mehtap Kaçar</i>	<b>Lecture</b> Orbit and Eye <i>Erdem Söztutar</i>	<b>Lecture</b> Physiology of Vision <i>Bayram Yılmaz &amp; Mehtap Kaçar</i>	<b>Group A, C IL</b>	<b>Group B</b>	
<b>12.00- 12.50</b>	<b>Lecture</b> Functions of Cerebellum and Basal Ganglia for Motor Control <i>Bayram Yılmaz &amp; Mehtap Kaçar</i>	<b>Lecture</b> Orbit and Eye <i>Erdem Söztutar</i>	<b>Lecture</b> Physiology of Vision <i>Bayram Yılmaz &amp; Mehtap Kaçar</i>			<b>Group B, ICP</b>
<b>13.00-13:50</b>	<b>Lunch Break</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> The Basal Ganglia <i>Aikaterini Panteli</i>	<b>Lecture</b> The Visual Pathways <i>Erdem Söztutar</i>	<b>Lecture</b> Congenital Anomalies of Nervous System <i>Aylin Yaba Uçar</i>	<b>Elective Courses II</b>	<b>Independent Learning</b>	
<b>15.00- 15.50</b>	<b>Lecture</b> The Basal Ganglia <i>Aikaterini Panteli</i>	<b>Laboratory / Anatomy</b> The Eye and Visual Pathways <i>Erdem Söztutar</i>	<b>Independent Learning</b>			<b>Elective Courses II</b>
<b>16.00- 16.50</b>	<b>Laboratory / Anatomy</b> The Basal Ganglia <i>Aikaterini Panteli</i>	<b>Group A, IL</b>	<b>Group B</b>	<b>Independent Learning</b>	<b>Elective Courses II</b>	
	<b>Group A</b>	<b>Group B, IL</b>	<b>Independent Learning</b>			<b>Laboratory / Physiology</b> Visual Examination & Tests <i>Bayram Yılmaz &amp; Mehtap Kaçar</i>
<b>17.00-17.50</b>	<b>Group A, IL</b>	<b>Group B</b>	<b>Independent Learning</b>	<b>Independent Learning</b>	<b>Group A, B IL</b>	<b>Group C</b>

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**COMMITTEE IV - NERVOUS SYSTEM  
IV WEEK / 26 Feb – 02 March 2018**

	<b>Monday 26-Feb-2018</b>	<b>Tuesday 27-Feb-2018</b>	<b>Wednesday 28-Feb-2018</b>	<b>Thursday 01-March-2018</b>		<b>Friday 02-March-2018</b>					
<b>09.00- 09.50</b>	<b>Lecture</b> Histology of Sensory Organs; Eye; Fibrous and Vascular Coat <i>Alev Cumbul</i>	<b>Lecture</b> Ascending pathways of the CNS <i>Aikaterini Panteli</i>	<b>Lecture</b> Physiology of Pain <i>Bayram Yılmaz &amp; Mehtap Kaçar</i>	<b>Laboratory / Physiology</b> Hearing Test <i>Bayram Yılmaz &amp; Mehtap Kaçar</i>		<b>ICP</b> <b>CSL: IV Cannulation</b> <i>Özlem Tanrıöver &amp; Arzu Akalın</i>					
<b>10.00- 10.50</b>	<b>Lecture</b> The Ear <i>Aikaterini Panteli</i>	<b>Lecture</b> Ascending Pathways of the CNS <i>Aikaterini Panteli</i>	<b>Lecture</b> Physiology of Pain <i>Bayram Yılmaz &amp; Mehtap Kaçar</i>	<b>Group A, B IL</b>	<b>Group C</b>	<b>Group A</b> SP SGS	<b>Group B ECE-</b> FHC	<b>Group C ECE-</b> YUH	<b>Group D</b> ICP		
<b>11.00- 11.50</b>	<b>Lecture</b> The Ear <i>Aikaterini Panteli</i>	<b>Lecture</b> Descending Pathways of the CNS <i>Aikaterini Panteli</i>	<b>Lecture</b> Limbic System <i>Aikaterini Panteli</i>	<b>Group A</b>	<b>Group B, C IL</b>						
<b>12.00- 12.50</b>	<b>Lecture</b> The Auditory Pathways <i>Aikaterini Panteli</i>	<b>Lecture</b> Descending Pathways of the CNS <i>Aikaterini Panteli</i>	<b>Lecture</b> Limbic System <i>Aikaterini Panteli</i>							<b>Independent Learning</b>	
<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> Physiology of Hearing <i>Bayram Yılmaz &amp; Mehtap Kaçar</i>	<b>Lecture</b> Cutaneous Senses <i>Bayram Yılmaz &amp; Mehtap Kaçar</i>	<b>Lecture</b> Histology of Sensory Organs; Eye; Nervous Coat and Appendix <i>Alev Cumbul</i>	<b>Elective Courses III</b>	<b>Independent Learning</b>	<b>Lecture</b> Drug Metabolism <i>Ece Genç</i>					
<b>15.00- 15.50</b>	<b>Lecture</b> Physiology of Hearing <i>Bayram Yılmaz &amp; Mehtap Kaçar</i>	<b>Lecture</b> Cutaneous Senses <i>Bayram Yılmaz &amp; Mehtap Kaçar</i>	<b>Lecture</b> Histology of Sensory Organs; Ear <i>Alev Cumbul</i>			<b>Lecture</b> Drug Metabolism <i>Ece Genç</i>					
<b>16.00- 16.50</b>	<b>Laboratory / Anatomy</b> The ear and auditory pathways <i>Aikaterini Panteli</i>	<b>Lecture</b> Auditory System Biophysics and Function <i>Bilge G. Tuna</i>	<b>Laboratory / Anatomy</b> Limbic System <i>Aikaterini Panteli</i>	<b>Independent Learning</b>	<b>Elective Courses III</b>	<b>Laboratory / Physiology</b> Hearing Test <i>Bayram Yılmaz &amp; Mehtap Kaçar</i>					
	<b>Group A I.L</b>		<b>Group B</b>			<b>Group A</b>	<b>Group B, IL</b>	<b>Group A, C IL</b>		<b>Group B</b>	
<b>17.00-17.50</b>	<b>Group A</b>	<b>Group B I.L</b>	<b>Independent Learning</b>		<b>Group A, IL</b>	<b>Group B</b>					

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**COMMITTEE IV - NERVOUS SYSTEM**  
**V. WEEK / 05 – 09 March 2018**

	<b>Monday 05-March-2018</b>	<b>Tuesday 06-March-2018</b>	<b>Wednesday 07-March-2018</b>	<b>Thursday 08-March-2018</b>	<b>Friday 09-March-2018</b>
<b>09.00- 09.50</b>	<b>Lecture</b> Introduction to the Autonomic Nervous System <i>Aikaterini Panteli</i>	<b>Lecture</b> Parasympathetic Nervous System <i>Aikaterini Panteli</i>	<b>Lecture</b> States of Brain Activity-Sleep and Brain Waves <i>Bayram Yılmaz &amp; Mehtap Kaçar</i>	<b>Laboratory / Physiology</b> Electroencephalography <i>Bayram Yılmaz &amp; Mehtap Kaçar</i>	<b>ICP</b> <b>CSL: IV Cannulation</b> <i>Özlem Tanrıöver &amp; Arzu Akalın</i>
<b>10.00- 10.50</b>	<b>Lecture</b> Sympathetic Nervous System <i>Aikaterini Panteli</i>	<b>Lecture</b> Parasympathetic Nervous System <i>Aikaterini Panteli</i>	<b>Lecture</b> States of Brain Activity-Sleep and Brain Waves <i>Bayram Yılmaz &amp; Mehtap Kaçar</i>	<b>Group A</b>	<b>Groups B, C; IL</b>
<b>11.00- 11.50</b>	<b>Lecture</b> Sympathetic Nervous System <i>Aikaterini Panteli</i>	<b>Lecture</b> Autonomic Nervous System <i>Bayram Yılmaz &amp; Mehtap Kaçar</i>	<b>Lecture</b> Inflammation <i>Ferda Özkan</i>	<b>Groups A, B, IL</b>	<b>Group C</b>
<b>12.00- 12.50</b>	<b>Lecture</b> Physiology of Pain <i>Bayram Yılmaz &amp; Mehtap Kaçar</i>	<b>Lecture</b> Autonomic Nervous System <i>Bayram Yılmaz &amp; Mehtap Kaçar</i>	<b>Lecture</b> Wound Healing <i>Ferda Özkan</i>		<b>Independent Learning</b>
<b>13.00- 13.50</b>	<b>Lunch Break</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> Physiology of Pain <i>Bayram Yılmaz &amp; Mehtap Kaçar</i>	<b>Lecture</b> Pharmaceutical Forms of Drug <i>Ece Genç</i>	<b>Lecture</b> Development of Sensory Organs; Eye <i>Alev Cumbul</i>	<b>Elective Courses IV</b>	<b>Independent Learning</b>
<b>15.00- 15.50</b>	<b>Laboratory / Anatomy</b> Sympathetic Nervous System <i>Aikaterini Panteli</i>	<b>Laboratory / Anatomy</b> Parasympathetic Nervous System <i>Aikaterini Panteli</i>	<b>Lecture</b> Development of Sensory Organs; Ear <i>Alev Cumbul</i>		<b>Independent Learning</b>
	<b>Group A</b>	<b>Group B, IL</b>	<b>Group A, IL</b>	<b>Group B</b>	
<b>16.00- 16.50</b>	<b>Group A, IL</b>	<b>Group B</b>	<b>Group A</b>	<b>Group B, IL</b>	
<b>17.00-17.50</b>	<b>Independent Learning</b>	<b>Independent Learning</b>	<b>Lecture</b> Test Hypotheses and Significance-Z-Test <i>Çiğdem Altunok</i>	<b>Independent Learning</b>	<b>Elective Courses IV</b>
					<b>Laboratory/ Physiology</b> Electroencephalography <i>Bayram Yılmaz &amp; Mehtap Kaçar</i> <b>Group B</b>
					<b>Laboratory/ Biostatistic</b> <i>Çiğdem Altunok</i> Computer Applications of Tests of Significance <b>Group C</b>
					<b>Group A I.L.</b>

