

**YEDİTEPE UNIVERSITY
FACULTY OF MEDICINE
PHASE II
ACADEMIC PROGRAM BOOK
2023 – 2024**

Student's;
Name :
Number :

YEDİTEPE UNIVERSITY

FACULTY OF MEDICINE PHASE II

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COORDINATION COMMITTEE

(TEACHING YEAR 2023 – 2024)

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ELECTIVE COURSES COORDINATION COMMITTEE

Seda GÜLEÇ YILMAZ, PhD. Assoc. Prof. (Coordinator)

Ahmet SAÇ, MD, Instructor (Co-coordinator)

PBL COORDINATION COMMITTEE

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

Tümay Sadıkoğlu, MD, Instructor (Co-Coordinator)

ACADEMIC CALENDAR 2023 – 2024

MED 203 BASIC MEDICAL SCIENCES II

COMMITTEE I CARDIOVASCULAR SYSTEM (6 Weeks)

Beginning of Committee:	September 11, 2023, Monday
End of Committee:	October 20, 2023, Friday
Committee Exam:	October 16-20, 2023 (Theoretical and Practical Exams)
Committee Exam Discussion:	October 20, 2023, Friday

COMMITTEE II RESPIRATORY SYSTEM (6 Weeks)

Beginning of Committee:	October 23, 2023, Monday
End of Committee:	December 1, 2023, Friday
Committee Exam: Exams)	November 27-December 1, 2023 (Theoretical and Practical
Committee Exam Discussion:	November 30, 2023, Thursday
National Holiday:	October: 29, 2023, Sunday
Commemoration of Atatürk:	November 10, 2023 Friday

COMMITTEE III GASTROINTESTINAL SYSTEM (7 Weeks)

Beginning of Committee:	December 4, 2023, Monday
End of Committee:	January 19, 2024, Friday
Committee Exam:	January 15-19, 2024 (Theoretical and Practical Exams)
Committee Exam Discussion:	January 19, 2024
New Year:	January 1, 2024, Monday

MIDTERM BREAK: JANUARY 22- FEBRUARY 4 2024

COMMITTEE IV NERVOUS SYSTEM (8 Weeks)

Beginning of Committee:	February 5, 2024, Monday
End of Committee:	March 29, 2024, Friday
Committee Exam:	March 25-29, 2024 (Theoretical and Practical Exams)
Committee Exam Discussion:	March 29, 2024, Friday
Physicians' Day:	March 14, 2024, Thursday

COMMITTEE V ENDOCRINE and UROGENITAL SYSTEMS (9 Weeks)

Beginning of Committee:	April 1, 2024, Monday
End of Committee:	May 31, 2024, Friday
Committee Exam:	May 27-31, 2024 (Theoretical and Practical Exams)
Committee Exam Discussion:	May 31, 2023, Friday
Feast of Ramadan:	April 10-12, 2024
National Holiday:	April 23, 2024, Tuesday
Labor's Day:	May 1, 2024, Wednesday
National Holiday:	May 19, 2024, Sunday

Make-up Exam:	June 10-14, 2023 Monday-Friday
Final Exam:	June 25, 2024, Tuesday
Incomplete Exam:	July 25, 2024, Thursday

FREE ELECTIVE COURSES-Spring 2023-2024

Introduction to Elective Courses:	January 5, 2024,	Friday 14:00-16:00 (Online)
Beginning of Elective Courses:	February 16, 2024,	Friday
Midterm Exam:	March 29, 2024	Friday
Final Exam:	June 8-14, 2024	Saturday-Friday
Make-up Exam:	June 21-28, 2024	Friday-Friday
Incomplete Exam:	July 8 -17, 2024	Monday-Wednesday

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

Beginning of Course:	September 14, 2023,	Thursday
End of Course:	May 31, 2024,	Friday
Midterm Exam:	January 11-12, 2024,	Thursday- Friday
Make-up Exam:	May 24, 2024,	Friday
Final Exam:	June 27-28, 2024	Thursday- Friday
Incomplete Exam:	July 17, 2024,	Thursday

THE COORDINATION COMMITTEE MEETINGS

1 st Coordination Committee Meeting:	October 17, 2023,	Thursday
2 nd Coordination Committee Meeting:	January 10, 2024,	Wednesday (With student participation)
3 rd Coordination Committee Meeting:	May 14, 2024,	Tuesday (With student participation)
4 th Coordination Committee Meeting:	July 9, 2024,	Tuesday

UNDERGRADUATE MEDICAL EDUCATION PROGRAM

YEDİTEPE UNIVERSITY FACULTY OF MEDICINE

AIM OF MEDICAL EDUCATION PROGRAM

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

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AIM

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

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

YEDİTEPE UNIVERSITY FACULTY OF MEDICINE

PROGRAM OUTCOMES OF MEDICAL EDUCATION

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

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

You can find UYYB from the link: https://www.yok.gov.tr/Documents/Kurumsal/egitim_ogretim_dairesi/Ulusal-cekirdek-egitimi-programlari/mezuniyet-oncesi-tip-egitimi-cekirdek-egitimi-programi.pdf

COMPETENCY AREA-1 / Professional Practices
COMPETENCY 1.1. Health Service Provider
Competence 1.1.1. Integrates knowledge, skills, and attitudes acquired from basic and clinical medical sciences, behavioral sciences, and social sciences to provide health services.
Competence 1.1.2. Demonstrates a biopsychosocial approach that considers the individual's sociodemographic and sociocultural background without discrimination based on language, religion, race, or gender in patient management.
Competence 1.1.3. Prioritizes the protection and improvement of individuals' and community's health in the delivery of healthcare services.
Competence 1.1.4. Performs the necessary actions in the direction of maintaining and improving the state of health as considering the individual, social, social and environmental factors affecting health.
Competence 1.1.5. Provides health education to healthy/ill individuals and their families, as well as to other healthcare professionals, by recognizing the characteristics, needs, and expectations of the target audience.
Competence 1.1.6. Demonstrates a safe, rational, and effective approach in the processes of protection, diagnosis, treatment, follow-up, and rehabilitation in health service delivery.

Competence 1.1.7. Performs interventional and/or non-interventional procedures safely and effectively for the patient in the processes of diagnosis, treatment, follow-up, and rehabilitation.
Competence 1.1.8. Provides healthcare services considering patient and employee health and safety.
Competence 1.1.9. Considers changes related to the physical and socio-economic environment at both regional and global scales that affect health, as well as changes in the individual characteristics and behaviors of those who seek healthcare services.
COMPETENCY AREA-2 / Professional Values and Approaches
COMPETENCY 2.1. Adopting Professional Ethics and Principles
Competence 2.1.1. Considers good medical practices while performing the profession.
Competence 2.1.2. Fulfills duties and obligations within the framework of ethical principles, rights, and legal responsibilities required by the profession.
Competence 2.1.3. Demonstrates determined behavior in providing high-quality healthcare while considering the patient's integrity.
Competence 2.1.4. Evaluates own performance in professional practices by considering own emotions and cognitive characteristics.
COMPETENCY 2.2. Health Advocate
Competence 2.2.1. Advocates for the improvement of healthcare service delivery by considering the concepts of social accountability and social responsibility in the protection and enhancement of community health.
Competence 2.2.2. Plans and implements service delivery, education, and counseling processes related to individual and community health, in collaboration with all stakeholders, for the protection and improvement of health.

<p>Competence 2.2.3. Evaluates the impact of health policies and practices on individual and community health indicators and advocates for the improvement of healthcare quality.</p>
<p>Competence 2.2.4. Gives importance to protecting and improving own physical, mental and social health and takes necessary actions for it.</p>
<p>COMPETENCY 2.3. Leader-Manager</p>
<p>Competence 2.3.1. Demonstrates exemplary behavior and leadership within the healthcare team during service delivery.</p>
<p>Competence 2.3.2. Utilizes resources in a cost-effective, socially beneficial, and compliant manner with regulations in the planning, implementation, and evaluation processes of healthcare services as the manager in the healthcare institution.</p>
<p>COMPETENCY 2.4. Team Member</p>
<p>Competence 2.4.1. Communicates effectively within the healthcare team and takes on different team roles as necessary.</p>
<p>Competence 2.4.2. Displays appropriate behaviors while being aware of the duties and responsibilities of healthcare workers within the healthcare team.</p>
<p>Competence 2.4.3. Works collaboratively and effectively with colleagues and other professional groups in professional practice.</p>
<p>COMPETENCY 2.5. Communicator</p>
<p>Competence 2.5.1. Communicates effectively with patients, their families, healthcare professionals, and other occupational groups, institutions and organizations.</p>
<p>Competence 2.5.2. Communicates effectively with individuals and groups who require a special approach and have different sociocultural characteristics.</p>

Competence 2.5.3. Demonstrates a patient-centered approach that involves the patient in decision-making mechanisms during the diagnosis, treatment, follow-up, and rehabilitation processes.

COMPETENCY AREA-3 / Professional and Personal Development

COMPETENCY 3.1. Scientific and Analytical Approach

Competence 3.1.1. Plans and implements scientific research, as necessary, for the population it serves, and utilizes the results obtained, as well as those from other research, for the benefit of the community.

Competence 3.1.2. Accesses and critically evaluates current literature related to their profession.

Competence 3.1.3. Applies evidence-based medicine principles in the clinical decision-making process.

Competence 3.1.4. Uses information technologies to enhance the effectiveness of healthcare, research, and education activities.

COMPETENCY 3.2. Lifelong Learner

Competence 3.2.1. Manages effectively individual study processes and career development.

Competence 3.2.2. Demonstrates skills in acquiring, evaluating, integrating new information with existing knowledge, applying to professional situations, and adapting to changing conditions throughout professional career.

Competence 3.2.3. Selects the right learning resources to improve the quality of health care and organizes the learning process.

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.

2023-2024 CURRICULUM OF PHASE II

YEDİTEPE UNIVERSITY FACULTY OF MEDICINE

CODE		SECOND YEAR	W	T	A	L	Y	E
MED	203	Basic Medical Sciences II	37	589		126		53
MED	202	Introduction to Clinical Practice II	34	5	12	18		5
MED	XXX	Free Elective Course ¹ (SS)	14	28				2
Total Credits								60

The curriculum applies to 2023-2024 educational term. The duration of educational term for each year is shown in the table as total number of weeks. ECTS credits are the university credits of the courses in Yeditepe University Faculty of Medicine Undergraduate Medical Education Program. 1 ECTS=30 hours of workload including independent study hours per average student. GPA and cGPA calculations are based on ECTS credits.

