YEDİTEPE UNIVERSITY

FACULTY OF MEDICINE

PHASE II

ACADEMIC PROGRAM BOOK

2019 - 2020

Student's
Name : .....
Number : .....

YEDİTEPE UNIVERSITY
FACULTY OF MEDICINE

PHASE II

CONTENT **Page**

YEDİTEPE UNIVERSITY FACULTY OF MEDICINE

AIM OF MEDICAL EDUCATION PROGRAM

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

AIM

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

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

YEDİTEPE UNIVERSITY FACULTY OF MEDICINE

PROGRAM OUTCOMES OF MEDICAL EDUCATION *, **

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 2019 – 2020)

Burcu GEMİCİ BAŞOL, PhD Assoc. Prof. (Coordinator)
Deniz KIRAÇ, PhD Assoc. Prof. (Co-Coordinator)
Alev CUMBUL, PhD Assist. Prof. (Co-Coordinator)
Müge KOPUZ ALVAREZ NOVAL, PhD Assist. Prof. (Co-Coordinator)
Mohammed ELGAZZAR, MD Lecturer (Co-Coordinator)

ICP-II COORDINATION COMMITTEE

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

ELECTIVE COURSES COORDINATION COMMITTEE

A. Arzu AKALIN, MD Assist. Prof. (Coordinator)
Seda GÜLEÇ, PhD Assoc. Prof. (Co-Coordinator)

PBL COORDINATION COMMITTEE

Serdar ÖZDEMİR, MD PhD Assist. Prof. (Coordinator)
İbrahim Çağatay ACUNER, MD Assoc. Prof. (Co-Coordinator)
Burcu GEMİCİ BAŞOL, PhD Assoc. Prof. (Co-Coordinator)

DESCRIPTION and CONTENT

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

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

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

AIM and LEARNING OBJECTIVES of PHASE II

AIMS

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

LEARNING OBJECTIVES

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

KNOWLEDGE

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

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. prepare a presentation of a scientific research

INSTRUCTIONAL DESIGN of PRECLINICAL YEARS

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

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

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

Therefore, the core medical courses are;

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

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

Phase II consists of five committees:

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

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

AIM

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

LEARNING OBJECTIVES

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

KNOWLEDGE

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

SKILLS

1.0. apply basic laboratory technics and basic medical examination.

2.0 prepare a presentation of a scientific research

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

Aim
This course aims to equip the students with basic medical skills such as history taking regarding to systems and in general, physical and mental examination in simulated environments in pre-clinical period and to give the students opportunity to develop skills by applying non –invasive or invasive procedures on the mannequins before encountering with real patients. The students improve the gained skills by observing real encounters in the clinical settings during 2nd and 3rd year.

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

Credit Facility:
This course has 5 ECTS credits for the first and third year students while it is 4 ECTS for the second year students and all of the students are required to pass this course in order to pass the year.

Content of the ICP I-II-III
First year medical students gain knowledge on First Aid approaches, develop skills in Basic Life Support, Patient/Casualty Transportation and Bandaging Techniques regarding to First Aid. They also acquire basic knowledge on communication and experience patient-doctor encounter with simulated patients (SP's).
The second years ICP Program consist of modules like handwashing, wearing sterile gloves, assessing vital signs, nasogastric intubation, bladder catheterization, intramuscular, subcutaneous, intradermal and intravenous injections as well as iv. catheterization.
In the third year medical students practice with SP's clinical skills like history taking and physical examination focused on body systems and in general and also mental examination They also gain clinical skills such as suturing techniques and Advanced Cardiac Life Support.

Clinical Skills Laboratory
The Clinical Skills Laboratory is designed for teaching and assessing students at undergraduate level (during the preclinical period from first-year to third year). The lab provides learners with the ideal setting to practice the clinical skills of history taking, physical examination, communication, and gives opportunities to practice invasive and non-invasive procedural skills on mannequins.
Each exam room is equipped with video cameras and microphones to record the encounter. An observation area at the center of the lab allows faculty and students to observe the encounters live or view digital recordings for subsequent analysis.

Simulated Patients (SPs)
The simulated patient encounters provide transition of students from the classroom to standardized patient contact in safe environments.
Encounters with specially trained individuals, known as simulated patients (SPs), simulate specific cases in outpatient and emergency settings. The pool of SPs consist of adults, from various backgrounds.
Clinical cases are created through research and extensive training of the patients portraying these roles.
Assessment: The Assessment procedure of ICP is given in Assessment Table.in this booklet.
Rules for Attendance of the Students: Students are grouped into 4 and group lists are announced in the announcement board at the beginning of the year. Any changes to practical groups on a week by week basis, will only be considered in exceptional situations such as a medical one. Any changes must be requested by a petition along with relevant documentation to the course coordinator. Any change in sessions will only be accepted interchangeably with another student in another group based on availability of work spaces and course coordinator's discretion (based on evidence provided).
Students are required to follow the rules of professional ethics in the laboratory at any time.
When an OSCE is conducted both students and faculty members complete a written evaluation of the event for the improvement of the course and OSCE.

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

AIM and LEARNING OBJECTIVES of ICP- II

AIM

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

LEARNING OBJECTIVES

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

KNOWLEDGE

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

SKILLS

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

ATTITUDE

1. **value** the importance of informed consent
2. **pay** attention to patient privacy
3. **value** the importance of not exceeding the limits of his/her own competency level.

EARLY CLINICAL EXPOSURE

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

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

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

Duration:
Education Program is spread over a total of 8 weeks.

Objectives of the Training:
Students who complete the training program will be able to;
Knowledge:
- explain the steps of the patient-doctor interview.
- explain the history taking steps from the patients.
- explain the examination of vital signs and systemic examination.
- explain the role of clinical settings in daily functioning and health personnel, including the primary care.
- list the administrative units in hospitals (consultant, hospital director, nursing director, quality management, patient safety unit) and function.
- explain the components of medical records.

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

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

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

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

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

Assessment
These assessments are made by the Coordinators of Early Clinical Experience.
The effect of ECE educational program will be considered as 10% of the ICP score.

Organization of Student Groups:
Student cycle of Phase II will be in synchronization with the ICP program.
Phase II coordinator will send the student list for the scheduled hours of training a week before the training to ECE coordinators.
Students should be in the clinical setting on the day of training during the ICP II Program.

Dates	Group A	Group B	Group C	Group D
06 March 2020	ICP	Yeditepe University Hospital, Kozyatağı	Scientific Research and Project Course SGS	FHC
12 March 2020	Yeditepe University Hospital, Kozyatağı	ICP	FHC	Scientific Research and Project Course SGS
20 March 2020	FHC	Scientific Research and Project Course SGS	ICP	Yeditepe University Hospital, Kozyatağı
03 April 2020	Scientific Research and Project Course SGS	FHC	Yeditepe University Hospital, Kozyatağı	ICP
10 April 2020	ICP	Scientific Research and Project Course SGS	FHC	Yeditepe University Hospital, Koşuyolu
17 April 2020	Scientific Research and Project Course SGS	ICP	Yeditepe University Hospital, Koşuyolu	FHC
24 April 2020	FHC	Yeditepe University Hospital, Koşuyolu	ICP	Scientific Research and Project Course SGS
07 May 2020	Yeditepe University Hospital, Koşuyolu	FHC	Scientific Research and Project Course 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 Prof.
A. Arzu AKALIN, MD, Assist. Prof.

SCIENTIFIC RESEARCH and PROJECT COURSE - II

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

ASSESSMENT PROCEDURE:

For the assessments of the medical students for the scientific research and project course - II, it is calculated out of 100 points; 50% will be graded from presentations and 50% will be graded via MCQ exam at the end of the second semester **(14 MAY, 2020 Wednesday).**

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

Scientific Research and Project Course-II course has 2% contribution to Term Score (TS).

The students lists for small group studies will be announced during the first week of educational year. Please note that it is mandatory to attend to Small Group Study hours in the assigned group hours. Students who could not attend to small group studies and make presentation, will not allow to attend MCQ exam of this course

ELECTIVE COURSES

Elective courses aim to add complementary educational experiences to the medical school curriculum in order to improve comprehension of biopsychosocial approach of medical students, besides offering an opportunity to extend knowledge of interest in specific domains. 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**		
MED 614	**Personal Trademark Development**		
Goals	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.		
Content	Business Etiquette creation techniques and personal image methodologies with case studies.		
Course Learning Outcomes	At the end of this course, the student should be able to • create personal brand for successful business life. • use behavioral codes for business etiquette.		
Assessment		**NUMBER**	**PERCENTAGE**
	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
	Attendence (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
	Total		**100**
Code	**Subject**		

MED 615	**Innovation Management**		
Goals	The aim of this course is to convey to the students knowledge on innovative approaches for visionary life, describe the philosophy of futurism.		
Content	Strategies for futurism and applied case studies for personal innovation.		
Course Learning Outcomes	At the end of this course, the student should be able to • use futuristic strategies to create innovative approaches. • use innovative and creative thinking techniques in professional life.		
Assessment		**NUMBER**	**PERCENTAGE**
	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
	Attendence (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
	Total	8	**100**

Code	Subject		
MED 616	**Medical Management and New Services Design Skills**		
Goals	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.		
Content	Leadership Styles, Skills needed in Med, Strategies for New Generation Leadership, Empathy Techniques, Problem Solving with Empathy, and Conciliation with Empathy.		
Course Learning Outcomes	At the end of this course, the student should be able to • develop leadership skills to manage teams. • use empathy techniques for conciliation with their patients and co-workers.		
Assessment		**NUMBER**	**PERCENTAGE**
	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
	Attendence (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
	Total		**100**

Code	Subject		
MED 617	**Personal Brand Management Skills**		
Goals	This course aimes 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.		
Content	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.		
Course Learning Outcomes	At the end of this course, the student should be able to • apply stress and time management skills in their personal development and career.		
Assessment		**NUMBER**	**PERCENTAGE**
	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
	Attendence (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
	Total		**100**

Code	Subject		
MED 621	**Epidemiological Research and Evidence Based Medicine**		
Goals	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.		
Content	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.		
Course Learning Outcomes	At the end of this course, the student should be able to • comprehend various types of epidemiological research. • explain basic epidemiological terminology.		
Assessment		**NUMBER**	**PERCENTAGE**
	Group work performance		50
	Presentations		50
	Total		**100**

Code	Subject		
MED 622	**Application of Economics in Health Care**		
Goals	This course aims to teach the essentials of economics and its' core concepts' relevance with health-care.		
Content	Tools and concepts of traditional Microeconomics Theory, health production function, cost & benefit analysis, demand for health insurance and health care markets.		
Course Learning Outcomes	At the end of this course, the student should be able to • explain the applications of micro-economic theories in health related areas. • discuss the causes of market failure. • list the factors effecting the demand for health. • explain health insurance supply and demand. • analyse how health care market operates.		
Assessment		**NUMBER**	**PERCENTAGE**
	Mid-terms	1	80
	Quizzes, Homeworks	5	5
	Attendance	14	15
		Total	100
	Contribution of Final Examination to Overall Grade		45
	Contribution of In-Term Studies to Overall Grade		55
		Total	**100**

Code	Subject
MED 624	**Narrative Medicine**
Goals	This course aims to build close reading skills and to develop approaches to reflective writing in the clinical setting. To equip with a capacity to read deeply, extensively, and rigorously the clinical setting and conditions of the cases so as to recognize the writer/artist and (here, the dividend) the reader/ the viewer opinions comparatively.
Content	The care of the sick unfolds in stories. The effective practice of healthcare requires the ability to recognize, absorb, interpret, and act on the stories and plights of others. Medicine practiced with narrative competence is a model for humane and effective medical practice. It addresses the need for patients and caregivers to voice their experience, to be heard and to be valued, and it acknowledges the power of narrative to change the way care is given and received. Narrative Medicine empowers the overarching goals of medicine, public health, and social justice, as well as the intimate, interpersonal experiences of the clinical encounter. There is a seminar part of the course, and the workshop will be an interactive session. The instructor helps students to discuss art pieces with some questions. At the end of the session, a project is given to write a reflective piece in a limited time. The writings could be shared depending on the writers' will and feedbacks are provided as a class by using close reading techniques. Artworks (literary works such as poetry, story, novels, visual artworks such as paintings, photographs, movies, comic books, or music) will be shared by the instructor.
Course Learning Outcomes	At the end of this course, the student should be able to • improve their close reading skills for medical narratives in the clinical setting. • recognize their emotions and learn emotional honesty by learning and experiencing a reflective writing approach • learn to understand/ listen/recognize more closely the artistic narratives and the clinical narratives as well. • develop a humanistic attitude such as compassion, tolerance for diversity and social justice in the clinic setting. • understand how important the creativity is to a clinician. • understand how the humanities and humanistic values influence and protect the clinician in the clinical setting. • recognize, understand and express their own feelings. • gain skills in telling, listening and understanding the illness experiences. • learn to increase the communication skills between the patient-physician and learn empathy in the clinical setting • gain new skills for a humanistic and effective healthcare service • understand the importance of writing for a clinician for understanding the self and expressing the self.

Assessment		**NUMBER**	**PERCENTAGE**
	Midterm		
	Assignments/weekly feedbacks	1	50
	Final Examination	1	50
		Total	100
	Contribution of Final Examination to Overall Grade	1	50
	Contribution of In-Term Studies to Overall Grade	1	50
		Total	**100**

Code	Subject
MED 627	**Presentation of Medicine on Media**
Goals	This course aims to teach deep understanding to approaches & visual methods/tools available as community communication media in conveying medical knowledge. To analyze technical features and to develop an understanding of aesthetics behind. To develop skills in conveying messages presented via media tools.
Content	Sensual and perceptual theories of visual communication. Analysis and reading the meaning of the images presented in the media as a PR tool.
Course Learning Outcomes	At the end of this course, the student should be able to • recognize the meaning of the visual literacy as intellectual property • describe the physical features of the light and theory of vision • analyze the images with the help of sensual and perceptual theories such as Gestalt, Constructivism, Semiology and Cognitive Approach. • recognize the differences between advertising, journalism and public relations. • describe the historical and cultural stereotypes used in the media • interpret images in the media (such as typography, graphic design, infographics, photography, TV, computer, internet) in technical, historical, cultural, ethical and critical aspects.

		NUMBER	PERCENTAGE
Assessment	Midterm Exam	1	70
	Homework	1	30
		Total	100
	Contribution of Final Examination to Overall Grade		60
	Contribution of In-Term Studies to Overall Grade		40
		Total	**100**

Code	Subject
MED 628	**Healthy Living: The Milestones of the Life for Performance Management**
Goals	This course aims to support fitness practices & dietary habits of healthy life style for medical students. To introduce techniques for reducing stress with healthy living habits. To highlight the importance of superior physical and mental health status for a better job performance.
Content	In the content of this course; understanding physiology of the physical activities, risks and benefits of the regular physical activities, using fitness training as a treatment technique, effects of physical activities to reduce stress, the relation between dietary habits and health will have quite importance.
Course Learning Outcomes	At the end of this course, the student should be able to • explain main exercise physiology • define main fitness terms • analyze main risks and benefits of exercising • relate health and eating habits • perform main fitness training techniques • manage the basic exercises necessary for healthy life • perform physical techniques which are frequently used in stress management • explain the relationship between health and nutrition • describe the principles of healthy eating • recognize exercise as a treatment method for common diseases in the community

		NUMBER	PERCENTAGE
Assessment	Midterm Project	1	25
	Homework	1	25
	Final Project	1	50
		Total	100
	Contribution of Final Examination to Overall Grade		50
	Contribution of In-Term Studies to Overall Grade		50
		Total	**100**

Code	Subject
MED 629	**Music and Medicine**
Goals	This course aims to convey the past and current uses and utilities of music in medicine.
Content	The connection of music and medicine throughout the historical development of antiquity and Middle Ages up until today. The place of music in medical practice after the transformations in the Age of Enlightenment and beyond.
Course Learning Outcomes	At the end of this course, the student should be able to • explain the uses of medicine in the past and present. • describe the uses of music in clinical conditions, and before and after surgical treatment. • explain the effects of music before and after surgery • describe the types of music used in music therapy

		NUMBER	PERCENTAGE
Assessment	Midterm	1	25
	Assignments (Homework)	1	25
	Final Exam		50
		Total	100
	Contribution of Final Examination to Overall Grade		50
	Contribution of In-Term Studies to Overall Grade		50
		Total	**100**

Code	Subject
MED 630	**Health Law**
Goals	The aim of the course is that students obtain a legal rationale, take ethical decisions from a legal perspective, act in a respectful way to patients' rights, legal risks and responsibilities.
Content	The basic concepts of law will be introduced with a view towards health law. The legal nature of medical interventions, concepts of malpractice and complication will be explained. The fundamentals and consequences of legal and criminal liability will be emphasized and medical interventions showing ethical, and legal characteristics will be evaluated from a legal point of view.
Course Learning Outcomes	At the end of this course, the student should be able to • analyze legislature and by-laws related to health law • distinguish branches and consequences of legal responsibility • in taking decisions about patients, help them to make their own decisions in a proper way by respecting their right to self-determination and their privacy. • take ethical decisions from a perspective of patients' rights and legal responsibility • identify legal risks in the developing areas of health law

		NUMBER	PERCENTAGE
Assessment	Assignment / presentation	1	50
	Final EXAM	1	50
		Total	100
	Contribution of Final Examination to Overall Grade		50
	Contribution of In-Term Studies to Overall Grade		50
		Total	**100**

Code	Subject		
MED 631	**Creative Drama II**		
Goals	This course aims the development of body awareness, improvement of communication skills of students by creating an atmosphere where the students can explore the potential of their emotional intelligence.		
Content	In this class, the students will be searching for their abilities for self-representation and being visible in society and going into an active learning process by experiencing image theatre, invisible theatre, newspaper theatre and forum theatre techniques		
Course Learning Outcomes	At the end of this course, the student should be able to • build supportive relationships in group by improving personal cooperating skills. • recognize personal awareness, • explain and review the schemes of personal attitude, thought and feeling by playing games and different roles. • improve critical and creative ways of thinking skills, also improve skills for life-long learning which will be useful for professional life as well as personal life. • explore being visible and expressing oneself in front of spectators using games and storytelling techniques.		
Assessment		**NUMBER**	**PERCENTAGE**
	Midterm	1	25
	Performance evaluation	5	25
	Final EXAM		50
		Total	**100**
	Contribution of Final Examination to Overall Grade		50
	Contribution of In-Term Studies to Overall Grade		50
		Total	**100**

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 begining of the spring semester.
2. Students are required to attend the session.
3. The phase coordinator will monitor the session. If necessary the dean, vice deans and heads of the educational boards will attend to the session.
4. All faculty members will be invited to the session.

Implementation:

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

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

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

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

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

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

The principal idea behind PBL is that the starting point for learning should be a problem, a query, or a puzzle that the learner wishes to solve.
PBL is a learning method where students perceive their knowledge gaps, decide on learning issues and achieve these, while working in small groups on a case to solve a patient's problems.
So, PBL starts by a clinical case of a patient. While working on the patient's problems you will identify your learning needs and study these. During this whole process you will work with a group of 8-12 students and a tutor.

How it works?

You will be presented a patient case (scenario) that has some problems and will be asked to proceed according to the information and instructions that you will receive. You will not be informed about the topic of the case in advance but will face the problem when given to you in your first session- *just like a doctor does not know what patients he/she will see when starting the day*.
Scenarios will be given to you one page at a time. When you finish discussing a page you will be given the following page with additional information about the patient.
Each PBL case will be discussed over 3 sessions, 2 hours each. You will work in a group of 8-12 students with a tutor. One student elected by the group will work as the "scribe" (person who will write the discussed topics on the board). The scribe may change at every session, by group decision.
Each group will be given the same scenario but will work independently from each other.
The tutor working with you will NOT TEACH you but will only guide to on this exciting trip. He/she will ask you questions to guide you to the problems to be solved.
Your aim will be to find out the reasons, and in some cases, the solutions of the problems presented.
It is clear (and we know) that you do not have enough knowledge to understand and solve all the problems presented to you.
Here comes the aim of PBL: **you will thus recognize WHAT YOU DO NOT KNOW and WHAT YOU SHOULD LEARN.** In other words **you will identify your knowledge gaps and try to learn them**. These are called "**learning objectives**".