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**COMMITTEE IV - NERVOUS SYSTEM  
VI. WEEK / 12 – 16 March 2018**

	<b>Monday 12-March-2018</b>	<b>Tuesday 13-March-2018</b>	<b>Wednesday 14-March-2018</b>	<b>Thursday 15-March-2018</b>	<b>Friday 16-March-2018</b>							
<b>09.00- 09.50</b>	<b>Lecture</b> Limbic System and the Hypothalamus <i>Bayram Yılmaz &amp; Mehtap Kaçar</i>	<b>Lecture</b> Taste and Smell Pathways <i>Aikaterini Panteli</i>	<b>Laboratory / Histology</b> Histology of CNS and Skin <i>Alev Cumbul &amp; Aylin Yaba Uçar</i>	<b>Laboratory //Physiology</b> Galvanized Skin Response <i>Bayram Yılmaz &amp; Mehtap Kaçar</i>	<b>ICP</b> <b>CSL: IV Cannulation</b> <i>Özlem Tanrıöver &amp; Arzu Akalın</i>							
<b>10.00- 10.50</b>	<b>Lecture</b> Limbic System and the Hypothalamus <i>Bayram Yılmaz &amp; Mehtap Kaçar</i>	<b>Lecture</b> Taste and Smell Pathways <i>Aikaterini Panteli</i>	<b>Group A</b> IL	<b>Group B</b>	<b>Groups A, C, IL</b>	<b>Group B</b>	<b>Group A ECE-FHC</b>	<b>Group B ICP</b>	<b>Group C SP SGS</b>	<b>Group D ECE-YUH</b>		
<b>11.00- 11.50</b>	<b>Lecture</b> Acute inflammation <i>Ferda Özkan</i>	<b>Lecture</b> Chemical Senses: Taste and Smell <i>Bayram Yılmaz &amp; Mehtap Kaçar</i>	<b>Laboratory / Histology</b> Histology of CNS and Skin <i>Alev Cumbul &amp; Aylin Yaba Uçar</i>	<b>Laboratory / Physiology</b> Galvanized Skin Response <i>Bayram Yılmaz &amp; Mehtap Kaçar</i>								
<b>12.00- 12.50</b>	<b>Lecture</b> Acute Inflammation <i>Ferda Özkan</i>	<b>Lecture</b> Chemical Senses: Taste and Smell <i>Bayram Yılmaz &amp; Mehtap Kaçar</i>	<b>Group A</b>	<b>Group B</b> IL	<b>Groups A, B, IL</b>	<b>Group C</b>	<b>Independent Learning</b>					
<b>13.00- 13.50</b>	<b>Lunch Break</b>	<b>Lunch Break</b>	<b>Lunch Break</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> Histology of Skin and Appendage; Epidermis, Dermis, Appendage <i>Aylin Yaba Uçar</i>	<b>Lecture</b> The Skin, Its Derivatives and the Mammary Glands <i>Aikaterini Panteli</i>	<b>PHYSICIANS' DAY</b>	<b>Elective Courses V</b>	<b>Independent Learning</b>	<b>Lecture</b> Biology of Nervous System <i>Turgay İsbir</i>						
<b>15.00- 15.50</b>	<b>Lecture</b> Development of Skin and Appendage <i>Aylin Yaba Uçar</i>	<b>Laboratory / Anatomy</b> The Skin <i>Aikaterini Panteli</i>				<b>Group A</b>	<b>Group B, IL</b>	<b>Lecture</b> Biology of Nervous System <i>Turgay İsbir</i>				
<b>16.00- 16.50</b>	<b>Independent Learning</b>	<b>Group A, IL</b>				<b>Group B</b>	<b>Independent Learning</b>	<b>Elective Courses V</b>	<b>Independent Learning</b>			
<b>17.00-17.50</b>	<b>Independent Learning</b>	<b>Independent Learning</b>				<b>Independent Learning</b>	<b>Elective Courses V</b>	<b>Independent Learning</b>				

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**COMMITTEE IV - NERVOUS SYSTEM  
VII. WEEK / 19 – 23 March 2018**

	<b>Monday 19- March -2018</b>	<b>Tuesday 20- March -2018</b>	<b>Wednesday 21- March -2018</b>	<b>Thursday 22- March -2018</b>	<b>Friday 23- March -2018</b>
<b>09.00- 09.50</b>	<b>Lecture</b> Meninges and the Dural Venous Sinuses <i>Aikaterini Panteli</i>	<b>Lecture</b> Vasculature of the CNS <i>Aikaterini Panteli</i>	<b>Lecture</b> Neuroimmunology <i>Gülderen Yanıkkaya Demirel</i>	<b>Laboratory / Histology Review Session</b> <i>Alev Cumbul &amp; Aylin Yaba Uçar</i>	<b>ICP CSL: IV Cannulation</b> <i>Özlem Tanrıöver &amp; Arzu Akalın</i>
				<b>Group A</b> <b>Group B, IL</b>	
<b>10.00- 10.50</b>	<b>Lecture</b> Meninges and the Dural Venous Sinuses <i>Aikaterini Panteli</i>	<b>Lecture</b> Vasculature of the CNS <i>Aikaterini Panteli</i>	<b>Lecture</b> Neuroimmunology <i>Gülderen Yanıkkaya Demirel</i>	<b>Group A, IL</b>	<b>Group B</b>
<b>11.00- 11.50</b>	<b>Lecture</b> Cerebral Cortex, Intellectual Functions of the Brain <i>Bayram Yılmaz &amp; Mehtap Kaçar</i>	<b>Lecture</b> Cerebrospinal Fluid and Brain Metabolism <i>Bayram Yılmaz &amp; Mehtap Kaçar</i>	<b>Lecture</b> Chronic Inflammation <i>Ferda Özkan</i>	<b>Laboratory / Physiology Galvanized Skin Response</b> <i>Bayram Yılmaz &amp; Mehtap Kaçar</i>	
<b>12.00- 12.50</b>	<b>Lecture</b> Learning and Memory <i>Bayram Yılmaz &amp; Mehtap Kaçar</i>	<b>Lecture</b> Cerebrospinal Fluid and Brain Metabolism <i>Bayram Yılmaz &amp; Mehtap Kaçar</i>	<b>Lecture</b> Chronic Inflammation <i>Ferda Özkan</i>	<b>Group A</b>	<b>Groups B, C, IL</b>
<b>13.00- 13.50</b>	<b>Lunch Break</b>	<b>Lunch Break</b>	<b>Lunch Break</b>	<b>Lunch Break</b>	<b>Independent Learning</b>
<b>14.00- 14.50</b>	<b>Lecture</b> Drug Excretion <i>Ece Genç</i>	<b>Laboratory / Anatomy</b> Vasculature of the CNS <i>Aikaterini Panteli</i> <b>Group A</b>	<b>Laboratory / Pharmacology</b> Drug Metabolism <i>Ece Genç</i> <b>Group B</b>	<b>Lecture</b> Correlation <i>Çiğdem Altunok</i>	<b>Elective Courses VI</b>
<b>15.00- 15.50</b>	<b>Lecture</b> Drug Excretion <i>Ece Genç</i>	<b>Group B</b>	<b>Group A</b>	<b>Lecture</b> Correlation <i>Çiğdem Altunok</i>	
<b>16.00- 16.50</b>	<b>Laboratory / Anatomy</b> Meninges and the Dural Venous Sinuses <i>Aikaterini Panteli</i>	<b>Lecture</b> Review of the Nervous System <i>Aikaterini Panteli</i>	<b>Independent Learning</b>	<b>Independent Learning</b>	<b>Elective Courses VI</b>
	<b>Group A, IL</b> <b>Group B</b>				
<b>17.00-17.50</b>	<b>Group A</b>	<b>Lecture</b> Review of the Nervous System <i>Aikaterini Panteli</i>	<b>Independent Learning</b>		<b>Independent Learning</b>