¹Free Elective Courses. At least one free elective course offered by the Faculty of Medicine or other faculties must be selected in an academic year. Free elective courses provided by Faculty of Medicine in the first three years: MED 611 Medical Anthropology, MED 612 Creative Drama I, MED 613 Medical Humanities, MED 614 Personal Trademark Development, MED 615 Innovation Management, MED 616 Medical Management and New Services Design Skills, MED 619 Entrepreneurship and Storytelling Techniques for Business Purposes, MED 620 Art, Culture and Life Styles, MED 621 Epidemiological Research and Evidence-Based Medicine, MED 622 Applications of Economics in Health Care, MED 623 Visual Presentation in Medicine, MED 627 Presentation of Medicine on Media, MED 628 Healthy Living: The Milestones of the Life for Performance Management, MED 629 Music and Medicine, MED 630 Health Law, MED 631 Creative Drama II, MED 632 Music Appreciation, MED 633 Communication with Hearing Impaired Patients in Turkish Sign Language, MED 634 Case Based Forensic Science, MED 635 Advanced Level Communication with Hearing Impaired Patients in Turkish Sign Language, MED 636 Art Project, MED 637 Artistic Photography and Composition..

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

T: Theoretical, A: Application, L: Laboratory, Y: Yeditepe University Credit, E: ECTS Credit

NC: Non-Credit Course, FS: Fall Semester, SS: Spring Semester, W: Weeks.

* Please see https://med.yeditepe.edu.tr/sites/default/files/curriculum_2023-24_tr.docx for total curriculum of Faculty of Medicine.

DESCRIPTION and CONTENT of PHASE II

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

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

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

AIM and LEARNING OBJECTIVES of PHASE II

AIMS

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

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

LEARNING OBJECTIVES

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

KNOWLEDGE

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

SKILLS

- 1.0 apply basic interventional and non-interventional processes for taking individual preventive measures, drug application and diagnosis or treatment.
- 2.0 apply basic laboratory techniques and use equipment.
- 3.0 prepare a presentation of a scientific research

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

AIM

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

LEARNING OBJECTIVES

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

KNOWLEDGE

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

SKILLS

- 1.0 apply basic interventional and non-interventional processes for taking individual preventive measures, drug application and diagnosis or treatment.
- 2.0 apply basic laboratory techniques and use equipment.
- 3.0 prepare a presentation of a scientific research

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

AIM of ICP PROGRAM

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

Description

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

Credit Facility

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

Content of the ICP I-II-III

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

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

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

Clinical Skills Laboratory

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

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

***Simulated Patients (SPs)**

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

Assessment

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

Rules for Attendance of the Students

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

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

Program Evaluation

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

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

AIM

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

LEARNING OBJECTIVES

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

KNOWLEDGE

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

SKILLS

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

ATTITUDE

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

EARLY CLINICAL EXPOSURE

Description:

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

Aim:

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

Learning Environment:

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

Duration:

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

Objectives of the Training:

Students who complete the training program will be able to;

Knowledge:

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

Skills:

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

Attitude:

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

Content:

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

Instructional Methods:

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

Educational Materials:

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

Assessment

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

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

Organization of Student Groups:

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

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

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

	Group A	Group B	Group C	Group D	Group E
21-MAR-2024	ICP	SRPC	FHC	Yeditepe University Hospital, Koşuyolu	Yeditepe University Hospital, Kozyatağı
04-APR-2024	Yeditepe University Hospital, Koşuyolu	ICP	SRPC	Yeditepe University Hospital, Kozyatağı	FHC
18-APR-2024	FHC	Yeditepe University Hospital, Kozyatağı	ICP	SRPC	Yeditepe University Hospital, Koşuyolu
02 -MAY-2024	SRPC	Yeditepe University Hospital, Koşuyolu	Yeditepe University Hospital, Kozyatağı	FHC, ICP	ICP, SRPC

MED 202 ICP II COURSE 2023-2024 ACADEMIC PROGRAM

DAY	HOUR	SUBJECT	LECTURER
14-SEP-2023 THURSDAY	14:00-17:50	CSL: Intramuscular Injection / Intradermal / Subcutan Injection Group A	Dr.Gökhan Gençer / Dr. Ayfer İskender
21-SEP-2023 THURSDAY	14:00-17:50	CSL: Intramuscular Injection / Intradermal / Subcutan Injection Group B	Dr.Gökhan Gençer / Dr.Hande Candemir
28-SEP-2023 THURSDAY	14:00-17:50	CSL: Intramuscular Injection / Intradermal / Subcutan Injection Group C	Dr. Cem Şimşek / Dr. Yunus Emre Vural
05-OCT-2023 THURSDAY	14:00-17:50	CSL: Intramuscular Injection / Intradermal / Subcutan Injection Group D	Dr. Cem Şimşek /Atakan Gültekin
12-OCT-2023 THURSDAY	14:00-17:50	CSL: Intramuscular Injection / Intradermal / Subcutan Injection Group E	Dr. Cem Şimşek / Dr. Rabia Sarıyıldız
26-OCT-2023 THURSDAY	14.00-17.50	Intravenous Cannulation Group A	Dr. Cem Şimşek / Dr. Rabia Sarıyıldız

02-NOV-2023 THURSDAY	14.00-17.50	Intravenous Cannulation Group B	Dr.Alp Kayıran / Dr. Ayfer İskender
09-NOV-2023 THURSDAY	14.00-17.50	Intravenous Cannulation Group C	Dr.Alp Kayıran/ Dr.Yunus Emre Vural
16-NOV-2023 THURSDAY	14.00-17.50	Intravenous Cannulation Group D	Dr. Cem Şimşek / Atakan Gültekin
23-NOV-2023 THURSDAY	14.00-17.50	Intravenous Cannulation Group E	Dr. Gökhan Gençer / Dr.Hande Candemir
07-DEC-2023 THURSDAY	14.00-17.50	CSL: Nasogastric Administration Group A	Dr. Abidin Yusuf Kavurmacı / Dr. Esra Bayar
14-DEC-2023 THURSDAY	14.00-17.50	CSL: Nasogastric Administration Group B	Dr. Abidin Yusuf Kavurmacı / Dr. Esra Bayar
21 DEC-2023 THURSDAY	14.00-17.50	CSL: Nasogastric Administration Group C	Dr. Abidin Yusuf Kavurmacı / Dr. Esra Bayar

28-DEC-2023 THURSDAY	14.00-17.50	CSL: Nasogastric Administration Group D	Dr. Abidin Yusuf Kavurmacı / Dr. Esra Bayar
04 JAN-2024 THURSDAY	14.00-17.50	CSL: Nasogastric Administration Group E	Dr. Abidin Yusuf Kavurmacı / Dr. Esra Bayar
08-JAN-24 MONDAY	11.00-11.50	REVIEW GROUP A	
	12.00-12.50	REVIEW GROUP B	
	14.00-14.50	REVIEW GROUP C	
	15.00-15.50	REVIEW GROUP D	
	16.00-16.50	REVIEW GROUP E	
11-12-JAN- 2024	09:00-17:50	OSCE-II MIDTERM	
08-FEB-2024 THURSDAY	14:0-17:50	Intraarterial Blood Sampling Group A	Dr. Ezgi Aytaç

15-FEB-2024 THURSDAY	14:00-17:50	Intraarterial Blood Sampling Group B	Dr. Ezgi Aytaç
22-FEB-2024 THURSDAY	14:00-17:50	Intraarterial Blood Sampling Group C	Dr. Ezgi Aytaç
29-FEB-2024 THURSDAY	14:00-17:50	Intraarterial Blood Sampling Group D	Dr. Ezgi Aytaç
07-MAR-2024 THURSDAY	14:00-17:50	Intraarterial Blood Sampling Group E	Dr. Ezgi Aytaç
21-MAR-2024 THURSDAY	14:00-17:50	Bladder Catheterization Group A	Dr. Cem Şimşek / Dr. Rabia Sarıyıldız
04-Apr-2024 THURSDAY	14:00-17:50	Bladder Catheterization Group B	Dr. Cem Şimşek / Dr. Yunus Emre Vural
18-APR-2024 THURSDAY	14:00-17:50	Bladder Catheterization Group C	Dr. Gökhan Gençer / Dr. Atakan Gültekin

2-MAY-2024 THURSDAY	09:00-13:00	Bladder Catheterization Group D	Dr.Hande Candemir / Dr. Ayfer İskender
2-MAY-2024 THURSDAY	14:00-17:50	Bladder Catheterization Group E	Dr. Gökhan Gençer / Dr.Hande Candemir
20-June-2024 THURSDAY	14:00-15:50	ICP REVIEW Group A	
	16:00-17:50	ICP REVIEW Group B	
	14:00-15:50	ICP REVIEW Group C	
	14:00-15:50	ICP REVIEW Group D	
	16:00-17:50	ICP REVIEW Group E	
<p style="text-align: center;"> Midterm Exam: January 11-12, 2024 Thursday-Friday Make-up Exam: May 24, 2024 Friday Final Exam: June 27-28, 2024 Thursday-Friday Incomplete Exam: July 18, 2024 Thursday </p>			

AIM and LEARNING OBJECTIVES of SCIENTIFIC RESEARCH and PROJECT COURSE– II

AIM

The aim of the Scientific Research And Project – II (SRP) is to equip second year medical students to convey basic knowledge on scientific research and methodology, to equip them with skills of searching scientific literature from different reliable sources and then, convey students knowledge and skills to write scientific review paper and present it as a poster.

LEARNING OBJECTIVES

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

KNOWLEDGE

- 1.0 find reliable scientific research articles and literature from different sources
- 2.0 decide on topic of interest related to scientific research
- 3.0 explain structure of scientific review paper
- 4.0 explain the different types of review papers
- 5.0 explain the basic structure of poster presentation
- 6.0 present review or research paper as a poster

SKILLS

- 1.0 decide on topic of scientific research interest
- 2.0 browse reliable sources to find reliable scientific literature
- 3.0 write a review paper
- 4.0 prepare poster

ASSESSMENT PROCEDURE:

For the assessments of the medical students for the SRP, it is calculated out of 100 points;

	Percentage
Review paper writing	30 %
Poster preparation and presentation	30 %
Turning in assignments on time	20 %
Attendance and participations	20 %

50% of the total grade will be on mini review writing by the end of first semester and 50% will be on poster presentation at the end of the second semester.