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

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

The patient's problems will be listed under **"Problems**" column.
The possible causes/reasons/mechanisms of the patient's problems will be listed under "**Hypotheses**". You can suggest and write anything that comes to your mind- you will then try to find any facts or information that can support these hypotheses. Do not be shy to suggest anything. You will not be judged for those things that you suggest.
As you will not be provided with all information about the patient you will need more information (such as, the patient's fever, physical examination findings, laboratory data, etc.). You will thus ask the scribe to write down these on the board under "**Required Information**" heading. This means information that you want to learn about this particular patient.
During the course of these discussions you will recognize that you do not know and thus need to study and learn some topics/issues, which are called "**learning objectives**". The learning objectives will be written on the fourth column under this heading. These are the topics that you will study until the next session and present by then.
This will lead you to the second stage of PBL: learning the facts that ***you*** have decided to. You will have to **find and reach the required learning resources** (textbooks, journal articles, reliable internet sources, etc.) and **study** these in your **independent study time**. You will be given a list of possible learning resources for every discipline

but you can find other sources in addition to them. However, make sure that these are reliable sources- especially web sources need cautiousness.
When you meet with your group and tutor in your second (and third) session, you will be asked to summarize the previous session, list the learning objectives and then present the knowledge that you had learned.
In this way every group member (students) will study and learn the objectives and these will be discussed during the session. There may be disagreements among students for some information reached. The group will discuss and come to a conclusion about it. The tutor will guide and moderate the group through this process- BUT WILL NOT TEACH. **The tutor will <u>not be a resource person</u> 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							
PROBLEM SOLVING AND CRITICAL THINKING	**Not observed**	**Poor**	**Fair**	**Average**	**Good**	**Excellent**	**Total Point of the Part**
	0	**1**	**2**	**3**	**4**	**5**	
13. Generates hypotheses independently							
14. Reviews hypotheses critically							
15. Integrates basic science and clinical concepts							
16. Describes the difference between normal and pathological conditions							
PROFESSIONAL ATTITUDE	**Not observed**	**Poor**	**Fair**	**Average**	**Good**	**Excellent**	**Total Point of the Part**
	0	**1**	**2**	**3**	**4**	**5**	
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							
Total Score of the Student →							

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

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

Signature of the tutor	

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

INDEPENDENT LEARNING

Description:

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

Aim:

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

Objectives:

With this instructional strategy, students will develop;

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

Rules:

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

What a student should do for learning independently?

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

8. **Improving:** Once you've achieved the target, the process of planning can start again. Your needs and priorities may have changed, so think about them and then set yourself to another target.

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

Reference:

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

For further reading useful resources to recommend to students:

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

ASSESSMENT PROCEDURE

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

- Exams:
  - Committee Exam (CE)
  - Mid-term Exam (MTE)
  - 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 Research and Project Course Score (SRPCS)
  - 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		SRPCS, 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)	
CE	For the proportional correspondence of individual learning objectives, please see the committee's assessment matrix table/page.
MTE$_{ICP}$	MTE$_{ICP}$ consists of MCQs to assess the theoretical part of the ICP program.
FE	FE consists of 200 MCQs. For the proportional contribution of each committee, please see the committee's assessment matrix table/page.
ICE	ICE consists of 200 MCQs. For the proportional contribution of each committee, please see the committee's assessment matrix table/page.
MUE$_{BMS}$	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)	
CS	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 I, II, III, and V is **5%.**
CMS	= Average of CSs
ICPS	= (OSCE 1 %45)+(OSCE2 %45)+(ECE %10)
ECSs	= Score information is shown pages of Elective Courses in the APB.
SRPCS	= Score information is shown pages of Scientific Research and Project Course in APB
FES	= Final Exam Score
ICES	= Incomplete Exam Score
TS *for students, who are exempted from FE*	= 98% of CMS + 2% of SRPCS
TS *for students, who are not exempted from FE*	= 98% of (60% of CMS + 40% of FES or ICES) + 2% of SRPCS

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

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 loose 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 (Base Floor 442)
15:00-15:50	MED 203 (B 310)	MED 203 (B 310)	MED 203 (B 310)	MED 203 (B 310)	MED 202 (Base Floor 442)
16:00-16:50	MED 203 (B 310)	MED 203 (B 310)	MED 203 (B 310)	Elective Course (SPRING)	MED 202 (Base Floor 442)
17:00-17:50	MED 203 (B 310)	MED 203 (B 310)	MED 203 (B 310)	Elective Course (SPRING)	MED 202 (Base Floor 442)

COURSE CODES:	**COURSES and LOCATIONS**
MED 203	Basic Medical Sciences II (B 310) or Laboratories*
MED 202	Introduction to Clinical Practice II (CSL)** or (B 310)

ELECTIVE COURSES CODES:

MED 614	Business Etiquette and Personal Image
MED 615	Futurism and Idea Creation
MED 616	Medical Management, Leadership and Coaching
MED 617	Stress and Time Management
MED 618	Medicine & Pharmaceutical Industry
MED 621	Epidemiology Journal Club
MED 622	Application of Economics in Health Care
MED 624	Narrative Medicine
MED 627	Presentation of Medicine on Media
MED 628	Healthy Living: The Milestones of the Life for Performance Management
MED 629	Music and Medicine
MED 630	Health Law
MED 631	Creative Drama II
CLASSES	
B 311	Ground Floor
Elective Course Classess	Will be announced later

*** MED 203 Laboratory sessions will be held at the laboratories of related departments:**
Physiology Laboratory: Room Number 448, Base Floor, and Room Number: 934, 5th Floor,
Histology and Embriology Laboratory: Room Number 929-930, 5th Floor
Anatomy Laboratory: C0547 and 3108 Cadaver Room, Ground Floor (-1)
Microbiology Laboratory: Room Number: 934, 5th Floor,
Pathology Laboratory: Room Number: 929-930, 5th Floor, Medical Faculty Block

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

ACADEMIC CALENDAR 2019 – 2020

BASIC MEDICAL SCIENCES II

COMMITTEE I
CARDIOVASCULAR SYSTEM (6 Weeks)

Beginning of Committee	September 9, 2019	Monday
End of Committee	October 18, 2019	Friday
Committee Exam (Theoretical and Practical Exams)	October 14- 18, 2019	Monday-Friday
Committee Exam Discussion	October 18, 2019	Friday

COMMITTEE II
RESPIRATORY SYSTEM (6 Weeks)

Beginning of Committee	October 21, 2019	Monday
End of Committee	November 29, 2019	Friday
Committee Exam (Theoretical and Practical Exams)	November 25 - 29, 2019	Monday-Friday
Committee Exam Discussion	November 29, 2019	Friday
National Holiday	**October 29, 2019**	**Tuesday**
Commemoration of Atatürk	**November 10, 2019**	**Sunday**

COMMITTEE III
GASTROINTESTINAL SYSTEM (7 Weeks)

Beginning of Committee	December 02, 2019	Monday
End of Committee	January 17, 2019	Friday
Committee Exam (Theoretical and Practical Exams)	January 13 - 17, 2019	Monday-Friday
Committee Exam Discussion	January 17, 2020	Friday
New Year	**January 1, 2020**	**Tuesday**
MIDTERM BREAK	**January 20 2020**	**February 02, 2020**

COMMITTEE IV
NERVOUS SYSTEM (8 Weeks)

Beginning of Committee	February 03, 2020	Monday
End of Committee	March 27, 2020	Friday
Committee Exam (Theoretical and Practical Exams)	March 23-27, 2020	Monday-Friday
Committee Exam Discussion	March 27, 2020	Friday
Physicians' Day	March 14, 2020	Saturday

COMMITTEE V
ENDOCRINE and UROGENITAL SYSTEMS (8 Weeks)

Beginning of Committee	30 March, 2020	Monday
End of Committee	May 22, 2020	Friday
Committee Exam (Theoretical and Practical Exams)	May 18-22, 2020	Monday-Friday
Committee Exam Discussion	May 22, 2020	Friday
Make-up Exam	June 09-10, 2020	Tuesday-Wednesday
Final Exam	June 19, 2020	Friday
Incomplete Exam	July 16, 2020	Thursday

Scientific Project and Research Course (SPRC)

Exam	May 14, 2020	Thursday 15:00
National Holiday	**April 23, 2020**	**Thursday**
Labor's Day	**May 1, 2020**	**Friday**
National Holiday	**May 19, 2020**	**Tuesday**

ELECTIVE COURSES-Spring 2019-2020

Beginning of Elective Courses	February 7, 2020	Friday
End of Elective Courses	May 22, 2020	Friday
Midterm Exam	March 27, 2020	Friday
Make-up Exam	May 29, 2020	Friday
Final Exam	June 5, 2020	Friday
Incomplete Exam	June 18, 2020	Friday

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

Midterm Exam:	February 05-06, 2020	Wednesday-Thursday
Make-up Exam:	May 20, 2020	Wednesday
Final Exam:	June 01-02, 2020	Monday-Tuesday
Incomplete Exam:	June 22, 2020	Monday

THE COORDINATION COMMITTEE MEETINGS

1. Coordination Committee Meeting	October 18, 2019	Friday 15:00
2. Coordination Committee Meeting	January 14, 2020	Tuesday 14:00 (with student participation)
3. Coordination Committee Meeting	May 12, 2020	Tuesday 14:00 (with student participation)
4. Coordination Committee Meeting	July 21, 2020	Tuesday 14:00

RECOMMENDED TEXTBOOKS

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

COMMITTEE I - CARDIOVASCULAR SYSTEM
DISTRIBUTION of LECTURE HOURS
September 09 - October 18, 2019
COMMITTEE DURATION: 6 WEEKS

MED 203	BASIC MEDICAL SCIENCES II	THEORETICAL	PRACTICAL	TOTAL
	DISCIPLINE			
	ANATOMY	14	2Grx4H	18
	BIOCHEMISTRY	12	3Grx2H	14
	BIOPHYSICS	10	0	10
	BIOSTATISTICS	2	0	2
	HISTOLOGY & EMBRYOLOGY	11	2Grx5H	16
	IMMUNOLOGY	3	0	3
	MEDICAL BIOLOGY	4	0	4
	MEDICAL MICROBIOLOGY	9	4GrX3H	12
	PATHOLOGY	7	0	7
	PHYSIOLOGY	34	3Grx10H	44
	SCIENTIFIC RESEARCH and PROJECT COURSE-II	2	4GrX3H	5
	TOTAL	**108**	**27**	**135**
	INDEPENDENT LEARNING HOURS			75

OTHER COURSES

MED 202	**INTRODUCTION to CLINICAL PRACTICE- II**	4GrX 1H	4GrX 2H	3

Coordination Committee	**Head**	Bayram YILMAZ, PhD, Prof.
	Secretary	Alev CUMBUL, PhD, Assist. Prof.
	Member	Mehtap KAÇAR, MD, PhD, Assoc. Prof.
	Member	Akif MAHARRAMOV, PhD, Assist. Prof.

COMMITTEE I - CARDIOVASCULAR SYSTEM
LECTURERS

MED 203 BASIC MEDICAL SCIENCES II	
DISCIPLINES	**LECTURERS**
ANATOMY	ERDEM SÖZTUTAR, MD, Assist. Prof. Aikaterini PANTELİ, MD, Lecturer Mohammed ELGAZZAR, MD, Lecturer LAB: Edibe BİLİŞLİ, DVM LAB: Zeynep Büşra ODABAŞ, DMD
BIOCHEMISTRY	İnci ÖZDEN, PhD, Prof. LAB: Jale ÇOBAN, MD, Prof. LAB: Müge KOPUZ ALVAREZ NOVAL, PhD, Assist. Prof.
BIOPHYSICS	Akif MAHARRAMOV, PhD, Assist. Prof. Bilge GÜVENÇ TUNA, PhD, Assist. Prof.
BIOSTATISTICS	E. Çiğdem ALTUNOK, PhD, Assist. Prof.
HISTOLOGY & EMBRYOLOGY	Aylin YABA UÇAR, PhD, Assoc. Prof. Alev CUMBUL, PhD, Assist. Prof.
IMMUNOLOGY	Gülderen YANIKKAYA DEMİREL, MD, PhD, Prof.
MEDICAL BIOLOGY	Turgay İSBİR, PhD, Prof. Soner DOĞAN, PhD, Assoc. Prof. Deniz KIRAÇ, PhD, Assoc. Prof.
MEDICAL MICROBIOLOGY	Aynur EREN, MD, Prof. Pınar ÇIRAGİL, MD, Prof. Çağatay ACUNER, MD, Assoc. Prof.
PATHOLOGY	Aydın SAV, MD, Prof.
PHYSIOLOGY	Bayram YILMAZ, PhD, Prof. Mehtap KAÇAR, MD PhD, Assoc. Prof. Burcu GEMİCİ BAŞOL, PhD, Assoc. Prof.
SCIENTIFIC RESEARCH AND PROJECT COURSE-II	Bayram YILMAZ, PhD, Prof. Deniz KIRAÇ, PhD, Assoc. Prof.

OTHER COURSES	
DISCIPLINES	**LECTURERS**
MED 202 INTRODUCTION to CLINICAL PRACTICE II	Özlem TANRIÖVER, MD, MPH, 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, general knowledge about microbiology and information about the structural/biological features and pathogenesis of fungi,
7. To convey basic knowledge about biostatistics.

LEARNING OBJECTIVES

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

1.0. For cardiovascular systems;
  1.1. explain biophysical changes,
  1.2. associate with the clinical reflections.
2.0. For cardiovascular system;
  2.1. explain biological characteristics of the system,
  2.2. associate with the clinical reflections.
3.0. For cardiovascular system;
  3.1. describe their anatomy,
  3.2. associate with adjacent tissues and organs,
  3.3. explain their functional and clinical reflections.
4.0. For thorax and diaphragm
  4.1. describe their anatomy,
  4.2. associate with adjacent tissue and organs,
  4.3. explain their functional and clinical reflections.
5.0. Desciribe of development of Neck and Pharyngeal Archs
6.0. For cardiovascular system;
  6.1. explain developmental stages,
  6.2. list embryological origins of organs,
  6.3. associate the relation between major birth abnormalities and developmental process.
  6.4. explain the histological properties of cardiovascular system
7.0. For Lyphoreticular System and Blood
  7.1. explain the histological properties of Lyphoreticular system and Blood
8.0. explain hemodynamics of cardiovascular system and electrical activity of heart by biophysical mechanisms.
9.0. describe the structure, functions, synthesis and degradation of hemoglobin.
10.0. describe erythrocyte-specific metabolisms.
11.0. describe formation, differentiation and functions of blood cells.
12.0. describe physiopathology of diseases, such as anemia, leukemia, hemophilia.
13.0. describe heart rhythm, cardiac output and cardiac cycle.
14.0. describe nervous (autonomous) control of cardiovascular system.
15.0. explain functions of cardiovascular system.

16.0. explain functions and dynamics of circulatory system.
17.0. explain measurements of hematocrit, blood group analysis, blood pressure and ECG methods.
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 discuss scientific articles in te view of literature
26.0. prepare a presentation of scientific research
27.0. for statistical decision
    27.1 lists the types of the statistical hypothesis.
    27.2 lists the types of errors in statistical decison making
    27.3 explain the steps of a statistical hypothesis test
28.0. For human flora;
    28.1 describe the flora,
    28.2 explain its relation to clinical conditions.
29.0. Describe the structural/biological features and pathogenesis of fungi.
30.0. explain case scenario related basic medical science topics in a clinical context.

COMMITTEE I - CARDIOVASCULAR SYSTEM
COMMITTEE I ASSESSMENT MATRIX

LEARNING OBJECTIVES	DISCIPLINE	LECTURER/ INSTRUCTOR	DISTRUBITION of MCQs			
			CE	FE	IE	TOTAL
3.0-4.0	ANATOMY	Dr. A. Panteli	14	5	5	24
8.0-10.0	BIOCHEMISTRY	Dr. İ. Özden	11	4	4	19
1.0	BIOPHYSICS	Dr. A. Maharramov	9	4	4	17
28.0	BIOSTATISTICS	Dr. Ç. Altunok	2	1	1	4
5.0-7.0	HISTOLOGY & EMBRYOLOGY	Dr. A. Yaba Uçar Dr. A. Cumbul	10	4	4	18
18.0	IMMUNOLOGY	Dr. G. Yanıkkaya Demirel	3	1	1	5
2.0	MEDICAL BIOLOGY	Dr. T. İsbir Dr. D. Kıraç	4	1	1	6
29.0-30.0	MEDICAL MICROBIOLOGY	Microbiology Lecturer	8	3	3	14
19.0-25.0	PATHOLOGY	Dr. A. Sav	6	3	3	12
8.0-17.0	PHYSIOLOGY	Dr. B. Yılmaz Dr. M. Kaçar Dr. B. Gemici Başol	32	12	12	56
31	PBL		1	0	0	1
		TOTAL	**100**	**38/200#**	**38/200#**	**176**

LEARNING OBJECTIVES	DISCIPLINE	DISTRUBITION of LAB POINTS
		LPE
3.0-4.0	ANATOMY	**30**
8.0-10.0	BIOCHEMISTRY	**5**
5.0-6.0	HISTOLOGY & EMBRYOLOGY	**15**
29.0-30.0	MEDICAL MICROBIOLOGY	**10**
7.0-16.0	PHYSIOLOGY	**40**
	TOTAL	**100**

Total number of MCQs are 100, equal to100 pts. Each question has 1 pt.).
Total value of LPE is equal to 100 points

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

Abbreviations:
MCQ: Multiple Choice Questions
SbMCQ: Scienario-based Multiple Choice Questions
LPE: Laboratory Practical Exam
CE: Committee Exam
CS: Committee Score
FE: Final Exam
ICE: Incomplete Exam
Pts.: Points
In FE and ICE**, 38** out of 200 FE and ICE MCQs and SbMCQ will be from Committee I (Each question is 0.5 pt, equal value)

COMMITTEE I - CARDIOVASCULAR SYSTEM
I. WEEK / 09– 13 Sep 2019

	Monday 09-Sep-2019	Tuesday 10-Sep-2019	Wednesday 11-Sep-2019	Thursday 12-Sep-2019		Friday 13-Sep-2019	
09.00- 09.50	**Independent Learning**	**Lecture** Porphin, Porphyrins, Heme, Hemoglobin, Structure of Hemoglobin *İnci Özden*	**Lecture** Introduction to Cardiovascular System *Aikaterini Panteli*	**Laboratory / Microbiology** Principles and Procedures of Laboratory Safety *Microbiology Instructors* **Group A**	**Group B, C, D IL**	**Lecture** Chambers of the Heart *Aikaterini Panteli*	
10.00- 10.50	**Introductory Session** Introduction to Phase II Phase II Coordination Committee/ Introduction to Committee I Secretary of Committee	**Lecture** Porphin, Porphyrins, Heme, Hemoglobin, Structure of Hemoglobin *İnci Özden*	**Lecture** Pericardium and Outer Surface of the Heart *Aikaterini Panteli*	**Group B**	**Group A, C, D IL**	**Lecture** Chambers of the Heart *Aikaterini Panteli*	
11.00- 11.50	**Lecture** Introduction to Medical Microbiology *Microbiology Lecturer*	**Lecture** Oxygen, Oxidative Stress, NO, Redox Disequilibrium in the Failing Heart and Cardiovascular System *Deniz Kıraç*	**Lecture** Functions of Hemoglobin *İnci Özden*	**Group C**	**Group A, B, D IL**	**Laboratory / Anatomy** Pericardium, Outer Surface and Chambers of the Heart *Aikaterini Panteli* **Group B**	**Group A IL**
12.00- 12.50	**Lecture** Sterilization and Disinfection *Microbiology Lecturer*	**Lecture** Oxygen, Oxidative Stress, NO, Redox Disequilibrium in the Failing Heart and Cardiovascular System *Deniz Kıraç*	**Lecture** Functions of Hemoglobin *İnci Özden*	**Group D**	**Group A, B, C IL**	**Group B IL**	**Group A**
13.00- 13.50	**Lunch Break**						
14.00- 14.50	**Lecture** Thoracic Cavity & Mediastinum *Aikaterini Panteli*	**Lecture** Histology of Circulatory Systems; Gn Spec. Arteries *Aylin Yaba Uçar*	**Lecture** Introduction to Mycology *Microbiology Lecturer*	**Lecture** Introduction to Bioelectromagnetics Magnetic Field *Akif Maharramov*		**Lecture** Synthesis of Hemoglobin, Disorders Concerning Synthesis of Hemoglobin *İnci Özden*	
15.00- 15.50	**Lecture** Thoracic Cavity & Mediastinum *Aikaterini Panteli*	**Lecture** Histology of Circulatory Systems; Capillaries & Veins *Aylin Yaba Uçar*	**Lecture** Introduction to Mycology *Microbiology Lecturer*	**Lecture** Introduction to Bioelectromagnetics Electric Field *Akif Maharramov*		**Lecture** Synthesis of Hemoglobin, Disorders Concerning Synthesis of Hemoglobin *İnci Özden*	
16.00- 16.50	**Lecture / Scientific Research and Project Course - II** Discussion of Scientific Articles in the View of Literature *Bayram Yılmaz / Deniz Kıraç/ Aylin Yaba Uçar*	**Independent Learning**	**Lecture** Leucocyte Circulation and Migration into Tissue *Gülderen Yanıkkaya Demirel*	**Laboratory / Anatomy** Thoracic Wall, Cavity and Mediastinum *Aikaterini Panteli* **Group A**	**Group B IL**	**Independent Learning**	
17.00-17.50	**Lecture / Scientific Research and Project Course - II** Presentation of Scientific Research *Bayram Yılmaz / Deniz Kıraç/ Aylin Yaba Uçar*	**Independent Learning**	**Independent Learning**	**Group A IL**	Group B	**Independent Learning**	