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**COMMITTEE IV - NERVOUS SYSTEM  
VIII. WEEK / 26 – 30 March 2018**

	<b>Monday 26- March - 2018</b>	<b>Tuesday 27- March - 2018</b>	<b>Wednesday 28- March - 2018</b>	<b>Thursday 29- March - 2018</b>		<b>Friday 30- March- 2018</b>
09.00- 09.50	<b>Assessment Session (Practical Exam)</b>	<b>Independent Learning</b>	<b>Independent Learning</b>	<b>Independent Learning</b>	<b>Independent Learning</b>	<b>Independent Learning</b>
10.00- 10.50						<b>Assessment Session Committee IV Exam (MCQ)</b>
11.00- 11.50						
12.00- 12.50						
13.00- 13.50	<b>Lunch Break</b>	<b>Lunch Break</b>	<b>Lunch Break</b>	<b>Lunch Break</b>		<b>Lunch Break</b>
14.00- 14.50	<b>Assessment Session (Practical Exam)</b>	<b>Independent Learning</b>	<b>Independent Learning</b>	<b>Elective Courses VII</b>	<b>Independent Learning</b>	<b>Program Evaluation Session</b> Review of the Exam Questions, Evaluation of the Committee IV Program <i>Secretary of Committee IV</i>
15.00- 15.50						
16.00- 16.50				<b>Independent Learning</b>	<b>Elective Courses VII</b>	<b>Independent Learning</b>
17.00-17.50						



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

**April 2 – May 25, 2018**

**COMMITTEE DURATION: 8 WEEKS**

		THEORETICAL	PRACTICAL	TOTAL
<b>MED 203</b>	<b>BASIC MEDICAL SCIENCES II</b>	<b>137</b>	<b>33</b>	<b>170</b>
	<b>DISCIPLINE</b>			
	ANATOMY	16	2Gr x 5H	21
	BIOCHEMISTRY	24	3Gr x 2H	26
	BIOPHYSICS	3	0	3
	BIOSTATISTICS	4	2Gr x 2H	6
	HISTOLOGY & EMBRYOLOGY	14	2Gr x 5H	19
	IMMUNOLOGY	1	0	1
	MEDICAL BIOLOGY	6	0	6
	MICROBIOLOGY	16	2Gr x 4H	20
	PATHOLOGY	7	2Gr x 2H	9
	PHARMACOLOGY	15	2GR x 4H	19
	PHYSIOLOGY	31	3Gr x 6H	37
SCIENTIFIC PROJECTS-II	0	4GrX3H	3	

<b>MED 202</b>	<b>INTRODUCTION TO CLINICAL PRACTICE- II</b>	4 GrX 1	4 GrX4	5
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<b>Coordination Committee</b>	<b>Head</b>	Bayram YILMAZ, PhD. Prof.
	<b>Secretary</b>	Deniz KIRAÇ, PhD. Assist. Prof
	<b>Member</b>	Mehtap KAÇAR, MD, PhD, Assoc. Prof.
	<b>Member</b>	Erdem SÖZTUTAR, MD, Assist. Prof.

**COMMITTEE V- UROGENITAL and ENDOCRINE SYSTEMS  
LECTURERS  
April 2 – May 25, 2018**

<b>MED 203 BASIC MEDICAL SCIENCES II</b>	
<b>DISCIPLINE</b>	<b>LECTURERS</b>
ANATOMY	Erdem SÖZTUTAR, MD, Assist. Prof. Aikaterini PANTELİ, MD, Lecturer LAB: Sinem GERGİN, MD LAB: Edibe BİLİŞLİ, DVM
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	Alev CUMBUL, PhD, Assist. Prof. Oya ALAGÖZ, MD, Assist. Prof. Aylin YABA UÇAR, PhD, Assist. Prof.
IMMUNOLOGY	Gülderen YANIKKAYA DEMİREL, MD, PhD, Assoc. Prof.
MEDICAL BIOLOGY	Turgay İSBİR, PhD, Prof. Soner DOĞAN, PhD, Assoc. Prof. Deniz KIRAÇ, PhD, Assist. Prof.
MICROBIOLOGY	Çağatay ACUNER, MD, Assoc. Prof. Barış Ata BORSA, MD, Assist. Prof.
PATHOLOGY	Ferda ÖZKAN MD, Prof. Işın EKİCİ MD, Prof.
PHARMACOLOGY	Ece GENÇ, PhD, Prof.
PHYSIOLOGY	Bayram YILMAZ, PhD, Prof. Mehtap KAÇAR, MD, PhD, Assoc. Prof. Burcu GEMİCİ, PhD, Assist. Prof.
PBL	
SCIENTIFIC PROJECTS-II	Gülderen YANIKKAYA DEMİREL, MD, PhD, Assoc. Prof.

<b>MED 202 INTRODUCTION TO CLINICAL PRACTICE II</b>	
<b>DISCIPLINE</b>	<b>LECTURERS</b>
CLINICAL SKILLS LAB	Özlem TANRIÖVER, MD, Assoc. Prof. Sezgin SARIKAYA, MD, Assoc. Prof. A. Arzu AKALIN, MD, Assist. Prof. Serdar ÖZDEMİR, MD, Assist. Prof. Deniz Algedik GÜRSOY, MD Ali KANDEMİR, MD Merve EKŞIOĞLU, MD

## **COMMITTEE V - UROGENITAL and ENDOCRINE SYSTEMS AIM and LEARNING OBJECTIVES**

### **AIMS**

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

### **LEARNING OBJECTIVES**

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

- 1.0. Describe biology of gonadal development and genetic differentiation.
- 2.0. 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 and urogenital systems;
  - 4.1. Classify embryological origins,
  - 4.2. Explain developmental stages,
  - 4.3. Describe histological properties,
  - 4.4. Associate the relation between birth anomalies and developmental processes.
- 5.0. In endocrine system;
  - 5.1. Describe endocrine, paracrine and neuroendocrine secretion,
  - 5.2. Explain the regulatory role of hypothalamus and pituitary gland,
  - 5.3. List secretions and functions of endocrine glands and organs.
- 6.0. In urinary system;
  - 6.1. Explain renal function and structure of nephrons,
  - 6.2. Explain renal blood flow and mechanisms of urine production,
  - 6.3. Explain liquid-electrolyte and acid-base equilibrium.
- 7.0. In genital system;
  - 7.1. Explain reproductive hormones and their functions in men and women,
  - 7.2. Describe changes in the maternal body in pregnancy and lactation.
- 8.0. For hormones;
  - 8.1. Classify according to mechanisms of action,
  - 8.2. Explain their effects and relation to each other.
- 9.0. Explain biochemical functions of vitamins and minerals.
- 10.0. Describe factors causing neoplasia, formation, mechanisms of occurrence, neoplastic diseases in organism, classification and staging of neoplasia.
- 11.0. Distinguish mechanisms of actions of drugs and explain toxicity of drugs.
- 12.0. Analyze events developing in response to drug receptor interactions.
- 13.0. Describe general principles of antimicrobial chemotherapy.
- 14.0. Describe general principles of cancer chemotherapy.
- 15.0. Describe pharmacology of inflammation and immunomodulation.
- 16.0. Describe the structural/biological features and pathogenesis of viruses
- 17.0. Describe the interrelationship of hormones and immunology
- 18.0. Describe the general principles of magnetic resonance imaging
- 19.0. describe how to write a scientific project proposal.
- 20.0. prepare a research project draft.
- 21.0. Count biostatistical sampling methods.