Any assignments including review paper and poster presentation should be done by the student herself or himself and should not be “copy and paste” of the others. Similarities more than 35% in Turnitin or similar search engine will be considered as plagiarism and students (the ones gives and the ones receives) will get zero (0) points for the total score for SRP course.

Students are strongly encourage to attend for the small group meetings and discussion since it will help to complete the tasks on time.

Students could attend only in their small groups. Attending with other small groups will be considered absance.

Turning in assignments on time: Any assignemnets given by the instructor should be turned in on the date and time decided by the instructor. Assignemnts turned in after the deadline will not be accepted and students will receive zero points.

The Scientific Research and Projects I has 3% contribution to Term Score (TS).

Note: Instructor has right to change the assignments and assesment portions of the assignments.

ASSESSMENT PROCEDURE

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

1. Exams:

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

2. Scores*:

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

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

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

Exams Information (MED 202, MED 203)	
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 question distribution table/page.
ICE	ICE consists of 200 MCQs. For the proportional contribution of each committee, please see the committee's question distribution table/page.
MUE_{IBS}	MUE will be held only twice in a term. MUE consists of FSAQs. The number of FSAQs is half of the relevant exam. MUE content will be developed by the coordination committees.

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

Pass or Fail Calculations of the Courses
Basic Medical Sciences II (MED 203)
Pass; TS ≥ 60 Fail; FES < 50 (barrier point), ICES < 50 (barrier point), or/and TS < 60 The student is <u>exempted from FE</u> , if the CMS is ≥ 80 and all CSs are ≥ 60

<i>The FE and ICE <u>barrier point is not applied</u> to the students whose all CSs are ≥ 60</i>
Introduction to Clinical Practice II (MED 202)
<i>Pass; ICPS ≥ 60</i> <i>Fail; ICPS < 60</i>
Anatomical Drawing (MED 103)
<i>Pass; ADS ≥ 60</i> <i>Fail; ADS < 60</i>
Common Compulsory Courses (HUM 103, TKL 201, TKL 202, HTR 301, HTR 302, AFYA 101, AFYA 102)
<i>Pass; CCCSs ≥ 50</i> <i>Fail; CCCSs < 50</i>
Elective Courses (MED 611, MED 612, MED 613, MED 614, MED 615, MED 616, MED 619, MED 620, MED 621, MED 622, MED 623, MED 627, MED 628, MED 629, MED 630, MED 631, MED 632, MED 633, MED 634, MED635, MED 636, MED637)

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

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

Definitions of the Assessment Methods and Question Types

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

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

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

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

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

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

OSPE is used as an objective instrument for the assessment of laboratory exercises in preclinical sciences.

It was adapted from the objective structured clinical examination (OSCE). OSPE has implemented in similarly conditions with OSCE.

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

Grades

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

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

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

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

RULES FOR COURSE ATTENDANCE OF THE STUDENTS

General Rules:

Students are required to attend the all theoretical and practical sessions such as laboratory work, discussions, seminars, area and clinical studies of courses for the term they are enrolled in. Students whose absenteeism in the theoretical and/or practical sessions exceeds 20% are not admitted to term final and incomplete examinations of the courses.

Phase I, II, and III:

BMS I, BMS II, ICS course committees

A student is required to attend a committee in full. A student who fails to fulfill the attendance requirements is not admitted to the committee examination, and is deemed to have failed that committee. The absenteeism of a student, whose absenteeism does not exceed 20% of a committee and who has a reason considered justified and valid, may be accepted. However, a student whose absenteeism in the theoretical and/or practical sessions in a committee exceeds 20% but whose excuse is accepted by the Board of Directors, is admitted to the make-up examination of the related committee if his/her absenteeism does not exceed 20% of the total number of the course hours covering/including all the committees throughout the term.

ICP I, II, III courses

A student whose absenteeism exceeds 20% of the theoretical and/or laboratory sessions in the program until the midterm exam date will not be admitted to the ICP Mid-Term exam (MCQ and/or OSCE). However, a student whose absence exceeds 20%, but whose excuse is accepted by the Board of Directors, is admitted to the make-up examination of the ICP Mid-Term exam, if his/her absenteeism does not exceed 20% of the total course hours during the term.

For more information: https://yeditepe.edu.tr/sites/default/files/2023-02/yeditepe_university_faculty_of_medicine_training-instruction_and_examination_regulation.pdf

EXAM RULES

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

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

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

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

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

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

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

How it works?

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

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

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

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

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

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

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

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

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

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

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

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

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

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

This will lead you to the second stage of PBL: learning the facts that **you** have decided to. You will have to **find and reach the required learning resources** (textbooks, journal articles, reliable internet sources, etc.) and **study** these in your **independent study time**. You will be given a list of possible learning

resources for every discipline but you can find other sources in addition to them. However, make sure that these are reliable sources- especially web sources need cautiousness.

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

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

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

Other benefits of PBL that you gain are to:

- learn "how to learn"
- develop lifelong learning skills
- improve your communications skills
- state and defend positions with evidence and sound argument
- become more flexible in processing information and meeting obligations
- practice skills that you will need after your education
- improve your information literacy

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

PBL <i>First Session</i> Flow	
A.	Introducing activity <i>(For the first session of the term)</i>
B.	Determination of group rules <i>(For the first session of the term)</i> <i>(Group rules will be written on the Flipchart.)</i>
C.	Introducing the PBL Student Assessment Form to students <i>(For the first session of the term)</i> <i>(This form will be filled in electronically via EYS by the tutors after the second session of the scenario.)</i>
1.	Review of the Group Rules <i>(The group rules created in the first session of the term will be remembered.)</i>
2.	Warmup game
3.	Selecting the reader and writer <i>(The reader's task is to read the scenario step by step, together with the questions on the box, to the group.)</i> <i>(The writer's task is to write the answers to all the questions in the scenario, especially! hypotheses and learning objectives on the flipchart.)</i>
4.	Reading the scenario step by step <i>(The tutors will distribute the student copies of the scenario that came out of the session envelope to the students.)</i> <i>(The next page will not be passed until the students have finished reading a page and answering the related questions.)</i>
5.	Using Dorland's Medical Dictionary for unknown medical terms. <i>(Printed Dorland's Medical Dictionary will be in the PBL room.)</i> <i>(Also, Electronic Dorland's Medical Dictionary can be accessed as; Yeditepe University Website □ Academic Drop-Down Menu □ Information Center Tab □ Electronic Library Drop-Down Menu □ Off-Campus Access Tab □ OBS user Login with username and password □ Finding Dorland's Medical Dictionary among resources)</i> <i>(Direct link □ https://login.lproxy.yeditepe.edu.tr/login)</i>

6.	Discussion <i>(Writing the hypotheses on the Flipchart, bringing the prior knowledge into the learning environment, reviewing the hypotheses, etc.)</i>
7.	The tutor asks questions that lead students to learning objectives during the discussion
8.	Determination of learning objectives by students <i>(The learning objectives determined by the student group will be written on the Flipchart by the writer.)</i>
9.	Feedback <i>(Each group member's thoughts on him/herself, the group, the scenario, the tutor, the PBL flow, the environment, etc.)</i>
10.	Attendance <i>(Students will sign the student list on the session envelope.)</i>
PBL Second Session Flow	
1.	Warmup game
2.	Discussion of the learning objectives obtained in the previous session <i>(Reading the learning objectives on the Flipchart they were written in the previous session □ putting the objectives in order for discussion □ in-depth discussion of all objectives by the student group.)</i> <i>(Important note: The second session of the scenario will not proceed until the following requirements are met. For each learning objective; it should be discussed in depth, the students' work should be shared, these discussions should be supported by the flowcharts drawn on the flipchart, the discussion of the learning objectives should not be superficial.)</i>
3.	Selecting the reader <i>(The reader's task is to read the scenario step by step, together with the questions on the box, to the group.)</i>
4.	Reading the scenario of the second session <i>(The tutors will distribute the student copies of the scenario from the session envelope to the students.)</i>
5.	Discussing the psychosocial dimension of the scenario
6.	Feedback <i>(Each group member's thoughts on him/herself, the group, the scenario, the tutor, the PBL flow, the environment, etc.)</i>
7.	Attendance <i>(Students will sign the student list on the session envelope.)</i>
8.	After the session, the Tutor Evaluation Form is filled by the students on the EYS.

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 <input type="checkbox"/>							

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. <input type="checkbox"/>	
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Signature of the tutor	
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*Assessment form should be filled in at the end of

AIM OF FREE ELECTIVE COURSES

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

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

List of Free Elective Courses

Code	Subject
MED 611	Medical Anthropology
MED 612	Creative Drama
MED 613	Medical Humanities
MED 614	Personal Trademark Development
MED 615	Innovation Management
MED 616	Medical Management and New Services Design Skills
MED 619	Entrepreneurship and Storytelling Techniques for Business Purposes
MED 620	Art, Culture and Life Styles
MED 621	Epidemiological Research and Evidence Based Medicine
MED 622	Application of Economics in Health Care
MED 623	Visual Presentation in Medicine
MED 627	Presentation of Medicine on Media
MED 628	Healthy Living: The Milestones of the Life for Performance Management
MED 629	Music and Medicine
MED 630	Health Law

MED 631	Creative Drama II
MED 632	Music Appreciation
MED 633	Communication with Hearing Impaired Patients in Turkish Sign Language
MED 634	Case Based Forensic Sciences
MED 635	Advanced Level Communication with Hearing Impaired Patients in Turkish Sign Language
MED 636	Art Project
MED 637	Artistic Photography and Composition

See details from "Elective Courses Guideline:<https://med.yeditepe.edu.tr/en/academic-program-booklets>

SPECIFIC SESSIONS / PANELS

INTRODUCTORY SESSION

Aim of the session:

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

Objectives of the Session:

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

Rules of the Session:

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

Implementation of the Session:

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

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

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

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

COMMITTEE EVALUATION SESSION

Aim of the Session:

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

Objectives of the Program Evaluation Session are to;

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

Process:

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

Rules of the Committee/ Evaluation Session:

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

PROGRAM IMPROVEMENT SESSION

Aim:

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

Objectives:

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

Rules:

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

Implementation:

Before the Session

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

During the Session

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

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

After the Session

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

INDEPENDENT LEARNING

Description:

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

Aim:

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

Objectives:

With this instructional strategy, students will develop;

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

Rules:

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

WEEKLY COURSE SCHEDULE and LOCATIONS

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

COURSE CODES

COURSES and LOCATIONS

MED 203

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

MED 202

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

CLASSES

4E03

Ground Floor

Elective Course Classes

Will be announced later

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

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

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

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

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

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

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

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

RECOMMENDED TEXTBOOKS

NO	DEPARTMENT	TEXTBOOK	AUTHOR	PUBLISHER
1	ANATOMY	Gray's Anatomy for Students	R.L. Drake et al, 3rd Edition, 2014	Churchill Livingstone
		Last's Anatomy: Regional and Applied	Chummy S. Sinnatamby, 12th Edition	Churchill Livingstone
		A Textbook of Neuroanatomy	Maria Patestas, Leslie P. Gartner, 2nd Edition, 2016	Wiley-Blackwell
		Hollinshead's Textbook of Anatomy	Cornelius Rosse, Penelope Gaddum-Rosse, 5th Edition, 1998	Lippincott Williams & Wilkins
2	BIOCHEMISTRY	Textbook of Biochemistry with Clinical Correlations	Thomas M. Devlin	Wiley-Liss Publishing Company
		Harper's Illustrated Biochemistry	Robert K. Murray et al	Mc-Graw-Hill Companies
		Lehninger Principles of Biochemistry	David L. Nelson, Michael M. Cox	W.H. Freeman Publishing Company
3	BIOPHYSICS	Introductory Biophysics: Perspectives on the Living State	J.R. Claycomb, J.P. Tran	Jones & Bartlett Publishers
4	BIOSTATISTICS	Primer of Biostatistics	Stanton Glantz	Mc-Graw-Hill Companies
5	HISTOLOGY	Junqueira's Basic Histology: Text and Atlas 13 th Ed.	Anthony Mescher	Mc-Graw-Hill Companies
	EMBRYOLOGY	The Developing Human: Clinically Oriented Embryology, 10 th 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

MED - 203 - COMMITTEE I - CARDIOVASCULAR SYSTEM
DISTRIBUTION of LECTURE HOURS
September 11 - October 20, 2023
COMMITTEE DURATION: 6 WEEKS

COURSES	BASIC MEDICAL SCIENCES II	THEORETICAL	PRACTICAL	SMALL GROUP DISCUSSION	TOTAL
MED 203	DISCIPLINE / COMPONENTS				
	ANATOMY	15	2GX4H	0	19
	BIOCHEMISTRY	12	4GX2H	0	14
	BIOPHYSICS	10	0	0	10
	BIOSTATISTICS	2	0	0	2
	HISTOLOGY & EMBRYOLOGY	12	2GX4H	0	16
	IMMUNOLOGY	3	0	0	3
	MEDICAL BIOLOGY	2	0	0	2
	MEDICAL MICROBIOLOGY	8	4GX1H	0	9
	PATHOLOGY	7	0	0	7
	PHYSIOLOGY	34	4GX5H	0	39
	SCIENTIFIC RESEARCH and PROJECT -II	2	0	5GX3H	5
	PBL	0	0	6	6
	TOTAL	107	16	9	132
MED 202	INTRODUCTION to CLINICAL PRACTICE- II	5H	5GX3H	0	8

INDEPENDENT LEARNING HOURS	88
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Coordination Committee	Head	Bayram YILMAZ, PhD Prof.
	Secretary	Alev CUMBUL, PhD Assoc. Prof.
	Member	Mehtap KAÇAR, MD PhD, Prof.
	Member	Akif MEHERREM, PhD Assist. Prof.

COMMITTEE I - CARDIOVASCULAR SYSTEM LECTURERS

MED 203 BASIC MEDICAL SCIENCES II	
DISCIPLINE	LECTURERS
ANATOMY	Aikaterini PANTELİ, MD Lecturer LAB: Edibe BİLİŞLİ KARA, DVM LAB: Ahmet SAÇ, MD
BIOCHEMISTRY	İnci ÖZDEN, PhD Prof. LAB: Jale ÇOBAN, MD Prof. LAB: Yeşim ÖZARDA, MD Prof. LAB: Müge KOPUZ ALVAREZ NOVAL, PhD Assist. Prof.
BIOPHYSICS	Akif MEHERREM, PhD Assist. Prof. Bilge GÜVENÇ TUNA, PhD Assoc. Prof.
BIOSTATISTICS	E. Çiğdem KELEŞ, PhD Assist. Prof.
HISTOLOGY & EMBRYOLOGY	Aylin YABA UÇAR, PhD Prof. Alev CUMBUL, PhD Assoc. Prof.
IMMUNOLOGY	Gülderen YANIKKAYA DEMİREL, MD PhD Prof.
MEDICAL BIOLOGY	Ayşe ÖZER, PhD Prof. Deniz KIRAÇ, PhD Prof. Seda GÜLEÇ YILMAZ PhD Assoc. Prof.
MEDICAL MICROBIOLOGY	Güner SÖYLETİR, MD PhD Prof. Pınar ÇIRAGİL, MD Prof. Aynur EREN TOPKAYA, MD Prof. Nilgün ÇERİKÇİOĞLU, MD Prof. Zehra KİPRİTÇİ, PhD Selvi DUMAN BAKIREZER, PhD
PATHOLOGY	Aydın SAV MD Prof.
PHYSIOLOGY	Bayram YILMAZ, PhD Prof. Mehtap KAÇAR, MD PhD Prof. Burcu GEMİCİ BAŞOL, PhD Prof.
SCIENTIFIC RESEARCH AND PROJECT-II	Aylin YABA UÇAR PhD Prof.(Responsible Faculty Member) Soner DOĞAN, PhD Prof.

OTHER COURSES

MED 202 INTRODUCTION TO CLINICAL PRACTICE II	
DISCIPLINE	LECTURERS
CLINICAL SKILLS LAB	Gökhan GENCER MD Assist.Prof. Hande CANDEMİR, MD Abuzer KEKEÇ, MD Yunus Emre VURAL, MD Ayfer İSKENDER, MD Erman UYGUN, MD Atakan GÜLTEKİN, MD Özkan ERASLAN, MD Cem ŞİMŞEK, MD Rabia SARIYILDIZ, MD

COMMITTEE I - CARDIOVASCULAR SYSTEM

AIM and LEARNING OBJECTIVES

AIMS

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

LEARNING OBJECTIVES

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

For cardiovascular systems;

- 1.1. explain biophysical changes,
- 1.2. associate with the clinical reflections.
- 1.3. to convey basic knowledge about biostatistics

2.0. For cardiovascular system;

- 2.1. explain biological characteristics of the system,
- 2.2. associate with the clinical reflections.

3.0. For cardiovascular system;

- 3.1. describe their anatomy,
- 3.2. associate with adjacent tissues and organs,
- 3.3. explain their functional and clinical reflections.

4.0. For thorax and diaphragm

- 4.1. describe their anatomy,
- 4.2. associate with adjacent tissue and organs,
- 4.3. explain their functional and clinical reflections.

5.0. Explain the development of Head; Splanchnocranium, Neurocranium

- 5.1. Describe of development of Neck and Pharyngeal Arches and Anomalies

6.0. Explain the developmental stages of heart,

- 6.1. explain developmental stages of arteries, veins and capillaries,
- 6.2. associate the relation between major birth abnormalities and developmental process.

7.0. Explain the histological properties of heart

- 7.1. Explain the histological features of arteries, veins and capillaries
- 7.2. Explain the histological properties of Lymph organs
- 7.3. explain the histological features of Blood

8.0. Explain hemodynamics of cardiovascular system and electrical activity of heart by biophysical mechanisms.

9.0 Describe the structure, functions, synthesis and degradation of hemoglobin.

10.0 Describe erythrocyte-specific metabolisms.

11.0 Describe formation, differentiation and functions of blood cells.

12.0 Describe physiopathology of diseases, such as anemia, leukemia, hemophilia.

13.0 Describe heart rhythm, cardiac output and cardiac cycle.

14.0 Describe nervous (autonomous) control of the cardiovascular system.

15.0 Explain functions of the cardiovascular system.

16.0 Explain functions and dynamics of the circulatory system.

17.0 Explain measurements of hematocrit, blood group analysis, blood pressure and ECG methods.

18.0 For immune system;

- 18.1. explain development and differentiation of immune cells,

- 18.2. relate changes with diseases,
- 18.3. describe the properties of immune response.
- 19.0 For hemodynamic changes;
 - 19.1. explain mechanisms of development,
 - 19.2. describe mechanisms for cellular damage,
 - 19.3. describe pathologies occurring due to cell and tissue damage.
- 20.0 Describe the factors that determine pathology as a basic science.
- 21.0 Explain the factors of tissue damage
- 22.0 Describe the pathological consequences and interactions of cellular injury on the cell and tissue morphology with examples.
- 23.0 Describe examples of pathological consequences of immune response.
- 24.0 Explain the factors that affect the clinical course and outcome of cell injury
- 25.0 List disorders resulting from hemodynamic changes.
- 26.0 Describe how to discuss scientific articles in the view of literature
- 27.0 Prepare a presentation of scientific research
- 28.0 For statistical decision
 - 28.1. lists the types of the statistical hypothesis.
 - 28.2. lists the types of errors in statistical decision making
 - 28.3. explain the steps of a statistical hypothesis test
- 29.0 Explain the importance of microbiology in medicine
- 30.0 Describe how to cultivate and identify microorganisms in laboratory
- 31.0 Describe microbial population in human body and their environment
- 32.0 Explain the host and parasite interaction during infection
- 33.0 Explain case scenarios related to basic medical science topics in a clinical context.