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

COMMITTEE I - CARDIOVASCULAR SYSTEM
II. WEEK / 16 – 20 Sep 2019

	Monday 16-Sep-2019	Tuesday 17-Sep-2019	Wednesday 18-Sep-2019	Thursday 19-Sep-2019			Friday 20-Sep-2019			
09.00- 09.50	**PBL Session**	**Lecture** Great Vessels of the Heart *Aikaterini Panteli*	**Lecture** Introduction to Pathology *Aydın Sav*	**Laboratory / Microbiology** Collection, Storage and Transport of Specimens *Microbiology Instructors*	**Group D**	**Laboratory / Physiology** Hematocrit Determination and Blood Typing & Bleeding Time *Bayram Yılmaz & Mehtap Kaçar & Burcu Gemici Başol* **Group A**	**Lecture** Adaptations *Aydın Sav*			
10.00- 10.50		**Lecture** Major Vessels of the Body *Aikaterini Panteli*	**Lecture** Platelets and Coagulation *Mehtap Kaçar*		**Group C**		**Lecture** Adaptations *Aydın Sav*			
11.00- 11.50		**Lecture** Functions of Blood *Burcu Gemici Başol*	**Lecture** Platelets and Coagulation *Mehtap Kaçar*		**Group B**	**Group C**	**Lecture** Regulation of Cardiac Function *Bayram Yılmaz*			
12.00- 12.50	**Independent Learning**	**Lecture** Erythrocyte *Burcu Gemici Başol*	**Lecture** Coronary arteries, Cardiac Veins, and Cardiac Conduction System *Aikaterini Panteli*		**Group A**		**Lecture** Regulation of Cardiac Function *Bayram Yılmaz*			
13.00- 13.50	**Lunch Break**									
14.00- 14.50	**Independent Learning**	**Lecture** Erythrocytes *Burcu Gemici Başol*	**Lecture** Coronary arteries, Cardiac Veins, and Cardiac Conduction System *Aikaterini Panteli*	**Lecture** Blood Types and Transfusion Reactions *Bayram Yılmaz*			**ICP** / CSL: Hand Washing & Wearing Sterile Gloves Özlem Tanrıöver/ Serdar Özdemir **Group A**	**Group D SRPC SGS**	**Independent Learning Group C**	**Laboratory / Physiology** Hematocrit Determination and Blood Typing & Bleeding Time *Bayram Yılmaz & Mehtap Kaçar & Burcu Gemici Başol* **Group B**
15.00- 15.50	**Independent Learning**	**Lecture** Histology of Lymph Organs; General Aspects, Thymus and Lymph Node *Aylin Yaba Uçar*	**Lecture** Leukocytes *Burcu Gemici Başol*	**Lecture** Lymphocytes and the Immune System *Bayram Yılmaz*						
16.00- 16.50	**Independent Learning**	**Lecture** Histology of Lymph Organs; Spleen and MALT (Tonsils) *Aylin Yaba Uçar*	**Lecture** Leukocytes *Burcu Gemici Başol*	**Laboratory / Anatomy** Coronary Arteries, Cardiac Veins, Cardiac Conduction System, Great Vessels of Heart and Body *Aikaterini Panteli* **Group B, IL**		**Group A**				
17.00-17.50	**Independent Learning**	**Independent Learning**	**Independent Learning**	**Group B**		**Group A IL**	**Independent Learning**			

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

COMMITTEE I - CARDIOVASCULAR SYSTEM
III. WEEK / 23 – 27 Sep 2019

	Monday 23-Sep-2019	Tuesday 24-Sep-2019	Wednesday 25-Sep-2019	Thursday 26-Sep-2019		Friday 27-Sep-2019		
09.00- 09.50	**PBL Session**	**Lecture** Principles of Hemodynamics *Burcu Gemici Başol*	**Lecture** Cardiac Arrhythmias *Bayram Yılmaz*	**Laboratory / Histology &Embryology** Histology of Cardiovascular System *Alev Cumbul & Aylin Yaba Uçar*	**Group B IL**	**Lecture** Microcirculation and the Lymphatic System *Bayram Yılmaz*		
10.00- 10.50		**Lecture** Principles of Hemodynamics *Burcu Gemici Başol*	**Lecture** Cardiac Arrhythmias *Bayram Yılmaz*	**Group A**	**Laboratory / Anatomy** Lymphatic System *Aikaterini Panteli* **Group B**	**Lecture** Capillary Fluid Exchange, Interstitial Fluid, and Lymph Flow *Bayram Yılmaz*		
11.00- 11.50		**Lecture** Ischemia and Infarction *Aydın Sav*	**Lecture** Development of Circulatory System; Endocardial Tube Formation & Looping *Alev Cumbul*	**Group B**	**Group A**	**Lecture** Systemic Mycoses *Microbiology Lecturer*		
12.00- 12.50	**Independent Learning**	**Lecture** Ischemia and Infarction *Aydın Sav*	**Lecture** Development of Circulatory Systems; Septation *Alev Cumbul*		**Grup A IL**	**Lecture** Superficial/Subcutaneous Mycosis *Microbiology Lecturer*		
13.00- 13.50	**Lunch Break**							
14.00- 14.50	**Lecture** Rhythmical Excitation of the Heart *Bayram Yılmaz*	**Lecture** Degradation of Hemoglobin *İnci Özden*	**Lecture** Sampling, Data Collection and Data Processing *E. Çiğdem Altunok*	**Lecture** Principles of Electrocardiography *Bayram Yılmaz*		**ICP** / CSL: Hand Washing & Wearing Sterile Gloves *Özlem Tanrıöver / Serdar Özdemir* **Group B**	**Group A SRPC SGS**	**Group C, D IL**
15.00- 15.50	**Lecture** Rhythmical Excitation of the Heart *Bayram Yılmaz*	**Lecture** Degradation of Hemoglobin *İnci Özden*	**Lecture** Statistical Decision Theory, Test of Hypothesis and Significance *E. Çiğdem Altunok*	**Lecture** Electrocardiographic Interpretation of Cardiac Abnormalities *Bayram Yılmaz*				
16.00-16.50	**Independent Learning**	**Lecture** Introduction to Lymphatic System *Aikaterini Panteli*	**Independent Learning**	**Invited Speaker**				
17.00-17.50	**Independent Learning**	**Lecture** Circulation of Lymph *Aikaterini Panteli*	**Independent Learning**			**Independent Learning**		

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

COMMITTEE I - CARDIOVASCULAR SYSTEM
IV. WEEK / 30 Sep – 04 Oct 2019

	Monday 30-Sep-2019		Tuesday 01-Oct-2019	Wednesday 02-Oct-2019		Thursday 03-Oct-2019		Friday 04-Oct-2019		
09.00- 09.50	**Lecture** Hyperemia & Congestion *Aydın Sav*		**Lecture** Circulatory Shock and Physiology of Its Treatment *Mehtap Kaçar*	**Lecture** Nervous Regulation of the Circulation *Bayram Yılmaz*		**Laboratory / Microbiology** Mycology *Microbiology Instructors* **Group D**	**Laboratory / Physiology** ECG-II *Bayram Yılmaz & Mehtap Kaçar & Burcu Gemici Başol* **Group A**	**Independent Learning**		
10.00- 10.50	**Lecture** Hyperemia & Congestion *Aydın Sav*		**Independent Learning**	**Lecture** Nervous Regulation of the Circulation *Bayram Yılmaz*		**Group C**		**ICP** / CSL: Hand Washing & Wearing Sterile Gloves *Arzu Akalın / Serdar Özdemir* **Group C**	**Group B SRPC SGS**	**Group A, D IL**
11.00- 11.50	**Lecture** Coronary Circulation *Mehtap Kaçar*		**Lecture** Disorders Concerning Hemoglobin Metabolism *İnci Özden*	**Lecture** Congenital Heart Anomalies *Alev Cumbul*		**Group B**	**Group C**			
12.00- 12.50	**Lecture** Cardiac Failure *Mehtap Kaçar*		**Lecture** Disorders Concerning Hemoglobin Metabolism *İnci Özden*	**Lecture** Development of Circulatory Systems; Arteries and Anomalies *Alev Cumbul*		**Group A**				
13.00- 13.50	**Lunch Break**									
14.00- 14.50	**Laboratory/ Physiology** ECG I *Bayram Yılmaz & Mehtap Kaçar & Burcu Gemici Başol* **Group A (Group C IL)**	**Laboratory / Biochemistry** Peripheral Blood Smear *Jale Çoban & Müge Kopuz Alvarez Noval* **Group B**	**Lecture** Opportunistic Mycoses-I *Microbiology Lecturer*	**Lecture** Development of Circulatory Systems; Veins and Anomalies *Alev Cumbul*		**Lecture** Vascular Distensibility and Functions of Arterial and Venous Systems *Bayram Yılmaz*		**Lecture** Blood Coagulation, Primary Hemostasis *İnci Özden*		
15.00- 15.50			**Lecture** Opportunistic Mycoses-II *Microbiology Lecturer*	**Lecture** Diagnostic Methods in Mycology *Microbiology Lecturer*		**Lecture** Vascular Distensibility and Functions of Arterial and Venous Systems *Bayram Yılmaz*		**Lecture** Secondary hemostasis, Procoagulation, Anticoagulation, Fibrinolysis *İnci Özden*		
16.00- 16.50	**Group C (Group B IL)**	**Group A**	**Independent Learning**	**Laboratory/ Physiology** ECG I *Bayram Yılmaz & Mehtap Kaçar & Burcu Gemici Başol* **Group B (Group A IL)**	**Laboratory / Biochemistry** Peripheral Blood Smear *Jale Çoban & Müge Kopuz Alvarez Noval* **Group C**	**Laboratory / Physiology** ECG-II *Bayram Yılmaz & Mehtap Kaçar & Burcu Gemici Başol*		**Lecture** Heart Valves and Heart Sounds *Bayram Yılmaz*		
17.00-17.50			**Independent Learning**			**Group B**	**Group A, C IL**	**Lecture** Heart Valves and Heart Sounds *Bayram Yılmaz*		

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

COMMITTEE I - CARDIOVASCULAR SYSTEM
V. WEEK / 07 – 11 Oct 2019

	Monday 07-Oct-2019		Tuesday 08-Oct-2019		Wednesday 09-Oct-2019	Thursday 10-Oct-2019				Friday 11-Oct-2019		
09.00- 09.50	**Lecture** Development of Head; Splanchocranium, Neurocranium *Aylin Yaba Uçar*		**Lecture** Fetal circulation *Aikaterini Panteli*		**Lecture** Local and Humoral Control of Blood Flow by the Tissues *Bayram Yılmaz*	**Laboratory / Histology&Embryology** Histology of Lyphoreticular System *Alev Cumbul & Aylin Yaba Uçar*	**Group B**	**Laboratory / Physiology** Heart Sounds *Bayram Yılmaz & Mehtap Kaçar & Burcu Gemici Başol*	**Group A**	**Independent Learning**		
10.00- 10.50	**Lecture** Development of Neck; Pharyngeal Arches and Anomalies *Aylin Yaba Uçar*		**Lecture** Review of the Cardiovascular System *Aikaterini Panteli*		**Lecture** Local and Humoral Control of Blood Flow by the Tissues *Bayram Yılmaz*					**ICP** / CSL: Hand Washing & Wearing Sterile Gloves *Arzu Akalın / Serdar Özdemir* **Group D**	**Group C SRPC SGS**	**Group A, B IL**
11.00- 11.50	**Lecture** Regulation of Blood Pressure *Mehtap Kaçar*		**Lecture** Hemorheology *Akif Maharramov*		**Lecture** Introduction to Bioelectromagnetics: Electromagnetic Field *Akif Maharramov*		**Group A**		**Group C**			
12.00- 12.50	**Lecture** Regulation of Blood Pressure *Mehtap Kaçar*		**Lecture** Hemorheology *Akif Maharramov*		**Lecture** Bioelectromagnetic Effects on the Heart *Akif Maharramov*							
13.00- 13.50	**Lunch Break**											
14.00-14.50	**Laboratory / Physiology** Blood Pressure *Bayram Yılmaz & Mehtap Kaçar & Burcu Gemici Başol* **Group A**	**Group B, C IL**	**Laboratory / Physiology** Blood Pressure *Bayram Yılmaz & Mehtap Kaçar & Burcu Gemici Başol*		**Lecture** Biological Basis of Cardiovascular Diseases; Death Begets Failure in the Heart *Turgay İsbir*	**Lecture** Immunology of heart and vessels *Gülderen Yanıkkaya Demirel*				**Lecture** Biophysics of Hemodynamics *Akif Maharramov*		
15.00- 15.50			**Group B**	**Group A, C IL**	**Lecture** Biological Basis of Cardiovascular Diseases; Death Begets Failure in the Heart *Turgay İsbir*	**Lecture** Immunology of heart and vessels *Gülderen Yanıkkaya Demirel*				**Lecture** Measurements of Different Hemodynamic Parameters *Akif Maharramov*		
16.00- 16.50	**Group C**	**Group A, B IL**	**Independent Learning**		**Independent Learning**	**Laboratory / Physiology** Heart Sounds *Bayram Yılmaz & Mehtap Kaçar & Burcu Gemici Başol*				**Indep Laboratory / Histology&Embryology Review Session** *Alev Cumbul & Aylin Yaba Uçar* **Group A and Group B**		
17.00-17.50			**Independent Learning**		**Independent Learning**	**Group B**		**Group A, C IL**		**Independent Learning**		

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

COMMITTEE I - CARDIOVASCULAR SYSTEM
VI. WEEK / 14 – 18 Oct 2019

<table>
<tr><th></th><th>Monday
14-Oct-2019</th><th>Tuesday
15-Oct-2019</th><th>Wednesday
16-Oct-2019</th><th>Thursday
17-Oct-2019</th><th>Friday
18-Oct-2019</th></tr>
<tr><td>09.00- 09.50</td><td rowspan="3">Assessment Session
(Physiology and Histology&Embryology Practical Exams)</td><td rowspan="3">Independent Learning</td><td rowspan="3">Independent Learning</td><td rowspan="3">Independent Learning</td><td>Independent Learning</td></tr>
<tr><td>10.00- 10.50</td><td rowspan="3">Assessment Session
Committee I
(MCQ)</td></tr>
<tr><td>11.00- 11.50</td></tr>
<tr><td>12.00- 12.50</td><td rowspan="3">Assessment Session
(Anatomy Practical Exam)</td><td rowspan="3">Independent Learning</td><td rowspan="3">Independent Learning</td><td rowspan="3">Independent Learning</td></tr>
<tr><td>13.00- 13.50</td><td colspan="4">Lunch Break</td></tr>
<tr><td>14.00- 14.50</td><td>Program Evaluation Session
Review of the Exam Questions, Evaluation of the Committee I Program
Secretary of the Committee</td></tr>
<tr><td>15.00- 15.50</td><td rowspan="3">Independent Learning</td></tr>
<tr><td>16.00- 16.50</td><td rowspan="2">Independent Learning</td></tr>
<tr><td>17.00-17.50</td></tr>
</table>

COMMITTEE II - RESPIRATORY SYSTEM
DISTRIBUTION of LECTURE HOURS
October 21– November 29, 2019
COMMITTEE DURATION: 6 WEEKS

MED 203	BASIC MEDICAL SCIENCES II	THEORETICAL	PRACTICAL	TOTAL
	DISCIPLINE			
	ANATOMY	12	2Grx3H	15
	BIOPHYSICS	4	0	4
	BIOSTATISTICS	4	0	4
	HISTOLOGY & EMBRYOLOGY	6	2Grx3H	9
	IMMUNOLOGY	7	0	7
	MEDICAL GENETICS	18	0	18
	MEDICAL MICROBIOLOGY	23	4GRx4H	27
	PATHOLOGY	9	0	9
	PHYSIOLOGY	16	3Grx4H	20
	SCIENTIFIC RESEARCH and PROJECT COURSE-II	0	4GrX3H	3
	TOTAL	**99**	17	**116**
	INDEPENDENT LEARNING HOURS			78

OTHER COURSES

MED 202	**INTRODUCTION to CLINICAL PRACTICE- II**	4GrX1H	4GrX2H	3

Coordination Committee	**Head**	Mehtap KAÇAR, MD PhD. Assoc. Prof.
	Secretary	Burcu GEMİCİ BAŞOL, PhD. Assoc.Prof.
	Member	Çağatay ACUNER, MD. Assoc. Prof.
	Member	Deniz YAT KIRAÇ, PhD. Assist. Prof.

COMMITTEE II - RESPIRATORY SYSTEM

LECTURERS

MED 203 BASIC MEDICAL SCIENCES II	
DISCIPLINE	**LECTURERS**
ANATOMY	Erdem SÖZTUTAR, MD, Assist. Prof. Aikaterini PANTELİ, MD, Lecturer Mohammed ELGAZZAR, MD. Lecturer LAB: Edibe BİLİŞLİ, DVM LAB: Zeynep Büşra ODABAŞ, DMD
BIOPHYSICS	Akif MAHARRAMOV, PhD Assist. Prof. Bilge GÜVENÇ TUNA, PhD Assist. Prof.
BIOSTATISTICS	E. Çiğdem ALTUNOK, PhD Assist. Prof.
HISTOLOGY & EMBRYOLOGY	Aylin YABA UÇAR, PhD Assoc. Prof. Alev CUMBUL, PhD Assist. Prof.
IMMUNOLOGY	Gülderen YANIKKAYA DEMİREL, MD PhD Prof.
MEDICAL GENETICS	Ömer Faruk BAYRAK, PhD Prof.
MEDICAL MICROBIOLOGY	İbrahim Çağatay ACUNER, MD. Assoc. Prof. Microbiology Lecturer/Instructor
PATHOLOGY	Aydın SAV, MD Prof.
PHYSIOLOGY	Bayram YILMAZ, PhD Prof. Mehtap KAÇAR, MD PhD Assoc. Prof. Burcu GEMİCİ BAŞOL, PhD Assoc. Prof
SCIENTIFIC RESEARCH AND PROJECT COURSE-II	Bayram YILMAZ, PhD Prof. Deniz KIRAÇ, PhD Assoc. Prof.

OTHER COURSES

MED 202 INTRODUCTION to CLINICAL PRACTICE II	
DISCIPLINE	**LECTURERS**
CLINICAL SKILLS LAB	Serdar ÖZDEMİR, MD, PhD, Assist. Prof. Emin Gökhan GENCER, MD, PhD, Assist. Prof Cem ŞİMŞEK, MD.

COMMITTEE II - RESPIRATORY SYSTEM

AIM and LEARNING OBJECTIVES

AIMS

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

LEARNING OBJECTIVES

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

KNOWLEDGE

1.0. For respiratory system;
1.1. explain biophysical changes,
1.2. associate with the clinical reflections.
2.0. For nose, paranasal sinus, pharynx, larynx, and lung;
2.1. describe their anatomy,
2.2. associate with adjacent tissues and organs,
2.3. explain their functional and clinical reflections.
3.0. For respiratory system;
3.1. explain developmental stages,
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. Describe the structural/biological features and pathogenesis of bacteria.
15.0. list methods used in protection from microorganisms.
16.0. For endogenous and exogenous harmful agents;
16.1. describe their mechanisms of cell and tissue damage,
16.2. describe adaptation process of cells.
17.0. list pathologies resulting from endogenous and exogenous harmful agents and consequently emerging diseases.

18.0. describe how to prepare a scientific research presentation.
19.0. prepare a research article presentation
20.0. count significance tests in biostatistics.
21.0. count biostatistical sampling methods.
22.0. choose significance tests according to the properties of biostatistical data.
23.0. explain case scenario related basic medical science topics in a clinical context.