- 22.0. Count significance tests in biostatistics.  
 23.0. Choose significance tests according to the properties of biostatistical data.  
 24.0. Explain case scenario related basic medical science topics in a clinical context.

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

LEARNING OBJECTIVES	DISCIPLINE	LECTURER/ INSTRUCTOR	DISTRUBITION of MCQs			
			CE	FE	IE	TOTAL
2.0-3.0	ANATOMY	Dr. E. Söztutar Dr. A. Panteli	12	5	5	22
8.0-9.0., 24.0.	BIOCHEMISTRY	Dr. İ. Özden	17	7	7	31
18.0	BIOPHYSICS	Dr. B.G.Tuna	2	1	1	4
21.0-23.0	BIOSTATISTICS	Dr. E.Ç. Altunok	3	1	1	5
4.0.	HISTOLOGY & EMBRYOLOGY	Dr. A. Cumbul Dr. A. Yaba Uçar	11	4	4	19
17.0	IMMUNOLOGY	Dr. G. Yanikkaya Demirel	1	0	0	1
1.0	MEDICAL BIOLOGY	Dr. T. İsbir Dr. D. Kıraç	4	2	2	8
16.0	MEDICAL MICROBIOLOGY	Dr.Ç. Acuner	12	5	5	22
10.0	PATHOLOGY	Dr. F. Özkan Dr. I. Ekici	5	2	2	9
11.0-15.0	PHARMACOLOGY	Dr. E. Genç	11	4	4	19
5.0-7.0., 24.0.	PHYSIOLOGY	Dr. B. Yılmaz Dr. M. Kaçar Dr. B. Gemici Başol	22	9	9	40
24.0	PBL		1	0	0	0
<b>TOTAL</b>			<b>100</b>	<b>46/200<sup>#</sup></b>	<b>46/200<sup>#</sup></b>	<b>180</b>

  

LEARNING OBJECTIVES	DISCIPLINE	POINTS of ASSESSMENT METHODS
		LPE
2.0-3.0	ANATOMY	20
8.0-9.0, 24.0	BIOCHEMISTRY	10
21.0-23.0	BIOSTATISTICS	10
4.0.	HISTOLOGY & EMBRYOLOGY	20
16.0.	MEDICAL MICROBIOLOGY	20
10.0.	PATHOLOGY	10
11.0-15.0.	PHARMACOLOGY	20
5.0-7.0, 24.0.	PHYSIOLOGY	20
<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**

**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, **40** 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 / 2 – 6 April 2018

	<b>Monday 2-April - 2018</b>	<b>Tuesday 3-April-2018</b>	<b>Wednesday 4-April-2018</b>	<b>Thursday 5-April-2018</b>			<b>Friday 6-April-2018</b>		
09.00- 09.50	<b>PBL</b>	<b>Lecture</b> Introduction to Viruses <i>Microbiology Lecturer</i>	<b>Lecture</b> Urine Formation and Renal Blood Flow <i>Bayram Yılmaz &amp; Mehtap Kaçar</i>	<b>Laboratory/ Physiology</b> <i>Bayram Yılmaz &amp; Mehtap Kaçar</i> Glomerular Filtration (Interactive Simulation) <b>Group A</b>	<b>Laboratory/ Biochemistry</b> <i>Jale Çoban &amp; Müge Kopuz</i> Urine Analysis <b>Group B</b>	<b>Group C, IL</b>	<b>Lecture</b> Urine Formation: Tubular Processing <i>Bayram Yılmaz &amp; Mehtap Kaçar</i>		
10.00- 10.50		<b>Lecture</b> Viral Pathogenesis <i>Microbiology Lecturer</i>	<b>Lecture</b> Urine Formation and Renal Blood Flow <i>Bayram Yılmaz &amp; Mehtap Kaçar</i>				<b>Lecture</b> Urine Formation: Tubular Processing <i>Bayram Yılmaz &amp; Mehtap Kaçar</i>		
11.00- 11.50		<b>Lecture</b> Body Fluids and Functions of Kidneys <i>Bayram Yılmaz &amp; Mehtap Kaçar</i>	<b>Lecture</b> Histology of Urinary System: General Aspect, Kidney Nephron <i>Aylin Yaba Uçar</i>	<b>Lecture</b> DNA Viruses I <i>Microbiology Lecturer</i>			<b>Lecture</b> Mechanisms of Hormone Actions, Intracellular and Cell Surface Receptors <i>Inci Özden</i>		
12.00- 12.50	Introduction to Committee V <i>Secretary of Committee</i>	<b>Lecture</b> Micturition <i>Bayram Yılmaz &amp; Mehtap Kaçar</i>	<b>Lecture</b> Histology of Urinary System: Excretory Passage <i>Aylin Yaba Uçar</i>	<b>Lecture</b> DNA Viruses II <i>Microbiology Lecturer</i>			<b>Lecture</b> Mechanisms of Hormone Actions, Intracellular and Cell Surface Receptors <i>Inci Özden</i>		
13.00- 13.50	<b>Lunch Break</b>	<b>Lunch Break</b>	<b>Lunch Break</b>	<b>Lunch Break</b>			<b>Lunch Break</b>		
14.00- 14.50	<b>Lecture</b> Introduction to Urinary System <i>Erdem Söztutar</i>	<b>Lecture</b> The Kidneys <i>Erdem Söztutar</i>	<b>Lecture</b> Mechanism of Drug Action 1 <i>Ece Genç</i>	<b>Elective Courses VIII</b>	<b>Independent Learning</b>	<b>Group A, IL</b>	<b>Laboratory/ Physiology</b> <i>Bayram Yılmaz &amp; Mehtap Kaçar</i> Glomerular Filtration (Interactive Simulation) <b>Group B</b>	<b>Laboratory/ Biochemistry</b> <i>Jale Çoban &amp; Müge Kopuz</i> Urine Analysis <b>Group C</b>	
15.00- 15.50	<b>Lecture</b> The Kidneys <i>Erdem Söztutar</i>	<b>Lecture</b> Urinary Tracts and Suprarenal Glands <i>Erdem Söztutar</i>	<b>Lecture</b> Mechanism of Drug Action 2 <i>Ece Genç</i>						
16.00- 16.50	<b>Independent Learning</b>	<b>Laboratory/Anatomy</b> Urinary System <i>Erdem Söztutar</i>		<b>Independent Learning</b>	<b>Independent Learning</b>	<b>Elective Courses VIII</b>	<b>Independent Learning</b>		
		<b>Group A</b>	<b>Group B, IL</b>						
17.00-17.50	<b>Independent Learning</b>	<b>Group A, IL</b>	<b>Group B</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 V – UROGENITAL and ENDOCRINE SYSTEMS**  
**II. WEEK / 9 – 13 April 2018**