COMMITTEE I - CARDIOVASCULAR SYSTEM
COMMITTEE I ASSESSMENT MATRIX

LEARNING OBJECTIVES	DISCIPLINE	LECTURER/ INSTRUCTOR	DISTRUBITION of MCQs			
			CE	FE	IE	TOTAL
3.0-4.0, 33.0	ANATOMY	Dr. A. Panteli	14	5	5	24
9.0-10.0, 33.0	BIOCHEMISTRY	Dr. İ. Özden	11	4	4	19
1.0, 8.0	BIOPHYSICS	Dr. A. Meherrem	8	4	4	17
28.0	BIOSTATISTICS	Dr. Ç. Keleş	2	1	1	4
5.0-7.0, 33.0	HISTOLOGY & EMBRYOLOGY	Dr. A. Yaba Uçar	6	2	2	10
		Dr. A. Cumbul	5	2	2	8
18.0	IMMUNOLOGY	Dr. G. Yanikkaya Demirel	3	1	1	5
2.0	MEDICAL BIOLOGY	Dr. S.Güleç Yılmaz	4	1	1	6
29.0-32.0, 33.0	MEDICAL MICROBIOLOGY	Dr. G. Söyletir Dr. N. Çerikçioğlu Dr. P. Çıragil	8	3	3	14
19.0-25.0, 33.0	PATHOLOGY	Dr. A. Sav	6	3	3	12
11.0-17.0, 33.0	PHYSIOLOGY	Dr. B. Yılmaz	32	12	12	56
		Dr. M. Kaçar				
		Dr. B. Gemici Başol				
33.0	PBL		1	0	0	1
TOTAL			100	38/200#	38/200#	176
LEARNING OBJECTIVES	DISCIPLINE	DISTRUBITION of LAB POINTS				
		LPE	QUIZ			
3.0-4.0	ANATOMY	30				
8.0-10.0	BIOCHEMISTRY	5				
5.0-7.0	HISTOLOGY & EMBRYOLOGY	15				
29.0-32.0	MEDICAL MICROBIOLOGY	10				
8.0- 17.0	PHYSIOLOGY	40				
TOTAL		100				

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

Total value of LPE is equal to 100 points

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

Abbreviations:

MCQ: Multiple Choice Questions

SbMCQ: Scenarion-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 / 11-15 Sep 2023

	Monday 11-Sep-2023	Tuesday 12-Sep-2023	Wednesday 13-Sep-2023	Thursday 14-Sep-2023	Friday 15-Sep-2023
09.00- 09.50	Independent Learning	Independent Learning	Independent Learning	Lecture / Scientific Research and PROJECT - II Presentation of Scientific Research <i>Soner Doğan</i>	Independent Learning
10.00- 10.50	Introductory Session Introduction to Phase II Phase II Coordination Committee/ Introduction to Committee I Secretary of Committee	Lecture Functions of Blood <i>Burcu Gemici Başol</i>	Independent Learning	Lecture / Scientific Research and PROJECT - II Presentation of Scientific Research <i>Soner Doğan</i>	Lecture Introduction to Cardiovascular System <i>Aikaterini Panteli</i>
11.00- 11.50	Lecture Porphin, Porphyrins, Heme, Hemoglobin, Structure of Hemoglobin <i>İnci Özden</i>	Lecture Erythrocyte <i>Burcu Gemici Başol</i>	Lecture Functions of Hemoglobin <i>İnci Özden</i>	Lecture Platelets and Coagulation <i>Mehtap Kaçar</i>	Lecture Thoracic Cavity & Mediastinum <i>Aikaterini Panteli</i>
12.00- 12.50	Lecture Porphin, Porphyrins, Heme, Hemoglobin, Structure of Hemoglobin <i>İnci Özden</i>	Lecture Erythrocyte <i>Burcu Gemici Başol</i>	Lecture Functions of Hemoglobin <i>İnci Özden</i>	Lecture Platelets and Coagulation <i>Mehtap Kaçar</i>	Lecture Thoracic Cavity & Mediastinum <i>Aikaterini Panteli</i>
13.00- 13.50	Lunch Break				
14.00- 14.50	Lecture Introduction to Medical Microbiology <i>Nilgün Çerikçioğlu</i>	Lecture Histology of Circulatory Systems; Gn Spec. Arteries <i>Aylin Yaba Uçar</i>	Lecture Leukocytes & Lymphocytes <i>Burcu Gemici Başol</i>	ICP / CSL: Intramuscular/Intradermal/ Subcutan Injection <i>ICP Lecturer Group A</i>	Lecture Synthesis of Hemoglobin, Disorders Concerning Synthesis of Hemoglobin <i>İnci Özden</i>
15.00- 15.50	Lecture Cultivation and identification of bacteria <i>Pınar Çiragil</i>	Lecture Histology of Circulatory Systems; Capillaries, Veins & Heart <i>Aylin Yaba Uçar</i>	Lecture Leukocytes & Lymphocytes <i>Burcu Gemici Başol</i>		Lecture Synthesis of Hemoglobin, Disorders Concerning Synthesis of Hemoglobin <i>İnci Özden</i>
16.00- 16.50	Independent Learning	Independent Learning	Lecture Bacterial pathogenicity <i>Güner Söyletir</i>		Lecture Pericardium and Outer Surface of the Heart <i>Aikaterini Panteli</i>
17.00-17.50	Independent Learning	Independent Learning	Lecture Microbial toxins <i>Güner Söyletir</i>		Lecture Pericardium and Outer Surface of the Heart <i>Aikaterini Panteli</i>

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

COMMITTEE I - CARDIOVASCULAR SYSTEM

II. WEEK / 18– 22 Sep 2023

	Monday 18-Sep-2023	Tuesday 19-Sep-2023	Wednesday 20-Sep-2023	Thursday 21-Sep-2023	Friday 22-Sep-2023
09.00- 09.50	PBL	Lecture Coronary arteries, Cardiac Veins, and Cardiac Conduction System <i>Aikaterini Panteli</i>	Lecture Regulation of Cardiac Function <i>Bayram Yılmaz</i>	Lecture Biophysics of Hemodynamics. Measurements of Different Hemodynamic Parameters <i>Akif Meherrem</i>	Independent Learning
10.00- 10.50		Lecture Coronary arteries, Cardiac Veins, and Cardiac Conduction System <i>Aikaterini Panteli</i>	Lecture Regulation of Cardiac Function <i>Bayram Yılmaz</i>	Lecture Biophysics of Hemodynamics. Measurements of Different Hemodynamic Parameters <i>Akif Meherrem</i>	Lecture Degradation of Hemoglobin <i>İnci Özden</i>
11.00- 11.50		Lecture Development of Circulatory Systems; Endocardial Tube Formation & Looping <i>Alev Cumbul</i>	Lecture Introduction to Lymphatic System <i>Aikaterini Panteli</i>	Laboratory / Anatomy Pericardium, Outer Surface, Chambers of the heart <i>Aikaterini Panteli & Edibe Bilişli & Ahmet Saç</i> Group 2	Lecture Degradation of Hemoglobin <i>İnci Özden</i>
12.00- 12.50	Independent Learning	Lecture Development of Circulatory Systems; Septation <i>Alev Cumbul</i>	Lecture Circulation of Lymph <i>Aikaterini Panteli</i>	Group 1	Lecture Introduction to Pathology <i>Aydın Sav</i>
13.00- 13.50	Lunch Break				
14.00- 14.50	Lecture Chambers of the Heart <i>Aikaterini Panteli</i>	Lecture Blood Types and Transfusion Reactions <i>Bayram Yılmaz</i>	Lecture Fetal Circulation <i>Aikaterini Panteli</i>	ICP / CSL: Intramuscular/ Intradermal/ Subcutan Injection <i>ICP Lecturer</i> Group B	
15.00- 15.50	Lecture Chambers of the Heart <i>Aikaterini Panteli</i>	Lecture Blood Types and Transfusion Reactions <i>Bayram Yılmaz</i>	Lecture Review of Cardiovascular Anatomy <i>Aikaterini Panteli</i>	Group B	Lecture Rhythmical Excitation of the Heart <i>Bayram Yılmaz</i>
16.00- 16.50	Lecture Great Vessels of the Heart <i>Aikaterini Panteli</i>	Laboratory / Anatomy Thoracic wall, Cavity & Mediastinum <i>Aikaterini Panteli & Edibe Bilişli & Ahmet Saç</i> Group 1	Independent Learning		Lecture Rhythmical Excitation of the Heart <i>Bayram Yılmaz</i>
17.00-17.50	Lecture Major Vessels of the Body <i>Aikaterini Panteli</i>	Group 2	Independent Learning		Laboratory / Anatomy Lymphatic System <i>Aikaterini Panteli & Edibe Bilişli & Ahmet Saç</i> Group 2
					Group 1