COMMITTEE II - RESPIRATORY SYSTEM
COMMITTEE II ASSESSMENT MATRIX

LEARNING OBJECTIVES	DISCIPLINE	LECTURER/ INSTRUCTOR	DISTRUBITION of MCQs and SbMCQ			
			CE	FE	IE	TOTAL
2.0, 23.0	ANATOMY	Dr. A. Panteli	12	5	5	22
1.0, 23.0	BIOPHYSICS	Dr. A. Maharramov	4	1	1	6
20.0 - 22.0	BIOSTATISTICS	Dr. Ç. Altunok	4	1	1	6
3.0	HISTOLOGY & EMBRYOLOGY	Dr. A. Yaba Uçar Dr. A. Cumbul	6	2	2	10
12.0	IMMUNOLOGY	Dr. G. Yanıkkaya Demirel	7	3	3	13
13.0	MEDICAL GENETICS	Dr. Ö.F. Bayrak	18	6	6	30
14.0-15.0	MEDICAL MICROBIOLOGY	Dr. İ. Ç. Acuner Microbiology Lecturer	23	8	8	39
16.0-17.0	PATHOLOGY	Dr. A. Sav	9	3	3	15
4.0-11.0, 23.0.	PHYSIOLOGY	Dr. B. Yılmaz Dr. M. Kaçar Dr. B. Gemici Başol	16	6	6	28
23.0	PBL		1	0	0	1
		TOTAL	**100**	**35/200#**	**35/200#**	**170**

LEARNING OBJECTIVES	DISCIPLINE	DISTRUBITION of LAB ASSESSMENT POINTS
		LPE
2.0	ANATOMY	**40**
3.0	HISTOLOGY & EMBRYOLOGY	**10**
14.0-15.0	MEDICAL MICROBIOLOGY	**20**
4.0-11.0	PHYSIOLOGY	**30**
	TOTAL	**100**

Total number of MCQs are 100, equal to100 pts. Each question has 1 pt.).
Total value of LPE is equal to 100 points

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

Abbreviations:
MCQ: Multiple Choice Questions
SbMCQ: Scienario-based Multiple Choice Questions
LPE: Laboratory Practical Exam
CE: Committee Exam
CS: Committee Score
FE: Final Exam
ICE: Incomplete Exam
Pts.: Points

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

COMMITTEE II - RESPIRATORY SYSTEM
I. WEEK / 21 – 25 Oct 2018

	Monday 21-Oct-2019	Tuesday 22-Oct-2019	Wednesday 23-Oct-2019	Thursday 24-Oct-2019	Friday 25-Oct-2019
09.00- 09.50	**PBL Session**	**Lecture** Histology of the Upper Respiratory Tract *Alev Cumbul*	Lecture Cellular Injury and Necrosis *Aydın Sav*	**Lecture** Hemodynamics *Aydın Sav*	**PBL Session**
10.00- 10.50		**Lecture** Histology of the Upper Respiratory Tract *Alev Cumbul*	Lecture Cellular Injury and Necrosis *Aydın Sav*	**Lecture** Hemodynamics *Aydın Sav*	
11.00- 11.50		**Lecture** Introduction to Bacteriology *Microbiology Lecturer*	**Lecture** Infection and Immunity *Gülderen Yanıkkaya Demirel*	**Lecture** Introduction to Respiratory System *Aikaterini Panteli*	
12.00- 12.50	Introduction to Committee II *Secretary of Committee*	**Lecture** Bacterial Genetics *Microbiology Lecturer*	**Lecture** Infection and Immunity *Gülderen Yanıkkaya Demirel*	**Lecture** Nasal Anatomy and Paranasal Sinuses *Aikaterini Panteli*	**Independent Learning**
13.00- 13.50	**Lunch Break**				
14.00- 14.50	**Independent Learning**	**Lecture** Test Hypotheses and Significance in Large Samples *E. Çiğdem Altunok*	**Lecture** Test Hypotheses and Significance in Large Samples *E. Çiğdem Altunok*	**Lecture** Bacterial Genetics *Microbiology Lecturer*	**ICP/CSL:** Vital Signs *E. Gökhan Gencer & Serdar Özdemir* ***Group C*** / ***Group D*** **SRPC SGS** / ***Group A, B IL***
15.00- 15.50		**Lecture** Test Hypotheses and Significance in Large Samples *E. Çiğdem Altunok*	**Lecture** Test Hypotheses and Significance in Large Samples *E. Çiğdem Altunok*	**Lecture** Bacterial Pathogenesis *Microbiology Lecturer*	
16.00- 16.50		**Independent Learning**	**Independent Learning**	**Lecture** Bacterial Pathogenesis *Microbiology Lecturer*	
17.00-17.50		**Independent Learning**	**Independent Learning**	**Independent Learning**	**Independent Learning**

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

COMMITTEE II - RESPIRATORY SYSTEM
II. WEEK / 28 Oct – 01 Nov 2019

	Monday 28-Oct-2019	Tuesday 29-Oct-2019	Wednesday 30-Oct-2019	Thursday 31-Oct-2019		Friday 01-Nov-2019		
09.00- 09.50	**Independent Learning**	**National Holiday**	**Lecture** The Pharynx *Aikaterini Panteli*	**Group B IL**	**Laboratory /Histology& Embryology** Histology of Respiratory System **Group A**	**Independent Learning**		
10.00- 10.50			**Lecture** The Pharynx *Aikaterini Panteli*	**Laboratory / Anatomy** Upper Respiratory System *Aikaterini Panteli* **Group B**		**ICP/CSL:** Vital Signs *E. Gökhan Gencer & Serdar Özdemir* **Group D**	**Group C SRPC SGS**	**Group A, B, IL**
11.00- 11.50			**Lecture** The Larynx *Aikaterini Panteli*	**Laboratory / Anatomy** **Group A**	**Group B**			
12.00- 12.50			**Lecture** The Larynx *Aikaterini Panteli*	**Group A IL**				
13.00- 13.50	**Lunch Break**		**Lunch Break**	**Lunch Break**		**Lunch Break**		
14.00- 14.50	**Independent Learning**		**Lecture** Gram Positive Cocci *Microbiology Lecturer*	**Lecture** Growth and Cultivation of Bacteria *Microbiology Lecturer*		**Lecture** Hemorrhage and Thrombosis *Aydın Sav*		
15.00- 15.50			**Lecture** Gram Positive Cocci *Microbiology Lecturer*	**Lecture** Microbiome *Microbiology Lecturer*		**Lecture** Hemorrhage and Thrombosis *Aydın Sav*		
16.00- 16.50			**Independent Learning**	**Lecture** Introduction to Medical Genetics *Ömer Faruk Bayrak*		**Lecture** Patterns of Single Gene Inheritance *Ömer Faruk Bayrak*		
17.00-17.50			**Independent Learning**	**Lecture** Introduction to Medical Genetics *Ömer Faruk Bayrak*		**Lecture** Patterns of Single Gene Inheritance *Ömer Faruk Bayrak*		

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

COMMITTEE II - RESPIRATORY SYSTEM
III. WEEK / 04 – 08 Nov 2019

	Monday 04-Nov-2019	Tuesday 05-Nov-2019	Wednesday 06-Nov-2019	Thursday 07-Nov-2019	Friday 08-Nov-2019
09.00- 09.50	**Independent Learning**	**Lecture** Principle of Surface Tension & Alveolar Mechanic *Akif Maharramov*	**Lecture** Development of the Respiratory Systems & Anomalies *Aylin Yaba Uçar*	**Laboratory / Microbiology** Microscopy Methods in Diagnostic *Microbiology Instructors* **Group B** / **Group A, C, D, IL**	**Independent Learning**
10.00- 10.50	**Lecture** Pulmonary Ventilation *Bayram Yılmaz*	**Lecture** Principle of Surface Tension & Alveolar Mechanic *Akif Maharramov*	**Lecture** Development of the Respiratory Systems & Anomalies *Aylin Yaba Uçar*	**Group D** / **Laboratory / Anatomy** Lower Respiratory *Aikaterini Panteli* **Group A**	**ICP/CSL:** Vital Signs *Cem Şimşek & Serdar Özdemir* **Group B** / **Group A SRPC SGS** / **Group C, D IL**
11:00-11:50	**Lecture** Pulmonary Ventilation *Bayram Yılmaz*	**Lecture** Pulmonary Circulation, Pulmonary Edema, Pleural Fluid *Bayram Yılmaz*	**Lecture** The Trachea *Aikaterini Panteli*	**Group A** / **Group B**	
12:00-12:50	**Lecture** Mycobacteria *Microbiology Lecturer*	**Lecture** Pulmonary Circulation, Pulmonary Edema, Pleural Fluid *Bayram Yılmaz*	**Lecture** The Lungs *Aikaterini Panteli*	**Group C** / **Group A, B, D, IL**	
13.00- 13.50	**Lunch Break**				
14.00- 14.50	**Lecture** Aerobic Actinomycetes *Microbiology Lecturer*	**Laboratory / Anatomy** Larynx *Aikaterini Panteli* **Group A** / **Group B IL**	**Lecture** Pulmonary Innate Immune Response *Gülderen Yanıkkaya Demirel*	**Lecture** Diffusion of Blood Gases *Bayram Yılmaz*	**Lecture** Gram Positive Aerobic Bacilli *Microbiology Lecturer*
15.00- 15.50	**Lecture** The Human Genome and Chromosomal Basis of Heredity *Ömer Faruk Bayrak*	**ICP/CSL:** Vital Signs *Cem Şimşek & Serdar Özdemir* **Group A** / **Group B**	**Lecture** Pulmonary Innate Immune Response *Gülderen Yanıkkaya Demirel*	**Lecture** Diffusion of Blood Gases *Bayram Yılmaz*	**Lecture** Non-fermenters *Microbiology Lecturer*
16.00- 16.50	**Lecture** Cytogenetics and Chromosomal Disorders *Ömer Faruk Bayrak*	**Group C, D IL**	**Lecture** Developmental Genetics and Birth Defects *Ömer Faruk Bayrak*	**Independent Learning**	**Lecture** Injury by Endogenous Substances *Aydın Sav*
17.00-17.50	**Independent Learning**		**Lecture** Developmental Genetics and Birth Defects *Ömer Faruk Bayrak*	**Independent Learning**	**Independent Learning**

COMMITTEE II - RESPIRATORY SYSTEM
IV. WEEK / 11 – 15 Nov 2019

	Monday 11-Nov-2019	Tuesday 12-Nov-2019	Wednesday 13-Nov-2019	Thursday 14-Nov-2019		Friday 15-Nov-2019	
09.00- 09.50	**Lecture** Transport of Blood Gases *Bayram Yılmaz*	**Lecture** Regulation of Respiration *Burcu Gemici Başol*	**Lecture** Pulmonary Adaptive Immune Response *Gülderen Yanıkkaya Demirel*	**Laboratory / Microbiology** Culture Methods in Diagnostic Microbiology *Microbiology Instructors* **Group D**	**Laboratory / Physiology** Spirometry *Bayram Yılmaz & Mehtap Kaçar & Burcu Gemici Başol* **Group A**	**Independent Learning**	
10.00- 10.50	**Lecture** Transport of Blood Gases *Bayram Yılmaz*	**Lecture** Regulation of Respiration *Burcu Gemici Başol*	**Lecture** Pulmonary Adaptive Immune Response *Gülderen Yanıkkaya Demirel*	**Group C**		**Group B SRPC SGS**	**Group A, C, D IL**
11.00- 11.50	**Lecture** Cancer Genetics and Genomics *Ömer Faruk Bayrak*	**Lecture** Enterobacteriaceae *Microbiology Lecturer*	**Lecture** Gram Negative Cocci *Microbiology Lecturer*	**Group B**	**Laboratory / Physiology** **Group C**		
12.00- 12.50	**Lecture** Cancer Genetics and Genomics *Ömer Faruk Bayrak*	**Lecture** Enterobacteriaceae *Microbiology Lecturer*	**Lecture** Gram Negative Cocci *Microbiology Lecturer*	**Group A**			
13.00- 13.50	**Lunch Break**						
14.00- 14.50	**Lecture** Pleura and Diaphragm *Aikaterini Panteli*	**Laboratory / Histology&Embryology** Review Session *Alev Cumbul & Aylin Yaba Uçar* **Group A and Group B**	**Lecture** Molecular Basis of Genetic Diseases *Ömer Faruk Bayrak*	**Laboratory / Physiology** Spirometry *Bayram Yılmaz & Mehtap Kaçar & Burcu Gemici Başol*		**Lecture** Other Gram Negative Bacilli-I *Microbiology Lecturer*	
15.00- 15.50	**Lecture** Pleura and Diaphragm *Aikaterini Panteli*		**Lecture** Tools of Human Molecular Genetics *Ömer Faruk Bayrak*	**Group B**	**Group A, C IL**	**Lecture** Other Gram Negative Bacilli-II *Microbiology Lecturer*	
16.00- 16.50	**Lecture** Review of the Respiratory System *Aikaterini Panteli*	**Lecture** The Human Genome and Chromosomal Basis of Heredity *Ömer Faruk Bayrak*	**Lecture** Histology of The Respiratory Systems; Conducting Part *Alev Cumbul*	**Laboratory/ Anatomy** Pleura and Diaphragm *Aikaterini Panteli* **Group A IL**	**Group B**	**Lecture** Injury by Toxic Substances and Pneumoconiosis *Aydın Sav*	
17.00-17.50	**Lecture** Infection and Immunity *Gülderen Yanıkkaya Demirel*	**Lecture** Cytogenetics and Chromosomal Disorders *Ömer Faruk Bayrak*	**Lecture** Histology of the Respiratory Systems; Respiratory Part *Alev Cumbul*	**Group A**	**Group B IL**	**Lecture** Injury by Toxic Substances and Pneumoconiosis *Aydın Sav*	

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

COMMITTEE II - RESPIRATORY SYSTEM
V. WEEK / 18 – 22 Nov 2019

	Monday 18-Nov-2019	Tuesday 19-Nov-2019	Wednesday 20-Nov-2019	Thursday 21-Nov-2019	Friday 22-Nov-2019
09.00- 09.50	**Lecture** Aviation, High-Altitude and Space Physiology *Bayram Yılmaz*	**Lecture** Sports Physiology *Mehtap Kaçar*	**Lecture** Miscallaneous Bacteria *Microbiology Lecturer*	**Laboratory / Microbiology** Microscopy and Culture Methods in Diagnostic Mycobacteria *Microbiology Instructors* **Group C** / **Group A, B, D IL**	**Lecture** Modeling in Circulatory & Respiratory Systems *Akif Maharramov*
10.00- 10.50	**Lecture** Physiology of Deep-Sea Diving and Hyperbaric Conditions *Bayram Yılmaz*	**Lecture** Sports Physiology *Mehtap Kaçar*	**Lecture** Diagnostic Methods in Bacteriology *Microbiology Lecturer*	**Group D** / **Group A, B, C IL**	**Lecture** Modeling in Circulatory & Respiratory Systems *Akif Maharramov*
11.00- 11.50	**Lecture** Anaerobic Bacteria *Microbiology Lecturer*	**Lecture** Mycoplasma, Chlamydia, Rickettsia *Microbiology Lecturer*	**Lecture** Introduction to Pathophysiology of Respiratory System *Mehtap Kaçar*	**Group A** / **Group B, C, D IL**	**Lecture** Genetics of Complex Diseases *Ömer Faruk Bayrak*
12.00- 12.50	**Lecture** Anaerobic Bacteria *Microbiology Lecturer*	**Lecture** Mycoplasma, Chlamydia, Rickettsia *Microbiology Lecturer*	**Lecture** Introduction to Pathophysiology of Respiratory System *Mehtap Kaçar*	**Group B** / **Group A, C, D IL**	**Lecture** Genetics of Complex Diseases *Ömer Faruk Bayrak*
13.00- 13.50	**Lunch Break**				
14.00- 14.50	**Laboratory / Microbiology** Identification Methods in Diagnostic Microbiology *Microbiology Instructors* **Group D** / **Group A, B, C IL**	**Laboratory / Physiology** Exercise and Metabolism *Bayram Yılmaz & Mehtap Kaçar & Burcu Gemici Başol*	**Laboratory / Physiology** Exercise and Metabolism *Bayram Yılmaz & Mehtap Kaçar & Burcu Gemici Başol*	**Lecture** Treatment of Genetic Disease - Introduction to Gene Therapy *Ömer Faruk Bayrak*	**Invited Speaker**
15.00- 15.50	**Group C** / **Group A, B, D IL**	**Group B** / **Group A, C I.L**	**Group C** / **Group A, B, IL**	**Lecture** Treatment of Genetic Disease - Introduction to Gene Therapy *Ömer Faruk Bayrak*	**Independent Learning**
16.00- 16.50	**Group B** / **Group A, C, D IL**	**Independent Learning**	**Group B, C IL** / **Group A**	**Independent Learning**	**Independent Learning**
17.00-17.50	**Group A** / **Group B, C, D IL**	**Independent Learning**			

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

COMMITTEE II - RESPIRATORY SYSTEM
VI. WEEK / 25 – 29 Nov 2019

<table>
<tr><th></th><th>Monday
25-Nov-2019</th><th>Tuesday
26-Nov-2019</th><th>Wednesday
27-Nov-2019</th><th>Thursday
28-Nov-2019</th><th>Friday
29-Nov-2019</th></tr>
<tr><td>09.00- 09.50</td><td rowspan="4">Assessment Session
(Physiology and Histology&Embryology Practical Exams)</td><td rowspan="4">Independent Learning</td><td rowspan="4">Independent Learning</td><td rowspan="4">Independent Learning</td><td>Independent Learning</td></tr>
<tr><td>10.00- 10.50</td><td rowspan="3">Assessment Session
Committee II
(MCQ)</td></tr>
<tr><td>11.00- 11.50</td></tr>
<tr><td>12.00- 12.50</td></tr>
<tr><td>13.00- 13.50</td><td colspan="5">Lunch Break</td></tr>
<tr><td>14.00- 14.50</td><td rowspan="4">Assessment Session
(Anatomy Exam)</td><td rowspan="4">Independent Learning</td><td rowspan="4">Independent Learning</td><td rowspan="4">Independent Learning</td><td>Program Evaluation Session
Review of the Exam Questions,
Evaluation of the Committee II Program
Secretary of the Committee</td></tr>
<tr><td>15.00- 15.50</td><td rowspan="3">Independent Learning</td></tr>
<tr><td>16.00- 16.50</td></tr>
<tr><td>17.00- 17.50</td></tr>
</table>

COMMITTEE III - GASTROINTESTINAL SYSTEM and METABOLISM
DISTRIBUTION of LECTURE HOURS
December 2, 2019 – January 17, 2020
COMMITTEE DURATION: 7 WEEKS

MED 203	BASIC MEDICAL SCIENCES II	THEORETICAL	PRACTICAL	TOTAL
	DISCIPLINE			
	ANATOMY	20	2Grx7H	27
	BIOCHEMISTRY	32	3Grx2H	34
	BIOPHYSICS	10	0	10
	BIOSTATISTICS	4	0	4
	HISTOLOGY & EMBRYOLOGY	12	2Grx4H	16
	IMMUNOLOGY	2	0	2
	MEDICAL BIOLOGY	6	0	6
	MEDICAL MICROBIOLOGY	10	4Grx1H	11
	PATHOLOGY	6	0	6
	PHYSIOLOGY	17	3Grx2H	19
	SCIENTIFIC RESEARCH and PROJECT COURSE-II	0	4GrX3H	3
	TOTAL	**119**	**19**	**138**
	INDEPENDENT LEARNING HOURS			107

OTHER COURSES

MED 202	**INTRODUCTION to CLINICAL PRACTICE- II**	4 GrX1 + 1 GrX1	4 GrX2 + 1 GrX2	5 / 3

Coordination Committee	**Head**	İnci ÖZDEN, Ph.D. Prof.
	Secretary	Mohammed ELGAZZAR, MD Lecturer
	Member	Mehtap KAÇAR, MD. Ph.D. Assoc. Prof.
	Member	Aikaterini PANTELİ, MD, Lecturer

COMMITTEE III - GASTROINTESTINAL SYSTEM and METABOLISM
LECTURERS

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

OTHER COURSES

MED 202 INTRODUCTION TO CLINICAL PRACTICE II	
DISCIPLINE	**LECTURERS**
CLINICAL SKILLS LAB	Özlem TANRIÖVER, MD MPH. Prof. A. Arzu AKALIN, MD Assist. Prof. Barış Murat AYVACI, MD Assist. Prof. Eren GÖKDAĞ, MD. Fatma Tuğba COŞKUN, MD.

COMMITTEE III - GASTROINTESTINAL SYSTEM and METABOLISM

AIM and LEARNING OBJECTIVES

AIMS

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

LEARNING OBJECTIVES

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

KNOWLEDGE

1.0. describe metabolic events in human organism, using concepts of internal energy, work, temperature, entropy, free energy and enthalpy.

2.0. describe gastrointestinal system biology and basics of proper alimentation.

4.0. For oral cavity, temporomandibular joint, chewing muscles, pharynx, esophagus, stomach, small intestine, large intestine, liver, gall bladder and tracts, pancreas, spleen and peritoneum;
- 4.1. describe the anatomy,
- 4.2. associate with adjacent tissue and organs,
- 4.3. explain their functional and clinical reflections.

4.0. For abdominal wall, inguinal canal and portal system;
- 4.1. describe anatomy,
- 4.2. associate with adjacent tissue and organs,
- 4.3. explain their functional and clinical reflections.

5.0. For digestive system and related glands;
- 5.1. classify embryological origins, developmental stages and histological properties,
- 5.2. associate the relation between birth abnormalities and developmental processes.
- 5.3. explain the histological properties of Upper Gastointestinal tract
- 5.4. explain the histological properties of Lower Gastointestinal tract
- 5.5. explain the histological properties of gland associated with Gastointestinal system

6.0. For lipid, protein and carbohydrate metabolisms;
- 6.1. describe physiological mechanisms,
- 6.2. explain the relation to each other,
- 6.3. associate the changes of these relations at fasting and postprandial phase.

7.0. In digestive system;
- 7.1. list exocrine glands secreting acid-neutralizing fluids,
- 7.2. explain their secretion mechanisms,
- 7.3. explain hormonal and neural factors.

8.0 classify the roles of enzymes and hormones in digestion and absorption of lipids and proteins.

9.0 explain types and roles of lipoproteins.

10.0 explain metabolisms of fatty acids, cholesterol, ketone bodies.

11.0 explain amino acid metabolisms, synthesis of urea and control mechanism of the synthesis.

12.0 Describe the structural/biological features and pathogenesis of parasites.

13.0 describe the properties of mucosal immunity

14.0 describe how to prepare a scientific research presentation.

15.0 prepare a research article presentation

16.0 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.

20.0 explain inflammatory processes, termination pathways, effects on tissues and mechanisms for inducing diseases.

COMMITTEE III - GASTROINTESTINAL SYSTEM and METABOLISM

COMMITTEE ASSESSMENT MATRIX

LEARNING OBJECTIVES	DISCIPLINE	LECTURER/ INSTRUCTOR	DISTRIBUTION of MCQs and SbMCQ			
			CE	FE	IE	TOTAL
3.0.-4.0.	ANATOMY	Dr. M. Elgazzar	17	7	7	31
6.0, 8.0.-11.0., 19.0	BIOCHEMISTRY	Dr. İ. Özden	27	11	11	49
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. Yaba Uçar Dr. A. Cumbul	10	4	4	18
13.0.	IMMUNOLOGY	Dr. G. Yanıkkaya Demirel	2	1	1	4
2.0.	MEDICAL BIOLOGY	Dr. S. Doğan	5	2	2	9
12.0.	MEDICAL MICROBIOLOGY	Dr. Ç. Acuner Dr. A. Eren Dr. P Çıragil	8	3	3	14
20.	PATHOLOGY	Dr. A. Sav	5	2	2	9
7.0., 19.0.	PHYSIOLOGY	Dr. B. Yilmaz Dr. M. Kaçar Dr. B. Gemici Başol	14	6	6	26
19	PBL		**1**	**0**	**0**	1
	TOTAL		**100**	**40/200#**	**40/200#**	**180**

LEARNING OBJECTIVES	DISCIPLINE	DISTRUBITION of LAB ASSESSMENT POINTS
		LPE
3.0-4.0	ANATOMY	**60**
6.0, 8.0.-11.0.	BIOCHEMISTRY	**5**
5.0.	HISTOLOGY & EMBRYOLOGY	**20**
12.0.	MICROBIOLOGY	**5**
7.0.	PHYSIOLOGY	**10**
TOTAL		**100**

Total number of MCQs are 100, equal to100 pts. Each question has 1 pt.).