	<b>Monday 9-April - 2018</b>	<b>Tuesday 10-April-2018</b>	<b>Wednesday 11-April-2018</b>	<b>Thursday 12-April-2018</b>		<b>Friday 13-April-2018</b>	
<b>09.00- 09.50</b>	<b>PBL</b>	<b>Lecture</b> Histology of Endocrine System: General Aspect, Hypothalamus, Epiphysis <i>Aylin Yaba Uçar</i>	<b>Lecture</b> Hormones of Hypothalamus and Pituitary <i>Inci Özden</i>	<b>Laboratory/ Biochemistry</b> <i>Jale Çoban / Müge Kopuz</i> Urine Analysis <b>Group A</b>	<b>Laboratory / Physiology</b> <i>Bayram Yılmaz &amp; Mehtap Kaçar</i> Glomerular Filtration (Interactive Simulation) <b>Group C</b>	<b>Group B, IL</b>	<b>Lecture</b> Hormones of Hypothalamus and Pituitary <i>Inci Özden</i>
<b>10.00- 10.50</b>		<b>Lecture</b> Introduction to Genital Systems <i>Erdem Söztutar</i>	<b>Lecture</b> Hormones of Hypothalamus and Pituitary <i>Inci Özden</i>				<b>Lecture</b> Thyroid Hormones <i>Inci Özden</i>
<b>11.00- 11.50</b>		<b>Lecture</b> Male Genital Organs <i>Erdem Söztutar</i>	<b>Lecture</b> Histology of Endocrine System: Hypophysis <i>Aylin Yaba Uçar</i>	<b>Independent Learning</b>		<b>Lecture</b> Regulation of Acid-Base Balance <i>Bayram Yılmaz &amp; Mehtap Kaçar</i>	
<b>12.00- 12.50</b>	<b>PBL Panel</b>	<b>Lecture</b> Male Genital Organs <i>Erdem Söztutar</i>	<b>Lecture</b> Histology of Endocrine System: Thyroid and Parathyroid and Suprarenal Glands <i>Aylin Yaba Uçar</i>	<b>Independent Learning</b>		<b>Lecture</b> Regulation of Acid-Base Balance <i>Bayram Yılmaz &amp; Mehtap Kaçar</i>	
<b>13.00- 13.50</b>	<b>Lunch Break</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> Mechanisms of Hormone Actions, Intracellular and Cell Surface Receptors <i>Inci Özden</i>	<b>Lecture</b> Fluid and Electrolyte Balance <i>Bayram Yılmaz &amp; Mehtap Kaçar</i>	<b>Lecture</b> DNA Viruses III <i>Microbiology Lecturer</i>	<b>Elective Courses IX</b>	<b>Independent Learning</b>	<b>Lecture</b> Eicosanoids <i>Ece Genç</i>	
<b>15.00- 15.50</b>	<b>Lecture</b> Mechanisms of Hormone Actions, Intracellular and Cell Surface Receptors <i>Inci Özden</i>	<b>Lecture</b> Fluid and Electrolyte Balance <i>Bayram Yılmaz &amp; Mehtap Kaçar</i>	<b>Lecture</b> DNA Viruses IV <i>Microbiology Lecturer</i>			<b>Lecture</b> Introduction to Neoplasia and Biologic Behaviors of Neoplasm <i>Işın D. Ekici</i>	
<b>16.00- 16.50</b>	<b>Independent Learning</b>	<b>Laboratory/Anatomy</b> Male Genital Organs <i>Erdem Söztutar</i>	<b>Lecture</b> DNA Viruses V <i>Microbiology Lecturer</i>	<b>Independent Learning</b>	<b>Elective Courses IX</b>	<b>Lecture</b> Introduction to Neoplasia and Biologic Behaviors of Neoplasm <i>Işın D. Ekici</i>	
		<b>Group A, IL</b>					<b>Group B</b>
<b>17.00-17.50</b>	<b>Independent Learning</b>	<b>Group A</b>	<b>Group B, IL</b>	<b>Independent Learning</b>		<b>Independent Learning</b>	

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**COMMITTEE V – UROGENITAL and ENDOCRINE SYSTEMS**  
**III. WEEK / 16 – 20 April 2018**

	<b>Monday 16-April - 2018</b>	<b>Tuesday 17-April-2018</b>	<b>Wednesday 18-April-2018</b>	<b>Thursday 19-April-2018</b>	<b>Friday 20-April-2018</b>				
<b>09.00- 09.50</b>	<b>Lecture</b> Introduction to Endocrinology <i>Bayram Yılmaz &amp; Mehtap Kaçar</i>	<b>Lecture</b> Hormones of Adrenal Cortex and Adrenal Medulla <i>Inci Özden</i>	<b>Independent Learning</b>	<b>Laboratory/Physiology</b> <i>Bayram Yılmaz &amp; Mehtap Kaçar</i> Metabolic Rate (Interactive Simulation)	<b>ICP</b> CSL: Bladder Catheterization <i>Deniz Algedik Gürsoy &amp; Özlem Tanrıöver</i>				
<b>10.00- 10.50</b>	<b>Lecture</b> Pituitary Gland and Hypothalamic Control <i>Bayram Yılmaz &amp; Mehtap Kaçar</i>	<b>Lecture</b> Hormones of Adrenal Cortex and Adrenal Medulla <i>Inci Özden</i>	<b>Lecture</b> Thyroid Metabolic Hormones <i>Bayram Yılmaz &amp; Mehtap Kaçar</i>	<b>Group A, C IL</b>	<b>Group B</b>				
<b>11.00- 11.50</b>	<b>Lecture</b> Histogenesis and Nomenclature <i>Işın D. Ekici</i>	<b>Lecture</b> Posterior Pituitary Hormones <i>Bayram Yılmaz &amp; Mehtap Kaçar</i>	<b>Lecture</b> RNA Viruses I <i>Microbiology Lecturer</i>	<b>Group C</b>	<b>Group A, B, IL</b>				
<b>12.00- 12.50</b>	<b>Lecture</b> Histogenesis and Nomenclature <i>Işın D. Ekici</i>	<b>Lecture</b> Physiology of Growth Hormones <i>Bayram Yılmaz &amp; Mehtap Kaçar</i>	<b>Lecture</b> RNA Viruses II <i>Microbiology Lecturer</i>			<b>Independent Learning</b>			
<b>13.00- 13.50</b>	<b>Lunch Break</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> Female Genital Organs <i>Erdem Söztutar</i>	<b>Laboratory/Microbiology</b> Immunoassays in Diagnostic Microbiology <i>Microbiology Instructors</i>	<b>Lecture</b> Histology of the Male Genital System: Testis <i>Alev Cumbul</i>	<b>Elective Courses X</b>	<b>Independent Learning</b>				
<b>15.00- 15.50</b>	<b>Lecture</b> Female Genital Organs <i>Erdem Söztutar</i>	<b>Group A I.L</b>	<b>Group B</b>			<b>Lecture</b> Histamine and Antihistamines <i>Ece Genç</i>			
<b>16.00- 16.50</b>	<b>Laboratory/Anatomy</b> Female Genital Organs <i>Erdem Söztutar</i>	<b>Group A</b>	<b>Group B I.L</b>	<b>Laboratory/Physiology</b> <i>Bayram Yılmaz &amp; Mehtap Kaçar</i> Metabolic Rate (Interactive Simulation) <b>Group A</b>	<b>Laboratory/Biostatistic</b> <i>Çiğdem Altınok</i> Computer Applications of Tests of Significance <b>Group B</b>	<b>Group C I.L</b>	<b>Independent Learning</b>	<b>Elective Courses X</b>	<b>Lecture</b> Vasoactive Peptides <i>Ece Genç</i>
	<b>Group A</b>								<b>Group B, IL</b>
<b>17.00-17.50</b>	<b>Group A, IL</b>	<b>Group A</b>							<b>Independent Learning</b>

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**COMMITTEE V – UROGENITAL and ENDOCRINE SYSTEMS  
IV. WEEK / 23 – 27 April 2018**

	<b>Monday 23-April - 2018</b>	<b>Tuesday 24-April-2018</b>	<b>Wednesday 25-April-2018</b>	<b>Thursday 26-April-2018</b>		<b>Friday 27-April-2018</b>				
09.00- 09.50	<b>NATIONAL HOLIDAY</b>	<b>Lecture</b> Regulation of Calcium & Phosphate Metabolism and Bone Formation <i>Bayram Yılmaz &amp; Mehtap Kaçar</i>	<b>Lecture</b> Histology of the Male Genital System: Ovaries <i>Alev Cumbul</i>	<b>Laboratory/ Microbiology</b> Molecular Methods in Diagnostic Microbiology <i>Microbiology instructors</i> <b>Group A</b>	<b>Laboratory/ Pharmacology</b> <i>Ece Genç</i> Efficacy and Potency Concepts <b>Group B</b>	<b>ICP</b> CSL: Bladder Catheterization <i>Ali Kandemir &amp; Arzu Akalin</i>				
10.00- 10.50		<b>Lecture</b> Regulation of Calcium & Phosphate Metabolism and Bone Formation <i>Bayram Yılmaz &amp; Mehtap Kaçar</i>	<b>Lecture</b> Histology of the Male Genital System: Conducting Part <i>Alev Cumbul</i>			<b>Group B</b>	<b>Group A</b>	Group A SP	Group B ICP	Group C ECE- Bağdat Outpatient Clinic
11.00- 11.50		<b>Lecture</b> Nerves of the Pelvis <i>Erdem Söztutar</i>	<b>Lecture</b> Post-receptor Events and Second Messengers <i>Ece Genç</i>	<b>Independent Learning</b>						
12.00- 12.50		<b>Lecture</b> Vasculature of the Pelvis <i>Erdem Söztutar</i>	<b>Lecture</b> Post-receptor Events and Second Messengers <i>Ece Genç</i>							
13.00- 13.50		<b>Lunch Break</b>		<b>Lunch Break</b>		<b>Lunch Break</b>		<b>Lunch Break</b>		
14.00- 14.50		<b>Lecture</b> Hormones Regulating Calcium Metabolism <i>Inci Özden</i>	<b>Lecture</b> Linear Regression <i>E. Çiğdem Altunok</i>	<b>Lecture</b> PTH, Calcitonin, Calcitriol <i>Inci Özden</i>	<b>Lecture</b> Insulin, Diabetes Mellitus <i>Bayram Yılmaz &amp; Mehtap Kaçar</i>					
15.00- 15.50		<b>Lecture</b> Hormones Regulating Calcium Metabolism <i>Inci Özden</i>	<b>Lecture</b> Linear Regression <i>E. Çiğdem Altunok</i>	<b>Lecture</b> PTH, Calcitonin, Calcitriol <i>Inci Özden</i>						
16.00- 16.50		<b>Laboratory/Anatomy</b> Nerves and Vasculature of the Pelvis <i>Erdem Söztutar</i>		<b>Lecture</b> RNA Viruses III <i>Microbiology Lecturer</i>	<b>Lecture</b> Oncogenesis, Incidence and Distribution of Cancer <i>Işın D. Ekici</i>		<b>Lecture</b> Biology of Endocrine System <i>Deniz Kıraç</i>			
		Group A, IL	Group B							
17.00-17.50		Group A	Group B, IL	<b>Lecture</b> RNA Viruses IV <i>Microbiology Lecturer</i>	<b>Lecture</b> Oncogenesis, Incidence and Distribution of Cancer <i>Işın D. Ekici</i>		<b>Lecture</b> Biology of Endocrine System <i>Deniz Kıraç</i>			