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

COMMITTEE I - CARDIOVASCULAR SYSTEM

III. WEEK / 25– 29 Sep 2023

	Monday 25-Sep-2023	Tuesday 26-Sep-2023	Wednesday 27-Sep-2023	Thursday 28-Sep-2023		Friday 29-Sep-2023
09.00- 09.50	PBL	Lecture Cardiac Arrhythmias <i>Bayram Yılmaz</i>	Lecture Microcirculation and the Lymphatic System <i>Bayram Yılmaz</i>	Laboratory / Histology &Embryology Histology of CVS (Aort, Heart, Vena Cava, Muscular arteries) <i>Alev Cumbul & Aylin Yaba Uçar</i> Group 1		Lecture Adaptations <i>Aydın Sav</i>
10.00- 10.50		Lecture Cardiac Arrhythmias <i>Bayram Yılmaz</i>	Lecture Capillary Fluid Exchange, Interstitial Fluid, and Lymph Flow <i>Bayram Yılmaz</i>			Lecture Adaptations <i>Aydın Sav</i>
11.00- 11.50		Lecture Congenital Heart Anomalies <i>Alev Cumbul</i>	Lecture Sampling, Data Collection and Data Processing <i>E. Çiğdem Keleş</i>	Group 2		Lecture Histology of Lymph Organs; General Aspects, Thymus and Lymph Node <i>Aylin Yaba Uçar</i>
12.00- 12.50	Independent Learning	Lecture Congenital Heart Anomalies <i>Alev Cumbul</i>	Lecture Statistical Decision Theory, Test of Hypothesis and Significance <i>E. Çiğdem Keleş</i>			Lecture Histology of Lymph Organs; Spleen and MALT (Tonsils) <i>Aylin Yaba Uçar</i>
13.00- 13.50	Lunch Break					
14.00- 14.50	Lecture Principles of Electrocardiography <i>Bayram Yılmaz</i>	Lecture Human microbiota <i>Nilgün Çerikçioğlu</i>	Lecture Development of Circulatory Systems; Arteries and Anomalies <i>Alev Cumbul</i>	ICP / CSL: Intramuscular/Intradermal/ Subcutan Injection <i>ICP Lecturer</i> Group C		Independent Learning
15.00- 15.50	Lecture Electrocardiographic Interpretation of Cardiac Abnormalities <i>Bayram Yılmaz</i>	Lecture Microbiology of air, water and milk <i>Nilgün Çerikçioğlu</i>	Lecture Development of Circulatory Systems; Veins and Anomalies <i>Alev Cumbul</i>	Group C	SRPC SGS Group D <i>Soner Doğan</i>	Independent Learning
16.00-16.50	Laboratory / Anatomy Coronary Arteries and Cardiac Veins/ Great Vessels Of The Heart and Body/ Cardiac conduction system <i>Aikaterini Panteli & Edibe Bilişli & Ahmet Saç</i> Group 1	Lecture Hemorheology <i>Akif Meherrem</i>	Lecture Introduction to Bioelectromagnetics: Magnetic Field <i>Akif Meherrem</i>			Independent Learning
17.00-17.50	Group 2	Lecture Hemorheology <i>Akif Meherrem</i>	Lecture Introduction to Bioelectromagnetics: Magnetic Field <i>Akif Meherrem</i>			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 / 02– 06 Oct 2023

	Monday 02-Oct-2023	Tuesday 03-Oct-2023		Wednesday 04-Oct-2023	Thursday 05-Oct-2023		Friday 06-Oct-2023
09.00- 09.50	Lecture Ischemia and Infarction <i>Aydın Sav</i>	Lecture Immunology of Heart and Vessels <i>Gülderen Yanıkkaya Demirel</i>		Lecture Principles of Hemodynamics <i>Burcu Gemici Başol</i>	Laboratory / Histology &Embryology Histology of Lymphoreticular System (Thymus, Lymph Node, Spleen, Tonsils) <i>Alev Cumbul & Aylin Yaba Uçar</i> Group 2		Lecture Regulation of Blood Pressure <i>Mehtap Kaçar</i>
10.00- 10.50	Lecture Ischemia and Infarction <i>Aydın Sav</i>	Lecture Vascular Distensibility and Functions of Arterial and Venous Systems <i>Bayram Yılmaz</i>		Lecture Principles of Hemodynamics <i>Burcu Gemici Başol</i>			Lecture Regulation of Blood Pressure <i>Mehtap Kaçar</i>
11.00- 11.50	Lecture Local and Humoral Control of Blood Flow by the Tissues <i>Bayram Yılmaz</i>	Lecture Vascular Distensibility and Functions of Arterial and Venous Systems <i>Bayram Yılmaz</i>		Lecture Introduction to Bioelectromagnetics. Electromagnetic Field <i>Akif Meherrem</i>	Group 1		Lecture Development of Head; Splanchnocranium, Neurocranium <i>Aylin Yaba Uçar</i>
12.00- 12.50	Lecture Local and Humoral Control of Blood Flow by the Tissues <i>Bayram Yılmaz</i>	Laboratory Lecture / Microbiology <i>Güner Söyletir</i> Group A, B, C, D		Lecture Introduction to Bioelectromagnetics.Electromagnetic Field <i>Akif Meherrem</i>			Lecture Development of Neck; Pharyngeal Arches and Anomalies <i>Aylin Yaba Uçar</i>
13.00- 13.50	Lunch Break						
14.00- 14.50	Lecture Host – Parasite interactions <i>Güner Söyletir</i>	Laboratory / Physiology Hematocrit Determination and Blood Typing & Bleeding Time <i>Bayram Yılmaz & Mehtap Kaçar & Burcu Gemici Başol</i> Group D	Laboratory / Microbiology Safety in microbiology laboratory and Use of microscope <i>Güner Söyletir, Pınar Çiragil,Aynur Eren Topkaya,Zehra Kipritçi & Selvi Duman Bakirezer</i> Group C	Lecture Immunology of Heart and Vessels <i>Gülderen Yanıkkaya Demirel</i>	ICP / CSL: Intramuscular/Intradermal/ Subcutan Injection <i>ICP Lecturer</i> Group D		Lecture Molecular Basis of Cardiovascular System <i>Seda Güleç Yılmaz</i>
15.00- 15.50	Lecture Viral Pathogenicityye <i>Güner Söyletir</i>	Group C	Group D	Lecture Immunology of Heart and Vessels <i>Gülderen Yanıkkaya Demirel</i>	Group D	SRPC SGS Group E <i>Soner Doğan</i>	Lecture Molecular Basis of Cardiovascular System <i>Seda Güleç Yılmaz</i>
16.00- 16.50	Lecture Introduction to Bioelectromagnetics. Electric Field <i>Akif Meherrem</i>	Group A	Group B	Independent Learning			Independent Learning
17.00-17.50	Lecture Introduction to Bioelectromagnetics. Electric Field <i>Akif Meherrem</i>	Group B	Group A	Independent Learning			Independent Learning

COMMITTEE I - CARDIOVASCULAR SYSTEM
V. WEEK / 09 – 13 Oct 2023

	Monday 09-Oct-2023		Tuesday 10-Oct-2023	Wednesday 11-Oct-2023	Thursday 12-Oct-2023		Friday 13-Oct-2023
09.00- 09.50	Laboratory/ Physiology ECG I-ECG II <i>Bayram Yılmaz & Mehtap Kaçar & Burcu Gemici Başol</i> Group A	Laboratory / Biochemistry Peripheral Blood Smear <i>Jale Çoban & Yeşim Özarda Müge Kopuz Alvarez Noval</i> Group C	Lecture Heart Valves and Heart Sounds <i>Bayram Yılmaz</i>	Laboratory / Physiology Blood Pressure Heart Sounds <i>Bayram Yılmaz & Mehtap Kaçar & Burcu Gemici Başol</i> Group C	Lecture Hyperemia & Congestion <i>Aydın Sav</i>		Lecture Blood Coagulation, Primary Hemostasis <i>İnci Özden</i>
10.00- 10.50			Lecture Heart Valves and Heart Sounds <i>Bayram Yılmaz</i>		Lecture Hyperemia & Congestion <i>Aydın Sav</i>		Secondary Hemostasis, Procoagulation, Anticoagulation, Fibrinolysis <i>İnci Özden</i>
11.00- 11.50	Group B	Group D	Lecture Disorders Concerning Hemoglobin Metabolism <i>İnci Özden</i>	Group D	Lecture Nervous Regulation of the Circulation <i>Bayram Yılmaz</i>		Lecture Coronary Circulation <i>Mehtap Kaçar</i>
12.00- 12.50			Disorders Concerning Hemoglobin Metabolism <i>İnci Özden</i>		Lecture Nervous Regulation of the Circulation <i>Bayram Yılmaz</i>		Lecture Cardiac Failure <i>Mehtap Kaçar</i>
13.00- 13.50	Lunch Break						
14.00-14.50	Group C	Group A	Laboratory /Histology & Embryology Histology of Cardiovascular System (Aort, Heart) <i>Alev Cumbul & Aylin Yaba Uçar</i> Group 1	Group A	ICP / CSL: Intramuscular/Intradermal/ Subcutan Injection <i>ICP Lecturer</i> Group E		Lecture Circulatory Shock and Physiology of Its Treatment <i>Mehtap Kaçar</i>
15.00- 15.50					Group D	Group B	Group 2
16.00- 16.50	Independent Learning						
17.00-17.50	Independent Learning						

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

COMMITTEE I - CARDIOVASCULAR SYSTEM

VI. WEEK / 16 – 20 Oct 2023

	Monday 16-Oct-2023	Tuesday 17-Oct-2023	Wednesday 18-Oct-2023	Thursday 19-Oct-2023	Friday 20-Oct-2023
09.00- 09.50	Independent Learning	Independent Learning	Independent Learning	Independent Learning	Independent Learning
10.00- 10.50		Assessment Session (Anatomy,Physiology, Histology&Embryology, Microbiology, Biochemistrty Practical Exams)			Assessment Session Committee I (MCQ)
11.00- 11.50					
12.00- 12.50					
13.00- 13.50	Lunch Break				Program Evaluation Session Evaluation of the Committee I Program <i>Secretary of the Committee</i>
14.00- 14.50	Independent Learning	Independent Learning	Independent Learning	Independent Learning	Independent Learning
15.00- 15.50					
16.00- 16.50					
17.00-17.50					

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

MED - 203 - COMMITTEE II - RESPIRATORY SYSTEM
DISTRIBUTION of LECTURE HOURS
October 23–December 1, 2023
COMMITTEE DURATION: 6 WEEKS

COURSES	BASIC MEDICAL SCIENCES II	THEORETICAL	PRACTICAL	SMALL GROUP DISCUSSION	TOTAL
MED 203	DISCIPLINE / COMPONENTS				
	ANATOMY	11	2GX3H	0	14
	BIOPHYSICS	4	0	0	4
	BIOSTATISTICS	4	0	0	4
	HISTOLOGY & EMBRYOLOGY	6	2GX2H	0	8
	IMMUNOLOGY	7	0	0	7
	MEDICAL BIOLOGY	2	0	0	2
	MEDICAL GENETIC	18	0	0	18
	MEDICAL MICROBIOLOGY	19	4GX6H	0	25
	PATHOLOGY	9	0	0	9
	PHYSIOLOGY	17	4GX2H	0	19
	SCIENTIFIC RESEARCH and PROJECT-II	0	0	5GX3H	3
	PBL	0	0	6	6
	TOTAL	97	13	9	119
MED 202	INTRODUCTION to CLINICAL PRACTICE- II	5H	5GX3H		8

INDEPENDENT LEARNING HOURS	67
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Coordination Committee	Head	Burcu GEMİCİ BAŞOL, PhD Prof.
	Secretary	Edibe BİLİŞLİ KARA, DVM Instructor
	Member	Alev CUMBUL, MD Assoc. Prof.
	Member	Deniz KIRAÇ, PhD Prof.