Total value of LPE is equal to 100 points

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

Abbreviations:

MCQ: Multiple Choice Questions
LPE: Laboratory Practical Exam
CE: Committee Exam
CS: Committee Score
FE: Final Exam
ICE: Incomplete Exam
Pts.: Points
In FE and ICE**, 41** out of 200 FE and ICE MCQs will be from Committee III (Each question is 0.5 pt, equal value)

COMMITTEE III - GASTROINTESTINAL SYSTEM and METABOLISM

I. WEEK / 02 – 06 Dec 2019

<table>
<tr><th></th><th>Monday
02-Dec-2019</th><th>Tuesday
03-Dec-2019</th><th>Wednesday
04-Dec-2019</th><th>Thursday
05-Dec-2019</th><th>Friday
06-Dec-2019</th></tr>
<tr><td>09.00- 09.50</td><td rowspan="3">PBL</td><td>Lecture
Transport of Lipids in Plasma
İnci Özden</td><td>Lecture
Digestion and Absorption of Lipids
İnci Özden</td><td colspan="2">Laboratory / Anatomy
Oral Cavity
Mohammed Elgazzar
Group A, IL | Group B</td><td rowspan="2">Lecture
Gastrointestinal Functions
Burcu Gemici Başol</td></tr>
<tr><td>10.00- 10.50</td><td>Lecture
Transport of Lipids in Plasma
İnci Özden</td><td>Lecture
Digestion and Absorption of Lipids
İnci Özden</td><td>Group A</td><td>Group B, IL</td></tr>
<tr><td>11.00- 11.50</td><td>Lecture
Oral Cavity
Mohammed Elgazzar</td><td>Lecture
Histology of Upper Gastrointestinal Tract; Oral Cavity
Alev Cumbul</td><td colspan="2">Independent Learning</td><td>Lecture
Introduction to Parasitology
Microbiology Lecturer</td></tr>
<tr><td>12.00- 12.50</td><td>Introduction to Committee III
Secretary of Committee</td><td>Lecture
Oral Cavity
Mohammed Elgazzar</td><td>Lecture
Histology of Upper Gastrointestinal Tract; Tongue, Salivary Gland
Alev Cumbul</td><td colspan="2">Independent Learning</td><td>Lecture
Parasitic Pathogenesis
Microbiology Lecturer</td></tr>
<tr><td>13.00- 13.50</td><td colspan="5">Lunch Break</td></tr>
<tr><td>14.00- 14.50</td><td>Lecture
Overall Developmental Anatomy of the Digestive System
Mohammed Elgazzar</td><td>Lecture
Bio-thermodynamics, Laws of Thermodynamics
Akif Maharramov</td><td>Lecture
Histology of Alimentary Canal; Esophagus, Stomach
Alev Cumbul</td><td colspan="2">Lecture
Cholesterol Metabolism
İnci Özden</td><td rowspan="3">ICP
CSL: Nasogastric Tube Administration
Özlem Tanrıöver / Arzu Akalın / Barış M. Ayvacı
Group A
Group B
SRPC SGS
Group C, D. I.L</td></tr>
<tr><td>15.00- 15.50</td><td>Lecture
Overall Developmental Anatomy of the Digestive System
Mohammed Elgazzar</td><td>Lecture
The Zeroth and First Laws of Thermodynamics
Akif Maharramov</td><td>Lecture
Energy Transformation & Distribution in Bio-molecular Systems
Akif Maharramov</td><td colspan="2">Lecture
Cholesterol Metabolism
İnci Özden</td></tr>
<tr><td>16.00- 16.50</td><td>Independent Learning</td><td>Independent Learning</td><td>Lecture
Energy Transformation & Distribution in Bio-molecular Systems
Akif Maharramov</td><td colspan="2">Independent Learning</td></tr>
<tr><td>17.00-17.50</td><td>Independent Learning</td><td>Independent Learning</td><td>Independent Learning</td><td colspan="2">Independent Learning</td><td>Independent Learning</td></tr>
</table>

COMMITTEE III - GASTROINTESTINAL SYSTEM and METABOLISM
II. WEEK / 09 – 13 Dec 2019

	Monday 9-Dec-2019	Tuesday 10-Dec-2019	Wednesday 11-Dec-2019	Thursday 12-Dec-2019		Friday 13-Dec-2019		
09.00- 09.50	**PBL Session**	**Lecture** Lipogenesis, Triacylglycerol Synthesis *İnci Özden*	**Lecture** Secretory Functions of the Alimentary Tract *Burcu Gemici Başol*	**Laboratory / Physiology** Digestive System *Bayram Yılmaz & Mehtap Kaçar & Burcu Gemici Başol*	**Laboratory / Biochemistry** Lipid Determination in Blood *Jale Çoban & Müge Kopuz Alvarez Noval*	**Lecture** Digestion and Absorption of Proteins *İnci Özden*		
10.00- 10.50		**Lecture** Lipogenesis, Triacylglycerol Synthesis *İnci Özden*	**Lecture** Secretory Functions of the Alimentary Tract *Burcu Gemici Başol*	**Group B**	**Group C**	**Lecture** Digestion and Absorption of Proteins *İnci Özden*		
11.00- 11.50		**Lecture** Digestion and Absorbtion in the Gastrointestinal Tract *Burcu Gemici Başol*	**Lecture** Applications of the First Law to Isothermal and Adiabatic Processes *Akif Maharramov*	**Group A**	**Group B**	**Lecture** Protozoa-I Microbiology Lecturer		
12.00- 12.50	**Independent Learning**	**Lecture** Digestion and Absorbtion in the Gastrointestinal Tract *Burcu Gemici Başol*	**Lecture** Applications of the First Law to Isochoric, Isobaric Processes, Enthalpy *Akif Maharramov*			**Lecture** Protozoa-II Microbiology Lecturer		
13.00- 13.50	**Lunch Break**							
14.00- 14.50	**Lecture** The Stomach *Mohammed Elgazzar*	**Lecture** The Esophagus *Mohammed Elgazzar*	**Lecture** Small Intestine *Mohammed Elgazzar*	**Laboratory / Physiology** Digestive System *Bayram Yılmaz & Mehtap Kaçar & Burcu Gemici Başol* **Group C**	**Laboratory / Biochemistry** Lipid Determination in *Jale Çoban & Müge Kopuz Alvarez Noval* **Group A**	**ICP** **CSL:** Nasogastric Tube Administration *Özlem Tanrıöver& Arzu Akalın & Eren Gökdağ* **Group B**	**Group A SRPC SGS**	**Group C, D IL**
15.00- 15.50	**Lecture** Duodenum *Mohammed Elgazzar*	**Laboratory / Anatomy** The Stomach and Duodenum *Mohammed Elgazzar* **Group A** / **Group B IL**	**Lecture** Small Intestine *Mohammed Elgazzar*					
16.00- 16.50	**Lecture** Propulsion and Mixing Movements in the GI Tract *Burcu Gemici Başol*	**Group A IL** / **Group B**	**Independent Learning**	**Laboratory / Anatomy** Esophagus *Mohammed Elgazzar* **Group A IL** / **Group B**				
17.00-17.50	**Lecture** Propulsion and Mixing Movements in the GI Tract *Burcu Gemici Başol*	**Independent Learning**	**Independent Learning**	**Group A**	**Group B IL**	**Independent Learning**		

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

COMMITTEE III - GASTROINTESTINAL SYSTEM and METABOLISM
III. WEEK / 16 – 20 Dec 2019

	Monday 16-Dec-2019	Tuesday 17-Dec-2019	Wednesday 18-Dec-2019	Thursday 19-Dec-2019		Friday 20-Dec-2019		
109.00- 09.50	**Lecture** Histology of Alimentary Canal; Small Intestine *Aylin Yaba Uçar*	**Lecture** Regulation of Feeding and Obesity *Bayram Yılmaz*	**Lecture** Oxidation of Fatty Acids *İnci Özden*	**Laboratory / Histology & Embryology** Histology of GIS I *Alev Cumbul & Aylin Yaba Uçar* **Group A**	**Laboratory / Microbiology** Parasitology *Microbiology Instructors* **Group D**	**Independent Learning**		
10.00- 10.50	**Lecture** Histology of Alimentary Canal; Large Intestine & Appendix *Aylin Yaba Uçar*	**Lecture** Regulation of Feeding and Obesity *Bayram Yılmaz*	**Lecture** Oxidation of Fatty Acids *İnci Özden*		**Group C**	**ICP** CSL: Nasogastric Tube Administration *ÖzlemTanrıöver& Arzu Akalın Eren Gökdağ* **Group C**	**Group D SRPC SGS**	**Group A, B IL**
11:00-11:50	**Lecture** Energetics and Metabolic Rate *Bayram Yılmaz*	**Lecture** Gland Associated with the Digestive System; Liver *Aylin Yaba Uçar*	**Lecture** Inflammation *Aydın Sav*	**Group B**	**Group A**			
12:00-12:50	**Lecture** Energetics and Metabolic Rate *Bayram Yılmaz*	**Lecture** Gland Associated with the Digestive System; Gall Bladder *Aylin Yaba Uçar*	**Lecture** Wound Healing *Aydın Sav*		**Group B**			
13.00- 13.50	**Lunch Break**							
14.00- 14.50	**Lecture** Large Intestine *Mohammed Elgazzar*	**Lecture** Ketone Bodies *İnci Özden*	**Lecture** Liver as organ *Bayram Yılmaz*	**Lecture** Metabolisms of Individual Amino Acids *İnci Özden*		**Lecture** Urea Cycle *İnci Özden*		
15.00- 15.50	**Lecture** Large Intestine *Mohammed Elgazzar*	**Lecture** Ketone Bodies *İnci Özden*	**Lecture** Gland Associated with the Digestive System; Pancreas *Aylin Yaba Uçar*	**Lecture** Metabolisms of Individual Amino Acids *İnci Özden*		**Lecture** Urea Cycle *İnci Özden*		
16.00- 16.50	**Independent Learning**	**Independent Learning**	**Lecture** Gland Associated with the Digestive System; APUD System *Aylin Yaba Uçar*	**Laboratory / Anatomy** Small and Large Intestine *Mohammed Elgazzar* **Group A**	**Group B IL**	**Lecture** Animalia – I Microbiology Lecturer		
17.00-17.50	**Independent Learning**	**Independent Learning**	**Independent Learning**	**Group A IL**	**Group B**	**Lecture** Animalia – II Microbiology Lecturer		

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 / 23 – 27 Dec 2019

	Monday 23-Dec-2018	Tuesday 24-Dec-2019	Wednesday 25-Dec-2019	Thursday 26-Dec-2019		Friday 27-Dec-2019		
09.00- 09.50	**Lecture** Body Temperature and Its Regulation *Bayram Yılmaz*	**Lecture** Metabolic Interrelationships and Provision of Tissue Fuels *İnci Özden*	**Lecture** Citric Acid Cycle *İnci Özden*	**Laboratory / Histology& Embryology** Histology of Gastrointestinal System II *Alev Cumbul & Aylin Yaba Uçar* **Group B**	**Group A I.L**	**Independent Learning**		
10.00- 10.50	**Lecture** Body Temperature and Its Regulation *Bayram Yılmaz*	**Lecture** Metabolic Interrelationships and Provision of Tissue Fuels *İnci Özden*	**Lecture** Citric Acid Cycle *İnci Özden*		**Laboratory / Anatomy** Liver and Biliary System *Mohammed Elgazzar* **Group A**	**ICP** CSL: Nasogastric Tube Administration *ÖzlemTanrıöver & Arzu Akalın Barış M. Ayvacı* **Group D**	**Group C SRPC SGS**	**Group A, B IL**
11.00- 11.50	**Lecture** Clinical and Topographic Anatomy of the Anterior Abdominal Wall *Mohammed Elgazzar*	**Lecture** Liver *Mohammed Elgazzar*	**Lecture** Development of Gastrointestinal Tract; Alimentary Canal *Alev Cumbul*	**Group A**	**Laboratory / Anatomy Group B**			
12.00- 12.50	**Lecture** Abdominal Cavity and Peritoneum *Mohammed Elgazzar*	**Lecture** Biliary System *Mohammed Elgazzar*	**Lecture** Development of Gastrointestinal Tract; Glands *Alev Cumbul*		**Group B IL**			
13.00- 13.50	**Lunch Break**							
14.00- 14.50	**Lecture** Interrelationship of Biology of Major Organs *Soner Doğan*	**Lecture** Interrelationship of Biology of MajorOrgans *Soner Doğan*	**Lecture** The Pancreas and Spleen *Mohammed Elgazzar*	**Lecture** Test Hypotheses and Significance-Chi-Square Test *E. Çiğdem Altunok*		**Lecture** Physiology of Gastrointestinal Disorders *Mehtap Kaçar*		
15.00- 15.50	**Lecture** Interrelationship of Biology of MajorOrgans *Soner Doğan*	**Lecture** Interrelationship of Biology of Major Organs *Soner Doğan*	**Lecture** Animalia – III Microbiology Lecturer	**Lecture** Test Hypotheses and Significance-Chi-Square Test *E. Çiğdem Altunok*		**Lecture** Physiology of Gastrointestinal Disorders *Mehtap Kaçar*		
16.00- 16.50	**Independent Learning**	**Independent Learning**	**Independent Learning**	**Introduction to Elective Courses**		**Lecture** Animalia – IV *Microbiology Lecturer*		
17.00-17.50	**Independent Learning**	**Independent Learning**	**Independent Learning**			**Lecture** Animalia – V *Microbiology Lecturer*		

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 / 30– 03 Jan 2020

	Monday 30-Dec-2019	Tuesday 31-Dec-2019	Wednesday 01-Jan-2020	Thursday 02-Jan-2020	Friday 03-Jan-2020
09.00- 09.50	**Lecture** Diagnostic Methods in Parasitology *Microbiology Lecturer*	**Lecture** Metabolic Interrelationships and Provision of Tissue Fuels *İnci Özden*	**NEW YEAR**	**Laboratory / Histology& Embryology** Review Session *Alev Cumbul & Aylin Yaba Uçar* **Group A and Group B**	**Independent Learning**
10.00- 10.50	**Lecture** Congenital Anaomalies of Gastrointestinal Trac *Alev Cumbul*	**Lecture** Metabolic Interrelationships and Provision of Tissue Fuels *İnci Özden*			**ICP** CSL: Intramuscular/ Intradermal/ Subcutan Injection *Özlem Tanrıöver& Arzu Akalın & F.Tuğba Coşkun* **Group C** **Group D SRPC SGS** **Group A, B IL**
11:00-11:50	**Lecture** Abdominal Cavity and Peritoneum *Mohammed Elgazzar*	**Lecture** Entropy, Free Energy, Boltzmann Distribution *Akif Maharramov*		**Independent Learning**	
12:00-12:50	**Lecture** Nerves and Vasculature of the Abdominal Cavity *Mohammed Elgazzar*	**Lecture** The Second Law of Thermodynamics *Akif Maharramov*		**Independent Learning**	
13.00- 13.50	**Lunch Break**	**Lunch Break**		**Lunch Break**	**Lunch Break**
14.00- 14.50	**Laboratory / Anatomy** Pancreas and Spleen *Mohammed Elgazzar* **Group A IL** / **Group B**	**Lecture** Review of the Digestive System *Erdem Söztutar*		**Laboratory / Anatomy** Abdominal Cavity and Peritoneum *Mohammed Elgazzar* **Group B IL** / **Group A**	**Lecture** Overview of Metabolism *İnci Özden*
15.00- 15.50	**Group A** / **Group B IL**	**Lecture** Review of the Digestive System *Erdem Söztutar*		**Group B IL** / **Group A IL**	**Lecture** Overview of Metabolism *İnci Özden*
16.00- 16.50	**Independent Learning**	**Independent Learning**		**Independent Learning**	**Independent Learning**
17.00-17.50	**Independent Learning**	**Independent Learning**		**Independent Learning**	**Independent Learning**

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

COMMITTEE III - GASTROINTESTINAL SYSTEM and METABOLISM
VI. WEEK / 06– 10 Jan 2020

	Monday 06-Jan-2020	Tuesday 07-Jan-2020	Wednesday 08-Jan-2020	Thursday 09-Jan-2020	Friday 10-Jan-2020
09.00- 09.50	**Lecture** Acute Inflammation *Aydın Sav*	**Lecture** Chronic Inflammation *Aydın Sav*	**Lecture** Lipolysis *İnci Özden*	**Independent Learning**	**Independent Learning**
10.00- 10.50	**Lecture** Acute Inflammation *Aydın Sav*	**Lecture** Chronic Inflammation *Aydın Sav*	**Lecture** Lipolysis *İnci Özden*		
11:00-11:50	**Lecture** Purine and Pyrimidine Metabolism *İnci Özden*	**Lecture** Xenobiotic Metabolism *İnci Özden*	**Lecture** Repetition all of the Material *Akif Maharramov*		
12:00-12:50	**Lecture** Purine and Pyrimidine Metabolism *İnci Özden*	**Lecture** Xenobiotic Metabolism *İnci Özden*	**Lecture** Repetition all of the Material *Akif Maharramov*		
13.00- 13.50	**Lunch Break**				
14.00- 14.50	**Lecture** Nutrigenomics *Soner Doğan*	**Lecture** Test Hypotheses and Significance- Z-Test *Çiğdem Altunok*	**Lecture** Mucosal Immunity *Gülderen Yanıkkaya Demirel*	**Independent Learning**	**Independent Learning**
15.00- 15.50	**Lecture** Nutrigenomics *Soner Doğan*	**Lecture** Test Hypotheses and Significance- Z-Test *Çiğdem Altunok*	**Lecture** Mucosal Immunity *Gülderen Yanıkkaya Demirel*		
16.00- 16.50	**Independent Learning**	**Independent Learning**	**Independent Learning**		
17.00-17.50					

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

COMMITTEE III - GASTROINTESTINAL SYSTEM and METABOLISM
VII. WEEK / 13 – 17 Jan 2020

<table>
<tr><th></th><th>Monday
13-Jan-2020</th><th>Tuesday
14-Jan-2020</th><th>Wednesday
15-Jan-2020</th><th>Thursday
16-Jan-2020</th><th>Friday
17-Jan-2020</th></tr>
<tr><td>09.00- 09.50</td><td rowspan="3">Assessment Session (Physiology and Histology&Embryology Practical Exams)</td><td rowspan="3">Independent Learning</td><td rowspan="3">Independent Learning</td><td rowspan="3">Independent Learning</td><td>Independent Learning</td></tr>
<tr><td>10.00- 10.50</td><td rowspan="3">Assessment Session
Committee III
(MCQ)</td></tr>
<tr><td>11.00- 11.50</td></tr>
<tr><td>12.00- 12.50</td><td></td><td></td><td></td><td></td><td></td></tr>
<tr><td>13.00- 13.50</td><td colspan="5">Lunch Break</td></tr>
<tr><td>14.00- 14.50</td><td rowspan="3">Anatomy Practical Exam</td><td rowspan="3">Independent Learning</td><td rowspan="3">Independent Learning</td><td rowspan="3">Independent Learning</td><td>Program Evaluation Session
Review of the Exam Questions, Evaluation of the Committee III Program
Secretary of the Committee</td></tr>
<tr><td>15.00- 15.50</td><td rowspan="3">Independent Learning</td></tr>
<tr><td>16.00- 16.50</td></tr>
<tr><td>17.00-17.50</td><td></td><td></td><td></td><td></td><td></td></tr>
</table>

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

MIDTERM BREAK 20 JAN - 02 FEB 2020

COMMITTEE IV - NERVOUS SYSTEM
DISTRIBUTION of LECTURE HOURS

February 4 – March 29, 2020

COMMITTEE DURATION: 8 WEEKS

MED 203	BASIC MEDICAL SCIENCES II	THEORETICAL	PRACTICAL	TOTAL
	DISCIPLINE			
	ANATOMY	43	2 Gr x 14H	57
	BIOPHYSICS	3	0	3
	BIOSTATISTICS	4	1 Gr x 2H	6
	HISTOLOGY & EMBRYOLOGY	11	2 Gr x 3H	14
	IMMUNOLOGY	2	0	2
	MEDICAL BIOLOGY	4	0	4
	PHARMACOLOGY	9	2 Gr x 1H	10
	PHYSIOLOGY	34	3 Gr x 10H	44
	SCIENTIFIC RESEARCH and PROJECT COURSE-II	0	4GrX3H	3
	TOTAL	**110**	**33**	**143**
	INDEPENDENT LEARNING HOURS	**86**		

OTHER COURSES

MED 202	INTRODUCTION to CLINICAL PRACTICE- II	4 GrX1 + 2 GrX1	4 GrX2 + 2 GrX2	6 / 3
MED 614-631	ELECTIVE COURSES	14	0	14

Coordination Committee	**Head**	Bayram YILMAZ, PhD Prof.
	Secretary	Müge KOPUZ ALVAREZ NOVAL, PhD Assist. Prof
	Member	Mehtap KAÇAR, MD PhD Assoc. Prof.
	Member	Deniz KIRAÇ, PhD Assoc. Prof.