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**COMMITTEE V – UROGENITAL and ENDOCRINE SYSTEMS**  
**V. WEEK / 30 April – 4 May 2018**

	<b>Monday 30-April - 2018</b>	<b>Tuesday 1-May-2018</b>	<b>Wednesday 2-May-2018</b>	<b>Thursday 3-May-2018</b>	<b>Friday 4-May-2018</b>					
09.00- 09.50	<b>Independent Learning</b>	<b>LABOR'S DAY</b>	<b>Lecture</b> Perineum and Ischiorectal Fossa <i>Erdem Söztutar</i>	<b>Laboratory/ Physiology</b> <i>Bayram Yılmaz &amp; Mehtap Kaçar</i> Dissection & Examination of Endocrine System	<b>ICP</b> <b>CSL: Bladder Catheterization</b> <i>Merve Ekşioglu &amp; Özlem Tanrıöver</i>					
10.00- 10.50	<b>Lecture</b> Pineal Gland & Melatonin <i>Bayram Yılmaz &amp; Mehtap Kaçar</i>		<b>Lecture</b> Review of the Urinary System <i>Erdem Söztutar</i>	<b>Group A</b>	<b>Group B, C I.L</b>	<table border="1"> <tr> <td align="center"><b>Group A ECE-FHC</b></td> <td align="center"><b>Group B Bağdat Outpatient Clinic</b></td> <td align="center"><b>Group C ICP</b></td> <td align="center"><b>Group D SP SGS</b></td> </tr> </table>	<b>Group A ECE-FHC</b>	<b>Group B Bağdat Outpatient Clinic</b>	<b>Group C ICP</b>	<b>Group D SP SGS</b>
<b>Group A ECE-FHC</b>	<b>Group B Bağdat Outpatient Clinic</b>		<b>Group C ICP</b>	<b>Group D SP SGS</b>						
11.00- 11.50	<b>Lecture</b> Male Reproductive Physiology <i>Bayram Yılmaz &amp; Mehtap Kaçar</i>		<b>Lecture</b> Review of the Urinary System <i>Erdem Söztutar</i>	<b>Group A, B I.L</b>	<b>Group C</b>					
12.00- 12.50	<b>Lecture</b> Male Reproductive Physiology <i>Bayram Yılmaz &amp; Mehtap Kaçar</i>		<b>Invited Speaker</b>		<b>Independent Learning</b>					
13.00- 13.50	<b>Lunch Break</b>		<b>Lunch Break</b>	<b>Lunch Break</b>	<b>Lunch Break</b>					
14.00- 14.50	<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>Elective Courses XI</b>	<b>Independent Learning</b>	<b>Lecture</b> Slow Viruses <i>Microbiology Lecturer</i>				
15.00- 15.50	<b>Lecture</b> Analysis of Variance and Multiple Comparisons <i>E. Çiğdem Altunok</i>		<b>Lecture</b> Development of Genital System; General Aspects <i>Alev Cumbul</i>		<b>Lecture</b> Viral Oncogenesis <i>Microbiology Lecturer</i>					
16.00- 16.50	<b>Lecture</b> Introduction to Drug Development <i>Ece Genç</i>		<b>Laboratory/Anatomy</b> Perineum and Ischiorectal Fossa <i>Erdem Söztutar</i>	<b>Independent Learning</b>	<b>Elective Courses XI</b>	<table border="1"> <tr> <td align="center"><b>Laboratory/ Biostatistic Çiğdem Altunok</b></td> <td align="center"><b>Laboratory/ Physiology Bayram Yılmaz &amp; Mehtap Kaçar</b></td> <td align="center"><b>Group A</b></td> <td align="center"><b>Group B</b></td> </tr> </table>	<b>Laboratory/ Biostatistic Çiğdem Altunok</b>	<b>Laboratory/ Physiology Bayram Yılmaz &amp; Mehtap Kaçar</b>	<b>Group A</b>	<b>Group B</b>
<b>Laboratory/ Biostatistic Çiğdem Altunok</b>	<b>Laboratory/ Physiology Bayram Yılmaz &amp; Mehtap Kaçar</b>		<b>Group A</b>				<b>Group B</b>			
17.00-17.50	<b>Lecture</b> Development of Biopharmaceuticals <i>Ece Genç</i>	<b>Group A</b>	<b>Group B, IL</b>	<b>Group C, IL</b>						
		<b>Group A, IL</b>	<b>Group B</b>							

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

**COMMITTEE V – UROGENITAL and ENDOCRINE SYSTEMS**  
**VI. WEEK / 7 – 11 May 2018**

	<b>Monday 7-May-2018</b>	<b>Tuesday 8-May-2018</b>	<b>Wednesday 9-May-2018</b>	<b>Thursday 10-May-2018</b>		<b>Friday 11-May-2018</b>				
09.00- 09.50	<b>Lecture</b> Endocrine Organs <i>Erdem Söztutar</i>	<b>Lecture</b> Insulin, Glucagon <i>Inci Özden</i>	<b>Lecture</b> Vitamins <i>Inci Özden</i>	<b>Laboratory/ Pharmacology</b> <i>Ece Genç</i> Use of the Tissue Culture in Pharmacology <b>Group A</b>	<b>Laboratory/ Hist. &amp; Embry.</b> Histology of Urinary & Endocrine Systems <i>Alev Cumbul &amp; Aylin Yaba Uçar</i> <b>Group B</b>	<b>ICP</b> <b>CSL: Bladder Catheterization</b> <i>Sezgin Sarıkaya &amp; Arzu Akalın</i>				
10.00- 10.50	<b>Lecture</b> Endocrine Organs <i>Erdem Söztutar</i>	<b>Lecture</b> Insulin, Glucagon <i>Inci Özden</i>	<b>Lecture</b> Vitamins <i>Inci Özden</i>			<b>Group B</b>	<b>Group A</b>	<b>Group A</b> Bağdat Cad. Outpatient Clinic	<b>Group B</b> ECE-FHC	<b>Group C</b> SP SGS
11.00- 11.50	<b>Lecture</b> Fetal and Neonatal Physiology <i>Bayram Yılmaz</i>	<b>Lecture</b> Adrenocortical Hormones <i>Bayram Yılmaz &amp; Mehtap Kaçar</i>	<b>Lecture</b> Development of Male Genital System and Anomalies <i>Alev Cumbul</i>	<b>Independent Learning</b>						
12.00- 12.50	<b>Lecture</b> Endocrine Disruptors <i>Bayram Yılmaz</i>	<b>Lecture</b> Adrenocortical Hormones <i>Bayram Yılmaz &amp; Mehtap Kaçar</i>	<b>Lecture</b> Development of Female Genital System and Anomalies <i>Alev Cumbul</i>	<b>Lunch Break</b>		<b>Lunch Break</b>				
13.00- 13.50	<b>Lunch Break</b>	<b>Lunch Break</b>	<b>Lunch Break</b>	<b>Lunch Break</b>		<b>Lunch Break</b>				
14.00- 14.50	<b>Lecture</b> Insulin, Glucagon <i>Inci Özden</i>	<b>Lecture</b> Pharmacogenetics & Pharmacogenomics <i>Ece Genç</i>	<b>Laboratory/Pathology</b> Inflammation & Neoplasia		<b>Elective Courses XII</b>	<b>Independent Learning</b>	<b>Lecture</b> Antiviral Agents <i>Microbiology Lecturer</i>			
15.00- 15.50	<b>Lecture</b> Insulin, Glucagon <i>Inci Özden</i>	<b>Lecture</b> Pharmacogenetics & Pharmacogenomics <i>Ece Genç</i>	<b>Group A, IL</b>	<b>Group B</b>			<b>Lecture</b> Diagnostic Methods in Virology <i>Microbiology Lecturer</i>			
16.00- 16.50	<b>Independent Learning</b>	<b>Lecture</b> Seeing with Sound: Images from Echoes (Diagnostic Ultrasound Imaging) <i>Bilge Güvenç Tuna</i>	<b>Group A</b>	<b>Group B, IL</b>	<b>Independent Learning</b>	<b>Elective Courses XII</b>	<b>Independent Learning</b>			
17.00-17.50	<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 V – UROGENITAL and ENDOCRINE SYSTEMS**  
**VII. WEEK / 14 – 18 May 2018**