COMMITTEE II - RESPIRATORY SYSTEM LECTURERS

MED 203 BASIC MEDICAL SCIENCES II	
DISCIPLINE	LECTURERS
ANATOMY	Erdem SÖZTUTAR, MD, Assist. Prof. Aikaterini PANTELİ, MD, Assist. Prof. LAB: Edibe BİLİŞLİ KARA, DVM, Lecturer LAB: Ahmet SAÇ, MD, Instructor
BIOPHYSICS	
BIOSTATISTICS	E. Çiğdem KELEŞ, PhD, Assist. Prof.
HISTOLOGY & EMBRYOLOGY	Aylin YABA UÇAR, PhD Prof. Alev CUMBUL, PhD Assoc. Prof.
IMMUNOLOGY	
MEDICAL BIOLOGY	Gülderen YANIKKAYA DEMİREL, MD PhD Prof.
MEDICAL GENETICS	Deniz KIRAÇ, PhD Prof.
MEDICAL MICROBIOLOGY	Burak Altay DALAN, PhD Prof. Didem SEVEN, PhD Instructor
PATHOLOGY	Aynur EREN TOPKAYA, MD Prof. Güner SÖYLETİR, MD PhD Prof. Pınar ÇIRAGİL, MD Prof. LAB: Zehra KİPRİTÇİ, PhD LAB: Selvi DUMAN BAKİREZER, PhD
PHYSIOLOGY	Aydın SAV, MD Prof.
SCIENTIFIC RESEARCH AND PROJECT-II	Bayram YILMAZ, PhD, Prof. Mehtap KAÇAR, MD, PhD Prof. Burcu GEMİCİ BAŞOL, PhD Prof.
	Aylin YABA UÇAR PhD Prof.(Responsible Faculty Member) Soner DOĞAN, PhD Prof.

OTHER COURSES

MED 202 INTRODUCTION to CLINICAL PRACTICE II	
DISCIPLINE	LECTURERS
CLINICAL SKILLS LAB	Gökhan GENCER, MD Cem Şimşek, MD Hande Candemir, MD Abuzer KEKEÇ, MD Erman UYGUN, MD Özkan Eraslan, MD Atakan Gültekin, MD Ayfer İskender, MD Rabia Sarıyıldız, MD Yunus Emre Vural, 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;
 - 2.0. describe their anatomy,
 - 2.1. associate with adjacent tissues and organs,
 - 2.2. explain their functional and clinical reflections.
- 3.0. Explain developmental stages and list embryological origins of organs,
 - 3.1. Associate the relation between major birth abnormalities and developmental process.
 - 3.2. Explain histological properties of upper respiratory system
 - 3.3. Explain histological properties of lower respiratory system
- 4.0 Explain functions of the 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 the pulmonary system.
- 8.0 Describe dynamics and control of pulmonary circulation.
- 9.0 Describe the measurement of the 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 of medically important bacteria.
- 15.0 Describe the medically important Respiratory viruses
- 16.0 Explain the action and resistance mechanism of antimicrobial agents.
- 17.0 For endogenous and exogenous harmful agents;
 - 17.1. Describe their mechanisms of cell and tissue damage,
 - 17.2. Describe the adaptation process of cells.
- 18.0 List pathologies resulting from endogenous and exogenous harmful agents and consequently emerging diseases.
- 19.0 Explain the molecular mechanism of lung cancer
- 20.0 Describe how to prepare a scientific research presentation.
- 21.0 Prepare a research article presentation
- 22.0 Explain the steps of a statistical hypothesis test according to the properties of a given data.
- 23.0 For statistical hypothesis,
 - 23.1. list the statistical hypothesis test according to the properties of given data
 - 23.2. choose the appropriate statistical hypothesis test according to the properties of given data.
- 24.0 Explain case scenario related basic medical science topics in a clinical context.

COMMITTEE II - RESPIRATORY SYSTEM

COMMITTEE II ASSESSMENT MATRIX

LEARNING OBJECTIVES	DISCIPLINE	LECTURER/ INSTRUCTOR	DISTRIBUTION of MCQs and SbMCQ			
			CE	FE	IE	TOTAL
2.0, 24.0	ANATOMY	Dr. A. Panteli	11	4	4	19
1.0	BIOPHYSICS	Dr. A. Meherrem	4	1	1	6
22.0-23.0	BIOSTATISTICS	Dr. Ç. Keleş	4	1	1	6
3.0, 24.0	HISTOLOGY & EMBRYOLOGY	Dr. A. Yaba Uçar	2	1	1	12
		Dr. A. Cumbul	4	2	2	
12.0	IMMUNOLOGY	Dr. G. Yanıkkaya Demirel	7	3	3	13
19.0	MEDICAL BIOLOGY	Dr. D. Kıraç	2	1	1	4
13.0	MEDICAL GENETIC	Dr. Burak Altay Dalan Dr. D. Seven	18	6	6	30
14.0-16.0, 24.0	MEDICAL MICROBIOLOGY	Dr. G. Söyletir	20	7	7	34
17.0-18.0, 24.0	PATHOLOGY	Dr. A. Sav	9	3	3	15
4.0-11.0, 24.0	PHYSIOLOGY	Dr. B. Yılmaz	18	6	6	30
		Dr. M. Kaçar				
		Dr. B. Gemici Başol				
24.0	PBL		1	0	0	1
		TOTAL	100	35/200 [#]	35/200 [#]	170
LEARNING OBJECTIVES	DISCIPLINE	DISTRIBUTION of LAB ASSESSMENT POINTS				
		LPE		QUIZ		
2.0, 4.0, 7.0	ANATOMY	40				
3.0	HISTOLOGY & EMBRYOLOGY	10				
14.0	MEDICAL MICROBIOLOGY	14		6		
5.0, 8.0-11.0	PHYSIOLOGY	30				
TOTAL		100				

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

Total value of LPE is equal to 100 points

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

Abbreviations:

MCQ: Multiple Choice Questions

SbMCQ: Scenario-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 / 23 - 27 Oct 2023

	Monday 23-Oct-2023	Tuesday 24-Oct-2023	Wednesday 25-Oct-2023	Thursday 26-Oct-2023		Friday 27-Oct-2023
09.00- 09.50	PBL	Lecture Introduction to Respiratory System <i>Aikaterini Panteli</i>	Lecture The Pharynx <i>Aikaterini Panteli</i>	Independent Learning		Lecture Histology of The Respiratory Systems; Conducting Part <i>Alev Cumbul</i>
10.00- 10.50		Lecture Nasal Anatomy and Paranasal Sinuses <i>Aikaterini Panteli</i>	Lecture The Pharynx <i>Aikaterini Panteli</i>	Independent Learning		Lecture Histology of The Respiratory Systems; Respiratory Part <i>Alev Cumbul</i>
11.00- 11.50		Lecture Histology of the Upper Respiratory Tract <i>Alev Cumbul</i>	Lecture Gram Negative Cocci <i>Güner Söyletir</i>	Laboratory / Anatomy Upper Respiratory System <i>Aikaterini Panteli & Edibe Bilişli Kara & Ahmet Saç</i> Group 1		Lecture Test of Hypothesis: Chi-Square <i>E. Çiğdem Keleş</i>
12.00- 12.50	Introduction to Committee II Secretary of Committee	Lecture Histology of the Upper Respiratory Tract <i>Alev Cumbul</i>	Lecture Gram Negative Cocci <i>Güner Söyletir</i>	Group 2		Lecture Test of Hypothesis: Chi-Square <i>E. Çiğdem Keleş</i>
13.00- 13.50						
14.00- 14.50	Lecture Infection and Immunity <i>Gülderen Yanıkkaya Demirel</i>	Lecture Introduction to Medical Genetics <i>Didem Seven</i>	Lecture Patterns of Single Gene Inheritance <i>Didem Seven</i>	ICP / CSL: IV Cannulation <i>ICP Lecturer</i> Group A		Lecture Gram Negative Small Non-enteric Bacilli I <i>Güner Söyletir</i>
15.00- 15.50	Lecture Infection and Immunity <i>Gülderen Yanıkkaya Demirel</i>	Lecture Introduction to Medical Genetics <i>Didem Seven</i>	Lecture Patterns of Single Gene Inheritance <i>Didem Seven</i>	Group A	SRPC SGS Group B <i>Soner Doğan</i>	Lecture Gram Negative Small Non-enteric Bacilli II <i>Güner Söyletir</i>
16.00- 16.50	Lecture Infection and Immunity <i>Gülderen Yanıkkaya Demirel</i>	Lecture Gram Positive Cocci <i>Güner Söyletir</i>	Independent Learning			Lecture Gram Negative Small Non-enteric Bacilli III <i>Güner Söyletir</i>
17.00-17.50	Independent Learning	Lecture Gram Positive Cocci <i>Güner Söyletir</i>	Independent Learning			Independent Learning

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COMMITTEE II - RESPIRATORY SYSTEM