COMMITTEE IV- NERVOUS SYSTEM
LECTURERS
February 4 – 29 March, 2020

MED 203 BASIC MEDICAL SCIENCES II	
DISCIPLINE	**LECTURERS**
ANATOMY	Erdem SÖZTUTAR MD Assist. Prof. Aikaterini PANTELİ, MD Lecturer Mohammed ELGAZZAR, MD Lecturer LAB: Edibe BİLİŞLİ, DVM LAB: Zeynep Büşra ODABAŞ, DMD
BIOPHYSICS	Akif MAHARRAMOV, PhD Assist. Prof. Bilge GÜVENÇ TUNA, PhD Assist. Prof.
BIOSTATISTICS	Çiğdem ALTUNOK, PhD, Assist. Prof.
HISTOLOGY & EMBRYOLOGY	Aylin YABA UÇAR PhD Assoc. Prof. Alev CUMBUL, PhD Assist. Prof.
IMMUNOLOGY	Gülderen YANIKKAYA DEMİREL, MD PhD Prof.
MEDICAL BIOLOGY	Turgay İSBİR, PhD Prof. Soner DOĞAN, PhD Assoc. Prof. Deniz KIRAÇ, PhD Assoc. Prof.
PHARMACOLOGY	Ece GENÇ, PhD Prof. Emine Nur ÖZDAMAR, MD, Assist. Prof.
PHYSIOLOGY	Bayram YILMAZ, PhD Prof. Mehtap KAÇAR, MD PhD Assoc. Prof. Burcu GEMİCİ, PhD Assoc. Prof.
SCIENTIFIC RESEARCH AND PROJECT COURSE-II	Bayram YILMAZ, PhD Prof. Deniz KIRAÇ, PhD Assoc. Prof.

OTHER COURSES

MED 202 INTRODUCTION TO CLINICAL PRACTICE II	
DISCIPLINE	**LECTURERS**
CLINICAL SKILLS LAB	Özlem TANRIÖVER, MD MPH. Prof. A. Arzu AKALIN, MD Assist. Prof. Pınar TÜRE, MD Assist. Prof. Alp KAYIRAN, MD Fatma Tuğba COŞKUN, MD
ELECTIVE COURSES	

COMMITTEE IV - NERVOUS SYSTEM
AIM and LEARNING OBJECTIVES

AIMS

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

LEARNING OBJECTIVES

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

1.0. describe biophysical basis of nervous system.
2.0. describe biology of nervous system.
3.0. In nervous system;
  3.1. describe the anatomy of cerebrum, cerebellum, meninges, brain stem, cranial nerves and spinal cord,
  3.2. describe limbic and autonomic nervous system,
  3.3. describe the anatomy of structures forming eyes and ears,
  3.4. describe the anatomy of skin and its derivatives and the mammary glands
  3.5. describe descending and ascending pathways,
  3.6. associate with adjacent tissue and organs,
  3.7. explain functional and clinical reflections.
4.0. For central and peripheral nervous system and special senses;
  4.1. classify embryological origins,
  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. describe the properties of neuroimmunology
16.0. describe how to prepare a scientific research presentation.
17.0. prepare a research article presentation
18.0. count biostatistical sampling methods.
19.0. count significance tests in biostatistics.
20.0. 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 and SbMCQ			
			CE	FE	IE	TOTAL
3.0.	ANATOMY	Dr. A. Panteli	39	17	17	73
1.0.	BIOPHYSICS	Dr. B. Güvenç Tuna	3	1	1	5
18.0-20.0	BIOSTATISTICS	Dr. E.Ç. Altunok	3	1	1	5
4.0.	HISTOLOGY & EMBRYOLOGY	Dr. A. Yaba Uçar Dr. A. Cumbul	10	4	4	18
6.0	IMMUNOLOGY	Dr. G. Yanıkkaya Demirel	2	1	1	4
2.0.	MEDICAL BIOLOGY	Dr. T. İsbir	3	1	1	5
13.0-14.0.	PHARMACOLOGY	Dr. E. Genç Dr. Emine Nur Özdamar	8	3	3	14
5.0-12.0.	PHYSIOLOGY	Dr. B. Yilmaz Dr. M. Kaçar Dr. B. Gemici Başol	31	13	13	57
PBL			1	0	0	1
		TOTAL	**100**	**41/200#**	**41/200#**	**182**

LEARNING OBJECTIVES	DISCIPLINE	POINTS of ASSESSMENT METHODS
		LPE
3.0.	ANATOMY	55
4.0.	HISTOLOGY & EMBRYOLOGY	10
13.0-14.0	PHARMACOLOGY	5
5.0-12.0.	PHYSIOLOGY	30
	TOTAL	**100**

Total value of LPE is equal to 100 points
Committee Score (CS) = 90% CE (MCQ) + 10% (LPE)
Abbreviations:
MCQ: Multiple Choice Questions
LPE: Laboratory Practical Exam
CE: Committee Exam
CS: Committee Score
FE: Final Exam
ICE: Incomplete Exam
Pts.: Points
In FE and ICE**, 41** out of 200 FE and ICE MCQs will be from Committee IV (Each question is 0.5 Pts., equal val

COMMITTEE IV - NERVOUS SYSTEM
I. WEEK / 03–07 Feb 2020

<table>
<tr><th></th><th>Monday
03-Feb-2020</th><th>Tuesday
04-Feb-2020</th><th>Wednesday
05-Feb-2020</th><th>Thursday
06-Feb-2020</th><th colspan="2">Friday
07-Feb-2020</th></tr>
<tr><td>09.00- 09.50</td><td rowspan="2">PBL</td><td>Independent Learning</td><td rowspan="4">ICP MIDTERM EXAM</td><td rowspan="4">ICP MIDTERM EXAM</td><td colspan="2">Independent Learning</td></tr>
<tr><td>10.00- 10.50</td><td>Lecture
Introduction to Neuroanatomy
Aikaterini Panteli</td><td colspan="2">Independent Learning</td></tr>
<tr><td>11.00- 11.50</td><td>Lecture
Organization of Nervous System
Bayram Yılmaz</td><td colspan="2">Laboratory/ Anatomy
Spinal Cord</td></tr>
<tr><td>12.00- 12.50</td><td>Introduction to Committee IV
Secretary of Committee</td><td>Lecture
Neuron and Neuroglia
Bayram Yılmaz</td><td>Group A</td><td>Group B IL</td></tr>
<tr><td>13.00- 13.50</td><td colspan="5">Lunch Break</td><td>Group A IL</td><td>Group B</td></tr>
<tr><td>14.00- 14.50</td><td>Program Improvement Sessions</td><td>Lecture
Spinal Cord
Aikaterini Panteli</td><td rowspan="4">ICP MIDTERM EXAM</td><td rowspan="4">ICP MIDTERM EXAM</td><td rowspan="2">ELECTIVE COURSES I</td><td rowspan="2">Independent Learning</td></tr>
<tr><td>15.00- 15.50</td><td rowspan="3">Independent Learning</td><td>Lecture
Spinal Cord
Aikaterini Panteli</td></tr>
<tr><td>16.00- 16.50</td><td>Independent Learning</td><td rowspan="2">Independent Learning</td><td rowspan="2">ELECTIVE COURSES I</td></tr>
<tr><td>17.00-17.50</td><td>Independent Learning</td></tr>
</table>

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COMMITTEE IV - NERVOUS SYSTEM
II. WEEK / 10– 14 Feb 2020

	Monday 10-Feb-2020	Tuesday 11-Feb-2020	Wednesday 12-Feb-2020	Thursday 13-Feb-2020	Friday 14-Feb-2020
09.00- 09.50	PBL	**Lecture** Synapse and Neurotransmitters *Bayram Yılmaz*	**Lecture** Cranial Nerves *Aikaterini Panteli*	**Independent Learning**	**ICP** **CSL:** Intramuscular / Intradermal / Subcutan Injection *Özlem Tanrıöver & Arzu Akalın* *F. Tuğba Coşkun* **Group A** / **Group B SRPC SGS** / **IL Group C and D**
10.00- 10.50		**Lecture** Synapse and Neurotransmitters *Bayram Yılmaz*	**Lecture** Cranial Nerves *Aikaterini Panteli*	**Laboratory / Pharmacology** Drug Metabolism *Ece Genç & Emine Özdamar* **Group A** / **Laboratory/ Anatomy** Cranial Nerves *Aikaterini Panteli* **Group B**	
11.00- 11.50		**Lecture** Scope of Pharmacology and Passage of Drugs Across Membranes *Ece Genç*	**Lecture** Cranial Nerves *Aikaterini Panteli*	**Laboratory / Pharmacology** Drug Metabolism *Ece Genç & Emine Özdamar* **Group B** / **Laboratory/ Anatomy** Cranial Nerves *Aikaterini Panteli* **Group A**	
12.00- 12.50	**Independent Learning**	**Lecture** Drug Distribution *Ece Genç*	**Lecture** Cranial Nerves *Aikaterini Panteli*		**Invited speaker**
13.00- 13.50	**Lunch Break**				
14.00- 14.50	**Lecture** Brainstem *Aikaterini Panteli*	**Lecture** ICP-ECE Introduction Session Özlem Tanrıöver	**Lecture** Drug Metabolism *Ece Genç*	**Lecture** Sensory Receptors and pathways *Bayram Yılmaz*	**ELECTIVE COURSES II** / **Independent Learning**
15.00- 15.50	**Lecture** Brainstem *Aikaterini Panteli*	**Laboratory/ Anatomy** Brainstem *Aikaterini Panteli* **Group A IL** / **Group B**	**Lecture** Drug Metabolism *Ece Genç*	**Lecture** Peripheral Nervous System *Bayram Yılmaz*	
16.00- 16.50	**Lecture** Brainstem *Aikaterini Panteli*	**Group A** / **Group B IL**	**Independent Learning**	**Lecture** Cerebellum *Aikaterini Panteli*	**Independent Learning** / **ELECTIVE COURSES II**
17.00-17.50	**Independent Learning**	**Independent learning**	**Independent Learning**	**Lecture** Cerebellum *Aikaterini Panteli*	

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

COMMITEE IV - NERVOUS SYSTEM
III. WEEK / 17–21 Feb 2020

	Monday 17- Feb-2020	Tuesday 18-Feb-2020	Wednesday 19-Feb-2020	Thursday 20-Feb-2020		Friday 21-Feb-2020		
09.00- 09.50	**Lecture** Cutaneous Senses *Bayram Yılmaz*	**Lecture** Physiology of Pain *Bayram Yılmaz*	**Lecture** Telencephalon *Aikaterini Panteli*	**Laboratory / Physiology** Reflexes *Bayram Yılmaz & Mehtap Kaçar & Burcu Gemici Başol* **Group C**	**Group B IL**	**Independent Learning**		
10.00- 10.50	**Lecture** Cutaneous Senses *Bayram Yılmaz*	**Lecture** Physiology of Pain *Bayram Yılmaz*	**Lecture** Telencephalon *Aikaterini Panteli*		**Laboratory / Anatomy** Basal Ganglia *Aikaterini Panteli* **Group A**	**ICP** **CSL**: Intramuscular / Intradermal / Subcutan Injection *F. Tuğba Coşkun / Alp Kayıran / Arzu Akalın* **Group B**	**Group C SRPC SGS**	**Group A, D IL**
11.00- 11.50	**Lecture** Diencephalon *Aikaterini Panteli*	**Lecture** Basal Ganglia *Aikaterini Panteli*	**Lecture** Telencephalon *Aikaterini Panteli*	**Group A**	**Laboratory / Anatomy** Basal Ganglia *Aikaterini Panteli* **Group B**			
12.00- 12.50	**Lecture** Diencephalon *Aikaterini Panteli*	**Lecture** Basal Ganglia *Aikaterini Panteli*	**Lecture** Histology of CNS; PNS, meninges and Spinal Cord *Aylin Yaba Uçar*		**Group B IL**			
13.00-13:50	**Lunch Break**							
14.00- 14.50	**Lecture** Diencephalon *Aikaterini Panteli*	**Laboratory / Anatomy** Cerebellum and Diencephalon *Aikaterini Panteli* **Group A**	**Group B IL**	**Lecture** Histology of CNS; Brain, Cerebellum *Aylin Yaba Uçar*	**Laboratory / Physiology** Reflexes *Bayram Yılmaz & Mehtap Kaçar & Burcu Gemici Başol* **Group B**	**Group A and C IL**	**ELECTIVE COURSES III**	**Independent Learning**
15.00- 15.50	**Lecture** Biology of Nervous System *Turgay Isbir*	**Group A IL**	**Group B**	**Lecture** Motor Functions of Spinal Cord *Bayram Yılmaz*				
16.00- 16.50	**Lecture** Biology of Nervous System *Turgay Isbir*	**Laboratory/ Biostatistic** Computer Applications of Tests of Significance *Çiğdem Altunok* **Group A**	**Group B, C IL**	**Lecture** Motor Functions of Spinal Cord *Bayram Yılmaz*	**Lecture** Test Hypotheses and Significance- Z-Test *Çiğdem Altunok*	**Independent Learning**	**ELECTIVE COURSES III**	
17.00-17.50	**Independent Learning**			**Independent Learning**	**BLecture** Test Hypotheses and Significance- Z-Test *Çiğdem Altunok*			

COMMITEE IV - NERVOUS SYSTEM
IV. WEEK / 24- 28 Feb 2020

	Monday 24- Feb-2020	Tuesday 25-Feb-2020	Wednesday 26-Feb-2020	Thursday 27-Feb-2020		Friday 28-Feb-2020		
09.00- 09.50	**Lecture** Cortical and Brainstem Control of Motor Function *Bayram Yılmaz*	**Lecture** Functions of Cerebellum and Basal Ganglia in motor control *Bayram Yılmaz*	**Lecture** Neuroimmunology *Gülderen Yanıkkaya Demirel*	**Laboratory / Physiology** Electroencephalography *Bayram Yılmaz & Mehtap Kaçar & Burcu Gemici Başol* **Group A**	**Group B IL**	**Independent Learning**		
10.00- 10.50	**Lecture** Cortical and Brainstem Control of Motor Function *Bayram Yılmaz*	**Lecture** Functions of Cerebellum and Basal Ganglia in Motor Control *Bayram Yılmaz*	**Lecture** Neuroimmunology *Gülderen Yanıkkaya Demirel*		**Laboratory / Anatomy** Eye and Visual Pathways *Aikaterini Panteli* **Group B**	**ICP** **CSL**: Intramuscular / Intradermal / Subcutan Injection *Özlem Tanrıöver/ F. Tuğba Coşkun / Arzu Akalın* **Group D**	**Group A SRPC SGS**	**Group B, C IL**
11.00- 11.50	**Lecture** Limbic System *Aikaterini Panteli*	**Lecture** Development of Central Nervous System; Early Stages *Aylin Yaba Uçar*	**Lecture** States of Brain Activity- Sleep and Brain Waves *Bayram Yılmaz*	**Group C**	**Laboratory / Anatomy** Eye and Visual Pathways *Aikaterini Panteli* **Group A**			
12.00- 12.50	**Lecture** Limbic System *Aikaterini Panteli*	**Lecture** Development of Central Nervous System; Late Stages *Aylin Yaba Uçar*	**Lecture** States of Brain Activity- Sleep and Brain Waves *Bayram Yılmaz*		**Group B IL**			
13.00-13:50	**Lunch Break**							
14.00- 14.50	**Lecture** Electrical Activity of Cortex and Evoked Potentials. Neural Coding *Bilge Güvenç Tuna*	**Laboratory / Anatomy** Limbic System *Aikaterini Panteli* **Group A** / **Group B IL**	**Lecture** Congenital Anomalies of Nervous System *Aylin Yaba Uçar*	**Laboratory / Physiology** Electroencephalography *Bayram Yılmaz & Mehtap Kaçar & Burcu Gemici Başol* **Group B**	**Group A and C IL**	**ELECTIVE COURSES IV**	**Independent Learning**	
15.00- 15.50	**Lecture** Electrical Activity of Cortex and Evoked Potentials. Neural Coding *Bilge Güvenç Tuna*	**Group A IL** / **Group B**	**Lecture** Orbit and Eye *Aikaterini Panteli*					
16.00- 16.50	**Laboratory / Anatomy** Telencephalon *Aikaterini Panteli* **Group A IL** / **Group B**	**Independent Learning**	**Lecture** Orbit and Eye *Aikaterini Panteli*	**Lecture** Biology of Nervous System *Turgay İsbir*		**Independent Learning**	**ELECTIVE COURSES IV**	
17.00-17.50	**Group A** / **Group B IL**	**Independent Learning**	**Lecture** Visual Pathways *Aikaterini Panteli*	**Lecture** Biology of Nervous System *Turgay İsbir*				

COMMITTEE IV - NERVOUS SYSTEM
V. WEEK / 02 – 06 March 2020

<table>
<tr><th></th><th>Monday
02-March-2020</th><th>Tuesday
03-March-2020</th><th>Wednesday
04-March-2020</th><th colspan="2">Thursday
05-March-2020</th><th colspan="4">Friday
06-March-2020</th></tr>
<tr><td>09.00- 09.50</td><td>Lecture
Ascending and Descending Pathways of the CNS
Aikaterini Panteli</td><td colspan="2">Lecture
Physiology of Vision
Mehtap Kaçar</td><td>Lecture
Physiology of Vision
Mehtap Kaçar</td><td rowspan="2">Laboratory / Physiology
Visual Examination & Tests
Bayram Yılmaz & Mehtap Kaçar & Burcu Gemici Başol
Group C</td><td>Group B IL</td><td colspan="4" rowspan="2">Independent Learning</td></tr>
<tr><td>10.00- 10.50</td><td>Lecture
Ascending and Descending Pathways of the CNS
Aikaterini Panteli</td><td colspan="2">Lecture
Physiology of Vision
Mehtap Kaçar</td><td>Lecture
Physiology of Vision
Mehtap Kaçar</td><td>Laboratory / Anatomy
Vasculature of the CNS
Aikaterini Panteli
Group A</td></tr>
<tr><td>11.00- 11.50</td><td>Lecture
Ascending and Descending Pathways of the CNS
Aikaterini Panteli</td><td colspan="2">Lecture
Taste and Smell Pathways
Aikaterini Panteli</td><td>Lecture
Vasculature of the CNS
Aikaterini Panteli</td><td rowspan="2">Group A</td><td>Group B</td><td rowspan="2">ICP
CSL: IV Cannulation
Alp Kayıran & Arzu Akalın & Özlem Tanrıöver
Group A</td><td rowspan="2">Group B ECE-YUH</td><td rowspan="2">Group C SRPC SGS</td><td rowspan="2">Group D ECE-FHC</td></tr>
<tr><td>12.00- 12.50</td><td>Lecture
Histology of Sensory Organs; Eye; Fibrous and Vascular Coat
Alev Cumbul</td><td colspan="2">Lecture
Taste and Smell Pathways
Aikaterini Panteli</td><td>Lecture
Vasculature of the CNS
Aikaterini Panteli</td><td>Group B IL</td></tr>
<tr><td>13.00- 13.50</td><td colspan="7">Lunch Break</td></tr>
<tr><td>14.00- 14.50</td><td>Lecture
Histology of Sensory Organs; Eye; Nervous Coat and Appendix
Alev Cumbul</td><td colspan="2">Lecture
Drug Application Routes and Pharmaceutical Forms of Drugs
Emine Nur Özdamar</td><td>Lecture
Correlation
Çiğdem Altunok</td><td>Laboratory / Physiology
Visual Examination & Tests
Bayram Yılmaz & Mehtap Kaçar & Burcu Gemici Başol
Group B</td><td>Group A & C IL</td><td colspan="2">ELECTIVE COURSES VI</td><td colspan="2" rowspan="2">Independent Learning</td></tr>
<tr><td>15.00- 15.50</td><td>Lecture
Cerebral Cortex, Intellectual Functions of the Brain
Bayram Yılmaz</td><td colspan="2">Laboratory / Anatomy
Eye and Visual Pathways
Aikaterini Panteli
Group A | Group B, IL</td><td>Lecture
Correlation
Çiğdem Altunok</td></tr>
<tr><td>16.00- 16.50</td><td>Lecture
Learning and Memory
Bayram Yılmaz</td><td>Group A, IL</td><td>Group B</td><td>Independent Learning</td><td colspan="3">Lecture
Meninges and Dural Venous Sinuses
Aikaterini Panteli</td><td rowspan="2">Independent Learning</td><td rowspan="2">ELECTIVE COURSES VI</td></tr>
<tr><td>17.00-17.50</td><td>Independent Learning</td><td colspan="2">Independent Learning</td><td>Independent Learning</td><td colspan="3">Lecture
Meninges and Dural Venous Sinuses
Aikaterini Panteli</td></tr>
</table>