	<b>Monday 14-May-2018</b>	<b>Tuesday 15-May-2018</b>	<b>Wednesday 16-May-2018</b>	<b>Thursday 17-May-2018</b>	<b>Friday 18-May-2018</b>
<b>09.00- 09.50</b>	<b>Lecture</b> Tissue Damage by Eating Disorders and Diabetes Mellitus <i>Ferda Özkan</i>	<b>Lecture</b> Female Reproductive Physiology <i>Bayram Yılmaz &amp; Mehtap Kaçar</i>	<b>Lecture</b> Vitamins <i>İnci Özden</i>	<b>Laboratory/ Hist. &amp; Embry.</b> Histology of Genital System <i>Alev Cumbul &amp; Aylin Yaba Uçar</i>	<b>Lecture</b> Minerals <i>İnci Özden</i>
<b>10.00- 10.50</b>	<b>Lecture</b> Vaccines <i>Microbiology Lecturer</i>	<b>Lecture</b> Female Reproductive Physiology <i>Bayram Yılmaz &amp; Mehtap Kaçar</i>	<b>Lecture</b> Vitamins <i>İnci Özden</i>	<b>Group A</b>	<b>Group B I.L</b>
<b>11.00- 11.50</b>	<b>Lecture</b> Drug Toxicity 1 <i>Ece Genç</i>	<b>Lecture</b> Biology of Sexual Differentiation and Development <i>Turgay İşbir</i>	<b>Lecture</b> Pregnancy and Lactation <i>Bayram Yılmaz &amp; Mehtap Kaçar</i>	<b>Group A I.L</b>	<b>Group B</b>
<b>12.00- 12.50</b>	<b>Lecture</b> Drug Toxicity 2 <i>Ece Genç</i>	<b>Lecture</b> Biology of Sexual Differentiation and Development <i>Turgay İşbir</i>	<b>Lecture</b> Pregnancy and Lactation <i>Bayram Yılmaz &amp; Mehtap Kaçar</i>		
<b>13.00- 13.50</b>	<b>Lunch Break</b>	<b>Lunch Break</b>	<b>Lunch Break</b>	<b>Lunch Break</b>	<b>Lunch Break</b>
<b>14.00- 14.50</b>	<b>ICP</b> <b>CSL: ICP-II Review</b> <i>Sezgin Sarıkaya</i>	<b>ICP</b> <b>CSL: ICP-II Review</b> <i>Özlem Tanrıöver</i>	<b>Lecture</b> Prenatal Diagnosis <i>Alev Cumbul</i>	<b>Elective Courses XIII</b>	<b>Independent Learning</b>
<b>15.00- 15.50</b>	<b>Group A</b>	<b>Groups B, C, D, IL</b>	<b>Group C</b>	<b>Groups A, B, D, IL</b>	<b>Lecture</b> Basics of MRI <i>Bilge Güvenç Tuna</i>
<b>16.00- 16.50</b>	<b>Group A</b>	<b>ICP-II Review</b> <i>Serdar Özdemir</i>	<b>Group C</b>	<b>Groups A, B, C, IL</b>	<b>ICP-II Review</b> <i>Arzu Akalın</i>
<b>17.00-17.50</b>	<b>Groups A, C, D, IL</b>	<b>Group B</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 V – UROGENITAL and ENDOCRINE SYSTEMS  
VIII. WEEK / 21 – 25 May 2018**

	<b>Monday 21-May-2018</b>	<b>Tuesday 22-May-2018</b>	<b>Wednesday 23-May-2018</b>	<b>Thursday 24-May-2018</b>	<b>Friday 25-May-2018</b>	
09.00- 09.50	<b>Assessment Session (Practical Exam)</b>	<b>ICP Make-Up Exam</b>	<b>Independent Learning</b>	<b>Independent Learning</b>	<b>Independent Learning</b>	
10.00- 10.50					<b>Assessment Session Committee V (MCQ)</b>	
11.00- 11.50						
12.00- 12.50						
13.00- 13.50	<b>Lunch Break</b>	<b>Lunch Break</b>	<b>Lunch Break</b>	<b>Lunch Break</b>	<b>Lunch Break</b>	
14.00- 14.50	<b>Assessment Session (Practical Exam)</b>	<b>Independent Learning</b>	<b>Independent Learning</b>	<b>Elective Courses XIV</b>	<b>Independent Learning</b>	<b>Program Evaluation Session</b> Review of the Exam Questions, Evaluation of the Committee V Program <i>Secretary of Committee</i>
15.00- 15.50						
16.00- 16.50				<b>Independent Learning</b>	<b>Elective Courses XIV</b>	<b>Independent Learning</b>
17.00-17.50						

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

## **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 students 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