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

COMMITTEE IV - NERVOUS SYSTEM
VI. WEEK / 09 – 13 March 2020

	Monday 09-March-2020	Tuesday 10-March-2020	Wednesday 11-March-2020	Thursday 12-March-2020	Friday 13-March-20
09.00-09.50	**Lecture** Ear *Aikaterini Panteli*	**Lecture** Drug Excretion *Ece Genç*	**Lecture** Limbic System and the Hypothalamus *Bayram Yılmaz*	**Independent Learning**	**Independent Learning**
10.00- 10.50	**Lecture** Ear *Aikaterini Panteli*	**Lecture** Drug Excretion *Ece Genç*	**Lecture** Limbic System and the Hypothalamus *Bayram Yılmaz*	**ICP** **CSL:** IV Cannulation *Özlem Tanrıöver & Arzu Akalın Pınar Tura* **Group B** **Group C ECE-FHC** **Group D SRPC SGS** **Group A ECE-YUH**	
11.00- 11.50	**Lecture** Auditory Pathways *Aikaterini Panteli*	**Lecture** Chemical Senses: Taste and Smell *Burcu Gemici Başol*	**Lecture** Development of Sensory Organs; Eye *Alev Cumbul*		
12.00- 12.50	**Lecture** Physiology of Hearing *Burcu Gemici Başol*	**Lecture** Chemical Senses: Taste and Smell *Burcu Gemici Başol*	**Lecture** Development of Sensory Organs; Ear *Alev Cumbul*		
13.00- 13.50	**Lunch Break**				
14.00- 14.50	**Lecture** Physiology of Hearing *Burcu Gemici Başol*	**Lecture** Introduction to Autonomic Nervous System *Aikaterini Panteli*	**Lecture** Auditory System Biophysics and Function *Bilge Güvenç Tuna*	**Independent Learning**	**Independent Learning**
15.00- 15.50	**Laboratory / Anatomy** Meninges and the Dural Venous Sinuses *Aikaterini Panteli* **Group A** / **Group B IL**	**Anatomy Laboratory /** Ear and Auditory Pathways *Aikaterini Panteli* **Group A IL** / **Group B**	**Lecture** Sympathetic Nervous System *Aikaterini Panteli*		
16.00- 16.50	**Group A IL** / **Group B**	**Group A** / **Group B IL**	**Lecture** Sympathetic Nervous System *Aikaterini Panteli*		
17.00-17.50	**Independent Learning**	**Independent Learning**	**Independent Learning**		

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

COMMITTEE IV - NERVOUS SYSTEM
VII. WEEK / 16 – 20 March 2020

	Monday 16- March -2020	Tuesday 17- March -2020	Wednesday 18- March -2020		Thursday 19- March -2020		Friday 20- March -2020			
09.00- 09.50	**Lecture** Autonomic Nervous System *Bayram Yılmaz*	**Lecture** Cerebrospinal Fluid and Brain Metabolism *Bayram Yılmaz*	**Laboratory/ Physiology** Hearing test *Bayram Yılmaz & Mehtap Kaçar & Burcu Gemici Başol* **Group B**	**Laboratory / Histology& Embryology** Histology of CNS and Skin *Alev Cumbul & Aylin Yaba Uçar* **Group A**	**Laboratory / Physiology** Galvanized Skin Response *Bayram Yılmaz & Mehtap Kaçar & Burcu Gemici Başol* **Group A**	**Group C IL**	**Independent Learning**			
10.00- 10.50	**Lecture** Autonomic Nervous System *Bayram Yılmaz*	**Lecture** Cerebrospinal Fluid and Brain Metabolism *Bayram Yılmaz*				**Laboratory / Histology** Review Session *Alev Cumbul & Aylin Yaba Uçar* **Group B**	**ICP** **CSL: IV Cannulation** *Özlem Tanrıöver & Arzu Akalın Pınar Tura* **Group C**	**Group D ECE-YUH I**	**Group A ECE-FHC**	**Group B SRPC SGS**
11.00- 11.50	**Lecture** Parasympathetic Nervous System *Aikaterini Panteli*	**Lecture** Histology of Skin and Appendage; Epidermis, Dermis, Appendage *Aylin Yaba Uçar*	**Group A**	**Group B**	**Group C**	**Group A**				
12.00- 12.50	**Lecture** Parasympathetic Nervous System *Aikaterini Panteli*	**Lecture** Development of Skin and Appendage *Aylin Yaba Uçar*				**Group B IL**				
13.00- 13.50	**Lunch Break**									
14.00- 14.50	**Lecture** Dopamine and Drugs Effecting Dopaminergic System *Emine Nur Özdamar*	**Lecture** Skin, its derivatives and the Mammary Glands *Aikaterini Panteli*	**Laboratory / Physiology** Hearing test *Bayram Yılmaz & Mehtap Kaçar & Burcu Gemici Başol* **Group C**	**Laboratory / Anatomy** Symphatic Nervous System *Aikaterini Panteli* **Group A**	**Laboratory / Physiology** Galvanized Skin Response *Bayram Yılmaz & Mehtap Kaçar & Burcu Gemici Başol* **Group B**	**Group A & C IL**	**ELECTIVE COURSES VI**	**Independent Learning**		
15.00- 15.50	**Lecture** Serotonin and Drugs Effecting Serotonergic System of CNS *Emine Nur Özdamar*	**Laboratory / Anatomy** Skin, its derivatives and the Mammary Glands *Aikaterini Panteli*		**Group B**						
		Group A	**Group B IL**							
16.00- 16.50	**Laboratory / Anatomy** Parasympathetic Nervous System *Aikaterini Panteli*	**Group A IL**	**Group B**	**Independent Learning**		**Laboratory / Histology & Embryology** Review Session *Alev Cumbul & Aylin Yaba Uçar* **Group A and Group B**	**Independent Learning**	**ELECTIVE COURSES VI**		
	Group A IL	**Group B**								
17.00-17.50	**Group A**	**Group B IL**	**Independent Learning**	**Independent Learning**						

COMMITTEE IV - NERVOUS SYSTEM
VIII. WEEK / 23 – 27 March 2020

<table>
<tr><th></th><th>Monday
23- March - 2020</th><th>Tuesday
24- March - 2020</th><th>Wednesday
25- March - 2020</th><th>Thursday
26- March - 2020</th><th colspan="2">Friday
27- March- 2020</th></tr>
<tr><td>09.00- 09.50</td><td rowspan="4">Assessment Session
(Physiology and Histology&Embryology Practical Exams)</td><td rowspan="4">Independent Learning</td><td rowspan="4">Independent Learning</td><td rowspan="4">Independent Learning</td><td colspan="2" rowspan="3">Assessment Session
Committee IV Exam
(MCQ)</td></tr>
<tr><td>10.00- 10.50</td></tr>
<tr><td>11.00- 11.50</td></tr>
<tr><td>12.00- 12.50</td><td colspan="2">Independent Learning</td></tr>
<tr><td>13.00- 13.50</td><td colspan="4">Lunch Break</td><td colspan="2">Program Evaluation Session
Review of the Exam Questions, Evaluation of the Committee IV Program
Secretary of Committee IV</td></tr>
<tr><td>14.00- 14.50</td><td rowspan="4">Anatomy Practical Exam</td><td rowspan="4">Independent Learning</td><td rowspan="4">Independent Learning</td><td rowspan="2">Independent Learning</td><td>ELECTIVE COURSES VII
(Midterm Exam)</td><td rowspan="2">Independent Learning</td></tr>
<tr><td>15.00- 15.50</td></tr>
<tr><td>16.00- 16.50</td><td rowspan="2">Independent Learning</td><td rowspan="2">ELECTIVE COURSES VII
(Midterm Exam)</td></tr>
<tr><td>17.00-17.50</td></tr>
</table>

COMMITTEE V - UROGENITAL and ENDOCRINE SYSTEMS
DISTRIBUTION of LECTURE HOURS

March 30 – May 22, 2020

COMMITTEE DURATION: 8 WEEKS

MED 203	BASIC MEDICAL SCIENCES II	THEORETICAL	PRACTICAL	TOTAL
	DISCIPLINE			
	ANATOMY	15	2Gr x 5H	20
	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
	MEDICAL MICROBIOLOGY	17	4Gr x 2H	19
	PATHOLOGY	7	2Gr x 1H	8
	PHARMACOLOGY	12	2GR x 2H	14
	PHYSIOLOGY	30	3Gr x 6H	36
	SCIENTIFIC RESEARCH and PROJECT COURSE-II	0	4GrX3H	3
	TOTAL	**133**	**28**	**161**
	INDEPENDENT LEARNING HOURS			83

OTHER COURSES

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

Coordination Committee	**Head**	Bayram YILMAZ, PhD Prof.
	Secretary	Deniz KIRAÇ, PhD Assoc. Prof.
	Member	Mehtap KAÇAR, MD PhD Assoc. Prof.
	Member	Aikaterini PANTELİ, MD, Lecturer

COMMITTEE V- UROGENITAL and ENDOCRINE SYSTEMS
LECTURERS
March 30 – May 22, 2020

MED 203 BASIC MEDICAL SCIENCES II	
DISCIPLINE	**LECTURERS**
ANATOMY	Erdem SÖZTUTAR, MD Assist. Prof. Aikaterini PANTELİ, MD Lecturer Mohammed ELGAZZAR, MD Lecturer LAB: Edibe BİLİŞLİ, DVM LAB: Zeynep Büşra ODABAŞ, DMD
BIOCHEMISTRY	İnci ÖZDEN, PhD Prof. LAB: Jale ÇOBAN, MD Prof. LAB: Müge KOPUZ ALVAREZ NOVAL, PhD Assist. Prof.
BIOPHYSICS	Akif MAHARRAMOV, PhD Assist. Prof. Bilge GÜVENÇ TUNA, PhD Assist. Prof.
BIOSTATISTIC	E. Çiğdem ALTUNOK, PhD Assist. Prof.
HISTOLOGY & EMBRYOLOGY	Aylin YABA UÇAR, PhD Assoc. Prof. Alev CUMBUL, PhD Assist. Prof.
IMMUNOLOGY	Gülderen YANIKKAYA DEMİREL, MD PhD Prof.
MEDICAL BIOLOGY	Turgay İSBİR, PhD Prof. Soner DOĞAN, PhD Assoc. Prof. Deniz KIRAÇ, PhD Assoc. Prof.
MICROBIOLOGY	Çağatay ACUNER, MD Assoc. Prof. Microbiology Lecturer
PATHOLOGY	Aydın SAV MD, Prof.
PHARMACOLOGY	Ece GENÇ, PhD, Prof. Emine Nur ÖZDAMAR MD Assist. Prof.
PHYSIOLOGY	Bayram YILMAZ, PhD Prof. Mehtap KAÇAR, MD PhD, Assoc. Prof. Burcu GEMİCİ, PhD Assoc. Prof.
PBL	
SCIENTIFIC RESEARCH and PROJECT COURSE-II	Bayram YILMAZ PhD, Prof. Deniz KIRAÇ, PhD, Assoc. Prof.

OTHER COURSES

MED 202 INTRODUCTION to CLINICAL PRACTICE II	
DISCIPLINE	**LECTURERS**
CLINICAL SKILLS LAB	Özlem TANRIÖVER, MD MPH. Prof. A. Arzu AKALIN, MD Assist. Prof. Murat KURU, MD Assist. Prof. Serdar ÖZDEMİR, MD Assist. Prof. Mustafa YAZICIOĞLU MD Assist. Prof. Alp KAYIRAN, MD. Ertan EMEK, MD, Ceyhun CENK, MD,
ELECTIVE COURSES	

COMMITTEE V - UROGENITAL and ENDOCRINE SYSTEMS
AIM and LEARNING OBJECTIVES

AIMS

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

LEARNING OBJECTIVES

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

1.0. Describe biology of gonadal development and genetic differentiation.
2.0. In urogenital system, for male and female genital system organs, kidney, ureter, bladder, urethra, pelvis and perineum;
    2.1. Describe its anatomy,
    2.2. Associate with adjacent tissue and organs,
    2.3. Explain their functional and clinical reflections.
3.0. In endocrine system, for thyroid, parathyroid, suprarenal gland and thymus,
    3.1. Describe its anatomy,
    3.2. Associate with adjacent tissue and organs,
    3.3. Explain their functional and clinical reflections.
4.0. For endocrine system;
    4.1 Classify embryological origins,
    4.2 Explain developmental stages,
    4.3 Describe histological properties,
    4.4 Associate the relation between birth anomalies and developmental processes.
5.0. For urogenital systems;
    5.1. Classify embryological origins,
    5.2. Explain developmental stages,
    5.3. Describe histological properties,
    5.4. Associate the relation between birth anomalies and developmental processes.
6.0. In endocrine system;
    6.1. Describe endocrine, paracrine and neuroendocrine secretion,
    6.2. Explain the regulatory role of hypothalamus and pituitary gland,
    6.3. List secretions and functions of endocrine glands and organs.
7.0. In urinary system;
    7.1. Explain renal function and structure of nephrons,
    7.2. Explain renal blood flow and mechanisms of urine production,
    7.3. Explain liquid-electrolyte and acid-base equilibrium.
8.0. In genital system;
    8.1. Explain reproductive hormones and their functions in men and women,
    8.2. Describe changes in the maternal body in pregnancy and lactation.
9.0. For hormones;
    9.1. Classify according to mechanisms of action,

9.2. Explain their effects and relation to each other.

10.0. Explain biochemical functions of vitamins and minerals.

11.0. Describe factors causing neoplasia, formation, mechanisms of occurrence, neoplastic diseases in organism, classification and staging of neoplasia.

12.0. Distinguish mechanisms of actions of drugs and explain toxicity of drugs.

13.0. Analyze events developing in response to drug receptor interactions.

14.0. Describe general principles of antimicrobial chemotherapy.

15.0. Describe general principles of cancer chemotherapy.

16.0. Describe pharmacology of inflammation and immunomodulation.

17.0. Describe the structural/biological features and pathogenesis of viruses

18.0. Describe the interrelationship of hormones and immunology

19.0. Describe the general principles of magnetic resonance imaging

20.0. describe how to prepare a scientific research presentation.

21.0. prepare a research article presentation

22.0. Count biostatistical sampling methods.

23.0. Count significance tests in biostatistics.

24.0. Choose significance tests according to the properties of biostatistical data.

25.0. 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 MCQsand SbMCQ			
			CE	FE	IE	TOTAL
2.0-3.0	ANATOMY	Dr. M. Elgazzar	11	6	6	23
9.0-10.0	BIOCHEMISTRY	Dr. İ. Özden	18	8	8	34
19.0	BIOPHYSICS	Dr. B.G. Tuna	2	1	1	4
20.0-24.0	BIOSTATISTICS	Dr. E.Ç. Altunok	3	1	1	5
4.0.-5.0	HISTOLOGY & EMBRYOLOGY	Dr. A. Yaba Uçar Dr. A. Cumbul	10	5	5	20
18.0	IMMUNOLOGY	Dr. G. Yanıkkaya Demirel	1	1	1	3
1.0	MEDICAL BIOLOGY	Dr. T. İsbir Dr. D. Kıraç	4	2	2	8
17.0	MEDICAL MICROBIOLOGY	Dr. Ç. Acuner Microbiology Lecturer	13	6	6	25
11.0	PATHOLOGY	Dr. A. Sav	5	2	2	9
12.0-16.0	PHARMACOLOGY	Dr. E. Genç Dr. E. N. Özdamar	9	4	4	17
6.0-8.0., 24.0.	PHYSIOLOGY	Dr. B. Yılmaz Dr. M. Kaçar Dr. B. Gemici Başol	23	10	10	43
26.0	PBL		1	0	0	1
		TOTAL	**100**	**46/200#**	**46/200#**	**192**

LEARNING OBJECTIVES	DISCIPLINE	POINTS of ASSESSMENT METHODS
		LPE
2.0-3.0	ANATOMY	26
8.0-9.0, 24.0	BIOCHEMISTRY	6
4.0.	HISTOLOGY & EMBRYOLOGY	24
16.0.	MEDICAL MICROBIOLOGY	6
10.0.	PATHOLOGY	5
11.0-15.0.	PHARMACOLOGY	6
5.0-7.0, 24.0.	PHYSIOLOGY	27
	TOTAL	**100**

Total number of MCQs are 100, equal to100 pts. Each question has 1 pt.).
Total value of LPE is equal to 100 points

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

Abbreviations:
MCQ: Multiple Choice Questions
LPE: Laboratory Practical Exam
CE: Committee Exam
CS: Committee Score
FE: Final Exam
ICE: Incomplete Exam
Pts.: Points
In FE and ICE**, 46** out of 200 FE and ICE MCQs will be from Committee I (Each question is equal value)

COMMITTEE V – UROGENITAL and ENDOCRINE SYSTEMS
I. WEEK / 30 March – 03 April 2020

	Monday 30-March-2020	Tuesday 31-March-2020	Wednesday 01-April-2020	Thursday 02-April-2020			Friday 03-April-2020			
09.00- 09.50	**PBL**	**Lecture** The Kidneys *Mohammed Elgazzar*	**Lecture** Mechanism of Drug Action 1 *Ece Genç*	**Laboratory/ Physiology** *Bayram Yılmaz & Mehtap Kaçar & Burcu Gemici Başol* Glomerular Filtration **Group A**	**Laboratory Biochemistry** Urine Analysis *Jale Çoban & Müge Kopuz Alvarez Noval* **Group B**	**Group C IL**	**Independent Learning**			
10.00- 10.50		**Lecture** Urinary Tracts and Suprarenal Glands *Mohammed Elgazzar*	**Lecture** Mechanism of Drug Action 2 *Ece Genç*				**ICP CSL: IV Cannulation** *Özlem Tanrıöver & Arzu Akalın & Alp Kayıran* **Group D**	**Group A SRPC SGS**	**Group C Yeditepe University Hospital, Koşuyolu**	**Group B FHC**
11.00- 11.50		**Lecture** Body Fluids and Functions of Kidneys *Bayram Yılmaz*	**Lecture** Histology of Urinary System: General Aspect, Kidney Nephron *Aylin Yaba Uçar*	**Group B**	**Laboratory/ Biochemistry** Urine Analysis *Jale Çoban & Müge Kopuz Alvarez Noval* **Group C**	**Group A IL**				
12.00- 12.50	Introduction to Committee V Secretary of Committee	**Lecture** Micturition *Bayram Yılmaz*	**Lecture** Histology of Urinary System: Excreatory Passage *Aylin Yaba Uçar*							
13.00- 13.50	**Lunch Break**									
14.00- 14.50	**Lecture** Introduction to Urinary System *Mohammed Elgazzar*	**Lecture** Mechanisms of Hormone Actions, Intracellular and Cell Surface Receptors *İnci Özden*	**Lecture** Urine Formation and Renal Blood Flow *Bayram Yılmaz*	**Lecture** Urine Formation: Tubular Processing *Bayram Yılmaz*			**ELECTIVE COURSES VIII**		**Independent Learning**	
15.00- 15.50	**Lecture** The Kidneys *Mohammed Elgazzar*	**Lecture** Mechanisms of Hormone Actions, Intracellular and Cell Surface Receptors *İnci Özden*	**Lecture** Urine Formation and Renal Blood Flow *Bayram Yılmaz*	**Lecture** Urine Formation: Tubular Processing *Bayram Yılmaz*						
16.00- 16.50	**Lecture** Introduction to Viruses *Microbiology Lecturer*	**Lecture** DNA Viruses I *Microbiology Lecturer*	**Laboratory/Anatomy** Urinary System *Mohammed Elgazzar* **Group A**	**Group B, IL**	**Lecture** DNA Viruses II *Microbiology Lecturer*		**Independent Learning**		**ELECTIVE COURSES VIII**	
17.00-17.50	**Lecture** Viral Pathogenesis/ Oncogenesis *Microbiology Lecturer*	**Independent Learning**	**Group A, IL**	**Group B**	**Independent Learning**					