**LIST OF STUDENT COUNSELING- PHASE II**

	STUDENT			COUNSELOR
	NO	NAME	SURNAME	NAME
1	20170800119	KARDELEN	AKGÜN	DOÇ. DR. MEHTAP KAÇAR
2	20160800016	BEYZA NUR	AKIN	PROF. İNCİ ÖZDEN
3	20160800024	CEREN	AKINCI	PROF. İNCİ ÖZDEN
4	20160800002	YARA	AKKAD	PROF. İNCİ ÖZDEN
5	20160800095	MAHMOUD	ALHOSARY	PROF. İNCİ ÖZDEN
6	20150800069	FATİH BURAK	ALTINTAŞ	PROF. ECE GENÇ
7	20160800042	DOĞAÇ	ALTIPARMAK	PROF. ECE GENÇ
8	20160800057	EFE	ARAS	DOÇ. DR. MEHTAP KAÇAR
9	20150800024	EBRU	ARIDURU	PROF. ECE GENÇ
10	20160800007	ÖZCAN	ATEŞ	PROF. TURGAY İSBİR
11	20160800076	SELİN	AYDIN	PROF. TURGAY İSBİR
12	20140800097	MOHAMAD İBRAHİM	BADENJKİ	PROF. TURGAY İSBİR
13	20160800020	FEYHAN	BALCI	PROF. TURGAY İSBİR
14	20160800026	ÇİĞDEM	BAYRAM	PROF. DR. RECEP EROL SEZER
15	20160800035	İPEK NAZ	BELEVİ	YRD. DOÇ. DR. ARZU AKALIN
16	20160800079	AYŞE ZEYNEP	CEVHER	YRD. DOÇ. DR. ARZU AKALIN
17	20150800019	SERKAN	CİVELEK	YRD. DOÇ. DR. ARZU AKALIN
18	20160800005	SABRİ ARTUN	ÇABUK	YRD. DOÇ. DR. ARZU AKALIN
19	20160800018	ÇAĞDAŞ	ÇAĞIN	PROF. DR. RECEP EROL SEZER
20	20160800087	GÜLDEN	ÇAĞLAR	DOÇ. DR. MEHTAP KAÇAR
21	20150800106	AYŞENUR BANU	ÇAKIL	YRD. DOÇ. DR. HALE ARIK TAŞYIKAN
22	20160800080	CANSU	ÇAKIR	DOÇ. DR. MEHTAP KAÇAR
23	20150800093	ÇAĞATAY	ÇALIK	PROF. Dr. ECE GENÇ
24	20160800088	ECE	ÇALIŞAN	DOÇ. DR. GÜLDEREN YANIKKAYA DEMİREL
25	20150800057	SERA	ÇELİK	DOÇ. DR. GÜLDEREN YANIKKAYA DEMİREL
26	20150800008	ALİ FETİH	ÇETİN	DOÇ. DR. GÜLDEREN YANIKKAYA DEMİREL
27	20160800030	ADARA	ÇOLLU	DOÇ. DR. GÜLDEREN YANIKKAYA DEMİREL
28	20150800053	HAKAN	DELİBAŞI	DOÇ. DR. GÜLDEREN YANIKKAYA DEMİREL
29	20170800111	MUHAMMED BURAK	DEMİRHAN	DOÇ. DR. MEHTAP KAÇAR
30	20150800004	BEYZA	DOĞRU	DOÇ. DR. ÖZLEM TANRIÖVER
31	20150800081	ATAKAN	DÖNMEZ	DOÇ. DR. ÖZLEM TANRIÖVER
32	20160800033	EMİN EGECAN	DURMUŞ	DOÇ. DR. ÖZLEM TANRIÖVER
33	20160800019	BURAK TUNAHAH	EKİNCİKLİ	DOÇ. DR. ÖZLEM TANRIÖVER
34	20160800029	BELİZ ÖYKÜ	ERDEM	DOÇ. DR. ÖZLEM TANRIÖVER
35	20160800045	OZAN	EREK	DOÇ. DR. ÇAĞATAY ACUNER
36	20160800107	ALİ ISMAEL	GAIBOUNA	DOÇ. DR. ÇAĞATAY ACUNER
37	20150800085	KARDELEN	GELEŞ	DOÇ. DR. ÇAĞATAY ACUNER
38	20150800072	MAHBUP	GÖKGÖZ	DOÇ. DR. ÇAĞATAY ACUNER
39	20160800023	MİCAN	GÖVERCİN	DOÇ. DR. SONER DOĞAN
40	20150800005	GİZEM	GÜNER	DOÇ. DR. SONER DOĞAN
41	20150800036	ŞAHESTE ÖZEN	GÜNEŞ	DOÇ. DR. SONER DOĞAN
42	20140800059	AYDAN	GÜR	DOÇ. DR. SONER DOĞAN
43	20160800013	YAĞMUR	GÜVEN	DOÇ. DR. SONER DOĞAN
44	20160800111	AFAF	HADDAD	DOÇ. DR. SONER DOĞAN
45	20160800011	İREM	HASDEMİR	YRD. DOÇ. DR. ARZU AKALIN
46	20160800027	SİNAN	HİÇDÖNMEZ	PROF. DR. RECEP EROL SEZER
47	20140800085	ALIREZA	JAVADIAN HOSSEINI	DOÇ. DR. ÖZLEM TANRIÖVER
48	20160800069	CEYHUN	IRMAK	DOÇ. DR. AYLİN YABA UÇAR
49	20150800010	ALKİM MELİKE	KARABÜK	YRD. DOÇ. DR. ÇİĞDEM ALTUNOK
50	20160800006	BERAN	KARAKOÇA	YRD. DOÇ. DR. ÇİĞDEM ALTUNOK
51	20160800113	BETÜL	KARS	DOÇ. DR. AYLİN YABA UÇAR
52	20150800035	ŞEYMA	KIRGIL	YRD. DOÇ. DR. HALE ARIK TAŞYIKAN
53	20150800021	İREM	KIYIPINAR	YRD. DOÇ. DR. ALEV CUMBUL
54	20150800039	DAMLA SELİN	KOCABIÇAK	YRD. DOÇ. DR. DENİZ KIRAÇ

55	2016080110	MERAL AYBÜKE	KOÇ	YRD. DOÇ. DR. ALEV CUMBUL
56	20160800017	DOĞUKAN	KOÇAK	YRD. DOÇ. DR. ALEV CUMBUL
57	20160800034	ALİ EGEMEN	KÖROĞLU	YRD. DOÇ. DR. ALEV CUMBUL
58	20140800031	OKTAY CEM	KUTLAR	YRD. DOÇ. DR. ALEV CUMBUL
59	20160800059	ENGİN BATUHAN	MENKÜER	YRD. DOÇ. DR. DENİZ KIRAÇ
60	20150800009	BÜŞRA	MOĞUL	YRD. DOÇ. DR. DENİZ KIRAÇ
61	20160800040	AZMİ CAN	OFLUOĞLU	YRD. DOÇ. DR. DENİZ KIRAÇ
62	20150800037	NECLA SIMAY	OKAY	DOÇ. DR. AYLİN YABA UÇAR
63	20150800068	EFE	ONAÇ	DOÇ. DR. AYLİN YABA UÇAR
64	20150800050	BUĞRA	ONDUR	DOÇ. DR. AYLİN YABA UÇAR
65	20160800032	KAAN UTKU	ÖNEN	YRD. DOÇ. DR. BİLGE GÜVENÇ TUNA
66	20150800017	ATAKAN	ÖZBEK	YRD. DOÇ. DR. BİLGE GÜVENÇ TUNA
67	20160800044	ZEYNEP	ÖZEL	YRD. DOÇ. DR. BİLGE GÜVENÇ TUNA
68	20150800062	NADİRE ÖZGE	ÖZEN	YRD. DOÇ. DR. SERDAR ÖZDEMİR
69	20150800056	HARUN	ÖZKAYA	YRD. DOÇ. DR. SERDAR ÖZDEMİR
70	20170800106	NİL	ÖZKUR	YRD. DOÇ. DR. ARZU AKALIN
71	20160800101	NEŞE	ÖZTÜRK	YRD. DOÇ. DR. SERDAR ÖZDEMİR
72	20150800060	ÇAĞATAY	PULLU	YRD. DOÇ. DR. SERDAR ÖZDEMİR
73	20160800096	NOUR	RMEID	YRD. DOÇ. DR. ERDEM SÖZTUTAR
74	20160800031	BEGÜM	SARGUT	YRD. DOÇ. DR. ERDEM SÖZTUTAR
75	20170800121	MOHAMMED	SHAHBAZOV	YRD. DOÇ. DR. AKİF MAHARRAMOV
76	20160800100	ENES	SELKİ	YRD. DOÇ. DR. ERDEM SÖZTUTAR
77	20150800061	YAĞMUR	SOLAK	DOÇ. DR. ÇAĞATAY ACUNER
78	20150800074	IŞIN SEDA	ŞAHİN	YRD. DOÇ. DR. ERDEM SÖZTUTAR
79	20160800053	SENİHA DENİZ	ŞAHİN	YRD. DOÇ. DR. ERDEM SÖZTUTAR
80	20160800082	BUKET SELEN	ŞAHİN	YRD. DOÇ. DR. ERDEM SÖZTUTAR
81	20150800054	BERNA	ŞAHİN	YRD. DOÇ. DR. ERDEM SÖZTUTAR
82	20150800012	GÖKÇE	ŞAMLI	YRD. DOÇ. DR. ERDEM SÖZTUTAR
83	20160800064	İNCİ SU	TAŞCAN	YRD. DOÇ. DR. ERDEM SÖZTUTAR
84	20160800028	AYŞIN	TOZŞEKERLİ	YRD. DOÇ. DR. ERDEM SÖZTUTAR
85	20150800063	HATİCE KÜBRA	UÇAR	DOÇ. DR. BURCU GEMİCİ
86	20150800095	BAGER	UNAT	DOÇ. DR. BURCU GEMİCİ
87	20170800118	MUSTAFA ANIL	USLU	DOÇ. DR. BURCU GEMİCİ
88	20160800049	MELİKE PINAR	ÜNSAL	DOÇ. DR. BURCU GEMİCİ
89	20160800001	YAĞMUR	ÜNSAL	DOÇ. DR. BURCU GEMİCİ
90	20160800037	MEHMET UFAK	YANMAZ	DOÇ. DR. BURCU GEMİCİ
91	20160800063	ALİ	YENİGÜN	DOÇ. DR. BURCU GEMİCİ
92	20160800050	LEVENT	YİĞİNER	DOÇ. DR. BURCU GEMİCİ

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