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

COMMITTEE V – UROGENITAL and ENDOCRINE SYSTEMS
II. WEEK / 06 – 10 April 2020

<table>
<tr><th></th><th>Monday
06-April-2020</th><th>Tuesday
07-April-2020</th><th>Wednesday
08-April-2020</th><th>Thursday
09-April-2020</th><th>Friday
10-April-2020</th></tr>
<tr><td>09.00- 09.50</td><td rowspan="3">PBL</td><td>Lecture
Fluid and Electrolyte Balance
Bayram Yılmaz</td><td>Lecture
Introduction to Neoplasia and Biologic Behaviors of Neoplasm
Aydın Sav</td><td colspan="2">Lecture
Hormones of Hypothalamus and Pituitary
İnci Özden</td><td colspan="4" rowspan="2">Independent Learning</td></tr>
<tr><td>10.00- 10.50</td><td>Lecture
Fluid and Electrolyte Balance
Bayram Yılmaz</td><td>Lecture
Introduction to Neoplasia and Biologic Behaviors of Neoplasm
Aydın Sav</td><td colspan="2">Lecture
Thyroid Hormones
İnci Özden</td></tr>
<tr><td>11.00- 11.50</td><td>Lecture
Linear Regression
E. Çiğdem Altunok</td><td>Lecture
Regulation of Acid-Base Balance
Bayram Yılmaz</td><td rowspan="2">Laboratory/ Physiology
Glomerular Filtration
Bayram Yılmaz & Mehtap Kaçar & Burcu Gemici Başol
Group C</td><td rowspan="2">Laboratory/ Biochemistry
Urine Analysis J
Jale Çoban / Müge Kopuz Alvarez Noval
Group A</td><td rowspan="2">ICP
CSL: Bladder Catheterization
Arzu Akalın & Murat Kuru Ertan Emek
Group A</td><td rowspan="2">Group B SRPC SGS</td><td rowspan="2">Group C FHC</td><td rowspan="2">Group D Yeditepe University Hospital, Koşuyolu</td></tr>
<tr><td>12.00- 12.50</td><td>Independent Learning</td><td colspan="2">Lecture
Linear Regression
E. Çiğdem Altunok</td><td>Lecture
Regulation of Acid-Base Balance
Bayram Yılmaz</td></tr>
<tr><td>13.00- 13.50</td><td colspan="5">Lunch Break</td></tr>
<tr><td>14.00- 14.50</td><td>Lecture
Histology of Endocrine System: General Aspect, Hypothalamus, Epiphysis
Aylin Yaba Uçar</td><td colspan="2">Lecture
Mechanisms of Hormone Actions, Intracellular and Cell Surface Receptors
İnci Özden</td><td>Lecture
Hormones of Hypothalamus and Pituitary
İnci Özden</td><td colspan="2">Lecture
Histology of Endocrine System: Hypophysis
Aylin Yaba Uçar</td><td rowspan="2">ELECTIVE COURSES IX</td><td colspan="2" rowspan="2">Independent Learning</td></tr>
<tr><td>15.00- 15.50</td><td>Lecture
Introduction to Genital Systems
Mohammed Elgazzar</td><td colspan="2">Lecture
Mechanisms of Hormone Actions, Intracellular and Cell Surface Receptors
İnci Özden</td><td>Lecture
Hormones of Hypothalamus and Pituitary
İnci Özden</td><td colspan="2">Lecture
Histology of Endocrine System: Thyroid and Parathyroid and Suprarenal Glands
Aylin Yaba Uçar</td></tr>
<tr><td rowspan="2">16.00- 16.50</td><td rowspan="2">Lecture
Male Genital Organs
Mohammed Elgazzar</td><td colspan="2">Laboratory/Anatomy
Male Genital Organs
Mohammed Elgazzar</td><td rowspan="2">Lecture
DNA Viruses III
Microbiology Lecturer</td><td rowspan="2">Laboratory/ Biostatistics
Computer Applications of Tests of Significance
Çiğdem Altunok
Group B</td><td rowspan="2">Group A IL</td><td rowspan="2">Independent Learning</td><td rowspan="2" colspan="2">ELECTIVE COURSES IX</td></tr>
<tr><td>Group A, IL</td><td>Group B</td></tr>
<tr><td>17.00-17.50</td><td>Lecture
Male Genital Organs
Mohammed Elgazzar</td><td>Group A</td><td>Group B, IL</td><td>Lecture
DNA Viruses IV
Microbiology Lecturer</td></tr>
</table>

COMMITTEE V – UROGENITAL and ENDOCRINE SYSTEMS
III. WEEK / 13 – 17 April 2020

	Monday 13-April-2020	Tuesday 14-April-2020	Wednesday 15-April-2020	Thursday 16-April-2020		Friday 17-April-2020			
09.00- 09.50	**Lecture** Histology of Male Genital System: Testis *Alev Cumbul*	**Lecture** Hormones of Adrenal Cortex and Adrenal Medulla *İnci Özden*	**Lecture** Oncogenesis, Incidence and Distribution of Cancer *Aydın Sav*	**Laboratory/ Microbiology** Immunoassays in Diagnostic Microbiology *Microbiology Instructors* **Group A**	**Laboratory/ Physiology** *Bayram Yılmaz & Mehtap Kaçar & Burcu Gemici Başol* Metabolic Rate **Group C**	**Independent Learning**			
10.00- 10.50	**Lecture** Histology of Male Genital System: Excreatory Parts *Alev Cumbul*	**Lecture** Hormones of Adrenal Cortex and Adrenal Medulla *İnci Özden*	**Lecture** Oncogenesis, Incidence and Distribution of Cancer *Aydın Sav*	**Group B**		**ICP** CSL: Bladder Catheterization *Arzu Akalın & Murat Kuru & Ceyhun Cenk* **Group B**	**Group A SRPC SGS**	**Group C Yeditepe University**	**Group D FHC**
11.00- 11.50	**Lecture** Introduction to Endocrinology *Mehtap Kaçar*	**Lecture** Posterior Pituitary Hormones *Mehtap Kaçar*	**Lecture** Insulin, Diabetes Mellitus *Mehtap Kaçar*	**Group C**	**Group A**				
12.00- 12.50	**Lecture** Pituitary Gland and Hypothalamic Control *Mehtap Kaçar*	**Lecture** Thyroid Metabolic Hormones *Mehtap Kaçar*	**Lecture** Insulin, Diabetes Mellitus *Mehtap Kaçar*	**Group D**					
13.00- 13.50	**Lunch Break**								
14.00- 14.50	**Lecture** Female Genital Organs *Mohammed Elgazzar*	**Lecture** DNA Viruses V *Microbiology Lecturer*	**Lecture** Hormones Regulating Calcium Metabolism *İnci Özden*	**Lecture** RNA Viruses I *Çağatay Acuner*		**ELECTIVE COURSES X**	**Independent Learning**		
15.00- 15.50	**Lecture** Female Genital Organs *Mohammed Elgazzar*	**Laboratory/Anatomy** Female Genital Organs *Mohammed Elgazzar* **Group A** / **Group B, IL**	**Lecture** Hormones Regulating Calcium Metabolism *İnci Özden*	**Lecture** RNA Viruses II *Çağatay Acuner*					
16.00- 16.50	**Lecture** Biology of Endocrine System *Deniz Kıraç*	**Group A, IL** / **Group B**	**Laboratory / Physiology** *Bayram Yılmaz & Mehtap Kaçar & Burcu Gemici Başol* Metabolic Rate **Group B**	**Group A, C IL**	**Lecture** Post-receptor Events and Second Messengers *Ece Genç*	**Independent Learning**	**ELECTIVE COURSES X**		
17.00-17.50	**Lecture** Biology of Endocrine System *Deniz Kıraç*	**Independent Learning**			**Independent Learning**				

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

COMMITTEE V – UROGENITAL and ENDOCRINE SYSTEMS
IV. WEEK / 20 – 24 April 2020

	Monday 20-April - 2020	Tuesday 21-April-2020	Wednesday 22-April-2020	Thursday 23-April-2020	Friday 24-April-2020
09.00- 09.50	**Lecture** Adrenocortical Hormones *Mehtap Kaçar*	**Lecture** Histology of the Female Genital System: Ovaries *Alev Cumbul*	**Laboratory/ Microbiology** Molecular Methods in Diagnostic Microbiology *Microbiology instructors* **Group D** / **Group A, B, C IL**	**NATIONAL HOLIDAY**	**Independent Learning**
10.00- 10.50	**Lecture** Adrenocortical Hormones *Mehtap Kaçar*	**Lecture** Histology of the Female Genital System: Conducting Part *Alev Cumbul*	**Group C** / **Group A, B, D IL**		**ICP** **CSL:** Bladder Catheterization *Murat Kuru & Ceyhun Cenk & Mustafa Yazıcıoğlu* **Group C** / **Group A FHC** / **Group B Yeditepe University Hospital, Koşuyolu** / **Group D SRPC SGS**
11.00- 11.50	**Lecture** Nerves of the Pelvis *Mohammed Elgazzar*	**Lecture** Introduction to Rational Pharmacotherapy *Emine Nur Özdamar*	**Group A** / **Group B, C, D IL**		
12.00- 12.50	**Lecture** Vasculature of the Pelvis *Mohammed Elgazzar*	**Lecture** Eicosanoids *Emine Nur Özdamar*	**Group B** / **Group A, C, D IL**		
13.00- 13.50	**Lunch Break**	**Lunch Break**	**Lunch Break**		**Lunch Break**
14.00- 14.50	**Lecture** RNA Viruses III *Çağatay Acuner*	**Lecture** PTH, Calcitonin, Calcitriol *İnci Özden*	**Lecture** Regulation of Calcium & Phosphate Metabolism and Bone Formation *Bayram Yılmaz*		**ELECTIVE COURSES XI** / **Independent Learning**
15.00- 15.50	**Lecture** RNA Viruses IV *Çağatay Acuner*	**Lecture** PTH, Calcitonin, Calcitriol *İnci Özden*	**Lecture** Regulation of Calcium & Phosphate Metabolism and Bone Formation *Bayram Yılmaz*		
16.00- 16.50	**Laboratory/Anatomy** Nerves and Vasculature of the Pelvis *Mohammed Elgazzar* **Group A, IL** / **Group B**	**Lecture** Diagnostic Methods in Virology *Microbiology Lecturer*	**Lecture** Specific Viruses *Çağatay Acuner*		**Independent Learning** / **ELECTIVE COURSES XI**
17.00-17.50	**Group A** / **Group B, IL**	**Independent Learning**	**Lecture** Specific Viruses *Çağatay Acuner*		

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COMMITTEE V – UROGENITAL and ENDOCRINE SYSTEMS
V. WEEK / 27 April – 1 May 2020

	Monday 27-April - 2020	Monday 28-April - 2020	Tuesday 29-April-2020		Thursday 30-April-2020		Friday 01-May-2020
09.00- 09.50	**Lecture** Physiology of Growth Hormones *Bayram Yılmaz / Mehtap Kaçar*	**Lecture** Insulin, Glucagon *İnci Özden*	**Laboratory/ Physiology** Dissection & Examination of Endocrine System *Bayram Yılmaz & Mehtap Kaçar & Burcu Gemici Başol* **Group C**	**Group A, B IL**	**Laboratory Histology& Embryology** Histology of Urinary & Endocrine Systems *Alev Cumbul & Aylin Yaba Uçar* **Group B**	**Laboratory/ Pharmacology** Efficacy and Potency Concepts *Ece Genç* **Group A**	**LABOR'S DAY**
10.00- 10.50	**Lecture** Pineal Gland & Melatonin *Bayram Yılmaz / Mehtap Kaçar*	**Lecture** Insulin, Glucagon *İnci Özden*					
11.00- 11.50	**Lecture** Viral Oncogenesis *Microbiology Lecturer*	**Lecture** Male Reproductive Physiology *Mehtap Kaçar*	**Lecture** Introduction to Drug Development *Emine Nur Özdamar*		**Group A**	**Group B**	
12.00- 12.50	**Lecture** Prions *Çağatay Acuner*	**Lecture** Male Reproductive Physiology *Mehtap Kaçar*	**Lecture** Development of Biopharmaceuticals *Emine Nur Özdamar*				
13.00- 13.50	**Lunch Break**						
14.00- 14.50	**Lecture** Perineum and Ischiorectal Fossa *Mohammed Elgazzar*	**Lecture** Analysis of Variance and Multiple Comparisons *E. Çiğdem Altunok*	**Lecture** Development of Urinary System and Anomalies *Alev Cumbul*		**Lecture** Seeing with Sound: Images from Echoes (Diagnostic Ultrasound Imaging) *Bilge Güvenç Tuna*		
15.00- 15.50	**Lecture** Review of the Urinary System *Mohammed Elgazzar*	**Lecture** Analysis of Variance and Multiple Comparisons *E. Çiğdem Altunok*	**Lecture** Development of Genital System; General Aspects *Alev Cumbul*		**Lecture** Basics of MRI *Bilge Güvenç Tuna*		
16.00- 16.50	**Independent Learning**	**Laboratory/Anatomy** Perineum and Ischiorectal Fossa *Mohammed Elgazzar* **Group A** / **Group B, IL**	**Laboratory/ Biostatistic** Computer Applications of Tests of Significance *Çiğdem Altunok* **Group C**	**Group A, B IL**	**Lecture** Basics of MRI *Bilge Güvenç Tuna*		
17.00-17.50	**Independent Learning**	**Group A, IL**	**Group B**		**Independent Learning**		

COMMITTEE V – UROGENITAL and ENDOCRINE SYSTEMS
VI. WEEK / 04 – 08 May 2020

<table>
<tr><th></th><th>Monday
04-May-2020</th><th>Tuesday
05-May-2020</th><th>Wednesday
06-May-2020</th><th colspan="4">Thursday
07-May-2020</th><th colspan="2">Friday
08-May-2020</th></tr>
<tr><td>09.00- 09.50</td><td>Lecture
Female Reproductive Physiology
Mehtap Kaçar</td><td>Lecture
Vitamins
İnci Özden</td><td colspan="2">Lecture
Insulin, Glucagon
İnci Özden</td><td rowspan="3">ICP
CSL: Bladder Catheterization
Murat Kuru & Özlem Tanrıöver & Mustafa Yazıcıoğlu
Group D</td><td rowspan="3">Group A
Yeditepe University Hospital, Koşuyolu</td><td rowspan="3">Group B FHC</td><td rowspan="3">Group C SRPC SGS</td><td>Laboratory/ Physiology
Dissection & Examination of Endocrine System
Bayram Yılmaz & Mehtap Kaçar & Burcu Gemici Başol
Group A</td><td>Group B, C IL</td></tr>
<tr><td>10.00- 10.50</td><td>Lecture
Female Reproductive Physiology
Mehtap Kaçar</td><td>Lecture
Vitamins
İnci Özden</td><td colspan="2">Lecture
Insulin, Glucagon
İnci Özden</td><td rowspan="2">Group B</td><td rowspan="2">Group A IL</td></tr>
<tr><td>11.00- 11.50</td><td>Lecture
Endocrine Organs
Mohammed Elgazzar</td><td>Lecture
Pharmacogenetics & Pharmacogenomics
Ece Genç</td><td colspan="2">Lecture
Histogenesis and Nomenclature
Aydın Sav</td></tr>
<tr><td>12.00- 12.50</td><td>Lecture
Endocrine Organs
Mohammed Elgazzar</td><td>Lecture
Pharmacogenetics & Pharmacogenomics
Ece Genç</td><td colspan="2">Lecture
Histogenesis and Nomenclature
Aydın Sav</td><td colspan="4">Independent Learning</td></tr>
<tr><td>13.00- 13.50</td><td colspan="9">Lunch Break</td></tr>
<tr><td>14.00- 14.50</td><td>Lecture
Vasoactive Peptides
Emine Nur Özdamar</td><td>Lecture
Pregnancy and Lactation
Mehtap Kaçar</td><td colspan="2">Lecture
Hormones and Immunity
Gülderen Yanıkkaya Demirel</td><td colspan="4" rowspan="2">Lecture
Minerals
İnci Özden</td><td rowspan="2">ELECTIVE COURSES XII</td><td rowspan="2">Independent Learning</td></tr>
<tr><td>15.00- 15.50</td><td>Lecture
Histamine and Antihistamines
Emine Nur Özdamar</td><td>Lecture
Pregnancy and Lactation
Mehtap Kaçar</td><td colspan="2">Laboratory/Pathology
Inflammation & Neoplasia
Group A, IL | Group B</td></tr>
<tr><td>16.00- 16.50</td><td>Lecture
Biology of Sexual Differentiation and Development
Turgay İsbir</td><td>Independent Learning</td><td>Group A</td><td>Group B IL</td><td colspan="4">Lecture
Minerals
İnci Özden</td><td rowspan="2">Independent Learning</td><td rowspan="2">ELECTIVE COURSES XII</td></tr>
<tr><td>17.00-17.50</td><td>Independent Learning</td><td>Independent Learning</td><td colspan="2">Independent Learning</td><td colspan="4">Independent Learning</td></tr>
</table>

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COMMITTEE V – UROGENITAL and ENDOCRINE SYSTEMS
VII. WEEK / 11 – 15 May 2020

	Monday 11-May-2020	Tuesday 12-May-2020	Wednesday 13-May-2020	Thursday 14-May-2020	Friday 15-May-2020
09.00- 09.50	**Lecture** Development of the Male Genital System and Anomalies *Alev Cumbul*	**Lecture** Fetal and Neonatal Physiology *Bayram Yılmaz*	**Laboratory/ Histology & Embryology** Histology of Genital System *Alev Cumbul & Aylin Yaba Uçar*	**Independent Learning**	**ICP** **CSL:** ICP-II Review *Serdar Özdemir*
10.00- 10.50	**Lecture** Development of the Female Genital System and Anomalies *Alev Cumbul*	**Lecture** Endocrine Distruptors *Bayram Yılmaz*	**Group A** / **Group B IL**	**Independent Learning**	**Group C** / **Groups A, B, D, IL**
11.00- 11.50	**Lecture** Drug Toxicity 1 *Ece Genç*	**Lecture** Vitamins *İnci Özden*	**Group A IL** / **Group B**	**Laboratory/ Hist. & Embry.** Review Session *Alev Cumbul & Aylin Yaba Uçar* **Group A and Group B**	**Groups A, B, C, IL** / **CSL:** ICP-II Review **Group D** *Özlem Tanrıöver*
12.00- 12.50	**Lecture** Drug Toxicity 2 *Ece Genç*	**Lecture** Vitamins *İnci Özden*			
13.00- 13.50	**Lunch Break**				
14.00- 14.50	**ICP** **CSL:** ICP-II Review *Arzu Akalın*	**Lecture** Vaccines *Microbiology Lecturer*	**Lecture** Biology of Sexual Differentiation and Development *Turgay İsbir*	**Lecture** Tissue Damage by Eating Disorders and Diabetes Mellitus *Aydın Sav*	**ELECTIVE COURSES XIII** / **Independent Learning**
15.00- 15.50	**Group A** / **Groups B, C, D, IL**	**Lecture** Prenatal Diagnosis *Alev Cumbul*	**Lecture** Biology of Sexual Differentiation and Development *Turgay İsbir*	**Independent Learning**	
16.00- 16.50	**Groups A, C, D, IL** / ICP-II Review **Group B** *Özlem Tanrıöver*	**Independent Learning**	**Lecture** Biology of Sexual Differentiation and Development *Turgay İsbir*	**Independent Learning**	**Independent Learning** / **ELECTIVE COURSES XIII**
17.00-17.50		**Independent Learning**	**Independent Learning**	**Independent Learning**	

COMMITTEE V – UROGENITAL and ENDOCRINE SYSTEMS
VIII. WEEK / 18 – 22 May 2020

<table>
<tr><th></th><th>Monday
18-May-2020</th><th>Tuesday
19-May-2020</th><th>Wednesday
20-May-2020</th><th>Thursday
21-May-2020</th><th colspan="2">Friday
22-May-2020</th></tr>
<tr><td>09.00- 09.50</td><td rowspan="4">Assessment Session
(Physiology and Histology&Embryology Practical Exams)</td><td rowspan="8">NATIONAL HOLIDAY</td><td rowspan="4">ICP Make-Up Exam</td><td rowspan="4">Independent Learning</td><td colspan="2">Independent Learning</td></tr>
<tr><td>10.00- 10.50</td><td colspan="2" rowspan="3">Assessment Session
Committee V
(MCQ)</td></tr>
<tr><td>11.00- 11.50</td></tr>
<tr><td>12.00- 12.50</td></tr>
<tr><td>13.00- 13.50</td><td>Lunch Break</td><td>Lunch Break</td><td>Lunch Break</td><td colspan="2">Program Evaluation Session
Review of the Exam Questions, Evaluation of the Committee V Program
Secretary of the Committee</td></tr>
<tr><td>14.00- 14.50</td><td rowspan="4">Anatomy Practical Exam</td><td rowspan="4">Independent Learning</td><td rowspan="4">Independent Learning</td><td rowspan="2">ELECTIVE COURSES XIV</td><td rowspan="2">Independent Learning</td></tr>
<tr><td>15.00- 15.50</td></tr>
<tr><td>16.00- 16.50</td><td rowspan="2">Independent Learning</td><td rowspan="2">ELECTIVE COURSES XIV</td></tr>
<tr><td>17:00-17:50</td></tr>
</table>

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

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

LIST OF STUDENT COUNSELING- PHASE II

	NAME	SURNAME	COUNSELOR
1	İLAYDA	AGAR	PROF. DR. TURGAY İSBİR
2	ASYA	AKOVA	PROF. DR. ECE GENÇ
3	MEHMET	AKYÜZ	DR. ÖĞR. ÜYESİ EMİNE NUR ÖZDAMAR
4	MAHMOUD	ALJOBBEH	DR. ÖĞR. ÜYESİ MOHAMMED ELGAZZAR
5	BARTU	ALKIŞER	PROF. DR. TURGAY İSBİR
6	EKİN SU	ALPSAR	DR. ÖĞR. ÜYESİ EMİNE NUR ÖZDAMAR
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9	FURKAN	ARIK	DR. ÖĞR. ÜYESİ EMİNE NUR ÖZDAMAR
10	ÇAĞLA	ATAY	DR. ÖĞR. ÜYESİ EMİNE NUR ÖZDAMAR
11	MELİSA	AYDEMİR	DR. ÖĞR. ÜYESİ EMİNE NUR ÖZDAMAR
12	NURİ EFE	AYDIN	DR. ÖĞR. ÜYESİ EMİNE NUR ÖZDAMAR
13	LIAN	AZZAWI	DR. ÖĞR. ÜYESİ MOHAMMED ELGAZZAR
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23	İREM	DALKIRAN	DOÇ. DR. DENİZ KIRAÇ
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25	AHMET	DEMİREZ	DR. ÖĞR. ÜYESİ ALEV CUMBUL
26	ORKUN	DEMİROK	DR. ÖĞR. ÜYESİ SERDAR ÖZDEMİR
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34	EMRE	ERDEN	PROF. DR. RECEP EROL SEZER

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