II. WEEK / 30 Oct - 3 Nov 2023

	Monday 30-Oct-2023	Tuesday 31-Oct-2023	Wednesday 1-Nov-2023	Thursday 2-Nov-2023	Friday 3-Nov-2023
09.00- 09.50	PBL	Lecture The Human Genome and Chromosomal Basis of Heredity <i>Didem Seven</i>	Lecture The Larynx <i>Aikaterini Panteli</i>	Lecture Molecular Basis of Genetic Diseases <i>Burak Altay Dalan</i>	Lecture Cellular Injury and Necrosis <i>Aydın Sav</i>
10.00- 10.50		Lecture Cytogenetics and Chromosomal Disorders <i>Didem Seven</i>	Lecture The Larynx <i>Aikaterini Panteli</i>	Lecture Tools of Human Molecular Genetics <i>Burak Altay Dalan</i>	Lecture Cellular Injury and Necrosis <i>Aydın Sav</i>
11.00- 11.50		Laboratory Lecture / Microbiology <i>Güner Söyletir</i> Group A, B, C, D	Lecture Developmental Genetics and Birth Defects <i>Didem Seven</i>	Lecture Pulmonary Ventilation <i>Bayram Yılmaz</i>	Lecture Pleura and Diaphragm <i>Aikaterini Panteli</i>
12.00- 12.50	Independent Learning	Laboratory / Microbiology Laboratory Identification of Gr (+) cocci and Gr (-) cocci - I <i>Güner Söyletir & Pınar Çıragil & Aynur Eren Topkaya & Zehra Kipritçi & Selvi Duman Bakırezer</i> Group A	Lecture Developmental Genetics and Birth Defects <i>Didem Seven</i>	Lecture Pulmonary Ventilation <i>Bayram Yılmaz</i>	Lecture Pleura and Diaphragm <i>Aikaterini Panteli</i>
13.00- 13.50	Lunch Break				
14.00- 14.50	Lecture Cancer Genetics and Genomics <i>Burak Atay Dalan</i>	Group B	Laboratory / Microbiology Laboratory Identification of Gr (+) cocci and Gr (-) cocci - II <i>Güner Söyletir & Pınar Çıragil & Aynur Eren Topkaya & Zehra Kipritçi & Selvi Duman Bakırezer</i> Group A	ICP / CSL: IV Cannulation <i>ICP Lecturer</i> Group B	Lecture Development of the Respiratory Systems & Anomalies <i>Aylin Yaba Uçar</i>
15.00- 15.50	Lecture Cancer Genetics and Genomics <i>Burak Altay Dalan</i>	Group C	Group B	Group B	Lecture Development of the Respiratory Systems & Anomalies <i>Aylin Yaba Uçar</i>
16.00- 16.50	Independent Learning	Group D	Group C		Independent Learning
17.00-17.50	Independent Learning	Independent Learning	Group D		Independent Learning

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

COMMITTEE II - RESPIRATORY SYSTEM

III. WEEK / 6-10 Nov 2023

	Monday 6-Nov-2023	Tuesday 7-Nov-2023	Wednesday 8-Nov-2023	Thursday 9-Nov-2023	Friday 10-Nov-2023
09.00- 09.50	Lecture Cytogenetics and Chromosomal Disorders <i>Didem Seven</i>	Lecture Pulmonary Circulation, Pulmonary Edema, Pleural Fluid <i>Bayram Yılmaz</i>	Lecture Hemodynamics <i>Aydın Sav</i>	Lecture Transport of Blood Gases <i>Bayram Yılmaz</i>	Commemoration of Atatürk
10.00- 10.50	Lecture Cytogenetics and Chromosomal Disorders <i>Didem Seven</i>	Lecture Pulmonary Circulation, Pulmonary Edema, Pleural Fluid <i>Bayram Yılmaz</i>	Lecture Hemodynamics <i>Aydın Sav</i>	Lecture Transport of Blood Gases <i>Bayram Yılmaz</i>	Independent Learning
11:00-11:50	Lecture Pulmonary Innate Immune Response <i>Gülderen Yanıkkaya Demirel</i>	Lecture Molecular Basis of Lung Cancer <i>Deniz Kırış</i>	Lecture Diffusion of Blood Gases <i>Bayram Yılmaz</i>	Lecture Regulation of Respiration <i>Burcu Gemici Başol</i>	Lecture Test of Hypothesis: Chi-Square <i>E. Çiğdem Keleş</i>
12:00-12:50	Lecture Pulmonary Innate Immune Response <i>Gülderen Yanıkkaya Demirel</i>	Lecture Molecular Basis of Lung Cancer <i>Deniz Kırış</i>	Lecture Diffusion of Blood Gases <i>Bayram Yılmaz</i>	Lecture Regulation of Respiration <i>Burcu Gemici Başol</i>	Lecture Test of Hypothesis: Chi-Square <i>E. Çiğdem Keleş</i>
13.00- 13.50	Lunch Break				
14.00- 14.50	Lecture The Trachea <i>Aikaterini Panteli</i>	Laboratory / Anatomy Larynx-Pleura and Diaphragm <i>Aikaterini Panteli & Edibe Bilişli Kara & Ahmet Saç</i> Group 2	Lecture Modeling in Circulatory & Respiratory Systems <i>Akif Meherrem</i>	ICP / CSL: IV Cannulation <i>ICP Lecturer</i> Group C	Lecture Mycobacteria <i>Güner Söyletir</i>
15.00- 15.50	Lecture The Lungs <i>Aikaterini Panteli</i>	Group 1	Lecture Modeling in Circulatory & Respiratory Systems <i>Akif Meherrem</i>	Group C	Lecture Mycobacteria <i>Güner Söyletir</i>
16.00- 16.50	Lecture Review of the Respiratory System <i>Aikaterini Panteli</i>	Independent Learning	Lecture Gram Positive Aerobic Bacilli <i>Güner Söyletir</i>		Lecture Actinomycetes- Nocardia <i>Güner Söyletir</i>
17.00-17.50	Independent Learning	Independent Learning			Independent Learning

COMMITTEE II - RESPIRATORY SYSTEM

IV. WEEK / 13 – 17 Nov 2023

	Monday 13-Nov-2023	Tuesday 14-Nov-2023	Wednesday 15-Nov-2023	Thursday 16-Nov-2023		Friday 17-Nov-2023
09.00- 09.50	Lecture Pulmonary Adaptive Immune Response <i>Gülderen Yanıkkaya Demirel</i>	Lecture Hemorrhage and Thrombosis <i>Aydın Sav</i>	Lecture Principle of Surface Tension & Alveolar Mechanic <i>Akif Meherrem</i>	Laboratory / Physiology Spirometry <i>Bayram Yılmaz & Mehtap Kaçar & Burcu Gemici Başol</i> Group A	Laboratory /Histology& Embryology Histology of RS (Trachea, Lung) <i>Alev Cumbul, Aylin Yaba Uçar</i> Group 2	Lecture Physiology of Deep-Sea Diving and Hyperbaric Conditions-1 <i>Bayram Yılmaz</i>
10.00- 10.50	Lecture Pulmonary Adaptive Immune Response <i>Gülderen Yanıkkaya Demirel</i>	Lecture Hemorrhage and Thrombosis <i>Aydın Sav</i>	Lecture Principle of Surface Tension & Alveolar Mechanic <i>Akif Meherrem</i>	Group B		Lecture Physiology of Deep-Sea Diving and Hyperbaric Conditions-2 <i>Bayram Yılmaz</i>
11.00- 11.50	Lecture Genetics of Complex Diseases <i>Didem Seven</i>	Lecture Aviation, High-Altitude and Space Physiology <i>Bayram Yılmaz</i>	Lecture Respiratory viruses <i>Güner Söyletir</i>	Group C	Group 1	Lecture Antimicrobial Agents: Mechanism of Action <i>Güner Söyletir</i>
12.00- 12.50	Lecture Genetics of Complex Diseases <i>Didem Seven</i>	Laboratory Lecture / Microbiology <i>Güner Söyletir</i> Group A, B, C, D	Lecture Respiratory viruses <i>Güner Söyletir</i>	Group D		Lecture Antimicrobial Agents: Mechanism of Action <i>Güner Söyletir</i>
13.00- 13.50	Lunch Break					
14.00- 14.50	Lecture Mycoplasma-Chlamydia-Rickettsia <i>Güner Söyletir</i>	Laboratory / Microbiology Laboratory Identification of Gr(+) bacilli and mycobacteria – I <i>Güner Söyletir & Pınar Çırağıl & Aynur Eren Topkaya & Zehra Kipritçi & Selvi Duman Bakirezer</i> Grup A	Laboratory / Microbiology Laboratory Identification of Gr (+) bacilli and mycobacteria – II <i>Güner Söyletir & Pınar Çırağıl & Aynur Eren Topkaya & Zehra Kipritçi & Selvi Duman Bakirezer</i> Group C	ICP / CSL: IV Cannulation <i>ICP Lecturer</i> Group D		Laboratory / Anatomy Lower Respiratory System <i>Aikaterini Panteli & Edibe Bilişli Kara & Ahmet Saç</i> Group 1
15.00- 15.50	Lecture Mycoplasma-Chlamydia-Rickettsia <i>Güner Söyletir</i>	Grup B	Group D	Group D	SRPC SGS Group E <i>Soner Doğan</i>	Group 2
16.00- 16.50	Independent Learning	GroupC	Group A			Independent Learning
17.00-17.50	Independent Learning	Group D	Group B			Independent Learning

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

COMMITTEE II - RESPIRATORY SYSTEM

V. WEEK / 20 – 24 Nov 2023

	Monday 20-Nov-2023	Tuesday 21-Nov-2023	Wednesday 22-Nov-2023	Thursday 23-Nov-2023	Friday 24-Nov-2023
09.00- 09.50	Lecture Injury by Endogenous Substances <i>Aydın Sav</i>	Lecture Introduction to Pathophysiology of Respiratory System <i>Mehtap Kaçar</i>	Laboratory / Microbiology Antibacterial susceptibility testing and interpretation II <i>Güner Söyletir & Pınar Çıragil & Aynur Eren Topkaya & Zehra Kipritçi & Selvi Duman Bakırezer</i> Group C	Laboratory / Physiology Exercise and Metabolism <i>Bayram Yılmaz & Mehtap Kaçar & Burcu Gemici Başol</i> Group C	Independent Learning
10.00- 10.50	Lecture Injury by Toxic Substances and Pneumoconiosis <i>Aydın Sav</i>	Lecture Introduction to Pathophysiology of Respiratory System <i>Mehtap Kaçar</i>	Group D	Group D	Independent Learning
11.00- 11.50	Lecture Injury by Toxic Substances and Pneumoconiosis <i>Aydın Sav</i>	Laboratory Lecture / Microbiology <i>Güner Söyletir</i> Group A, B, C, D	Group A	Group A	Independent Learning
12.00- 12.50	Lecture Sports Physiology <i>Mehtap Kaçar</i>	Laboratory / Microbiology Antibacterial susceptibility testing and interpretation I <i>Güner Söyletir & Pınar Çıragil & Aynur Eren Topkaya & Zehra Kipritçi & Selvi Duman Bakırezer</i> Group A	Group B	Group B	Independent Learning
13.00- 13.50	Lunch Break				
14.00- 14.50	Lecture Sports Physiology <i>Mehtap Kaçar</i>	Grup B	Lecture Treatment of Genetic Disease - Introduction to Gene Therapy <i>Burak Altay Dalan</i>	ICP / CSL: IV Cannulation <i>ICP Lecturer</i> Group E	Independent Learning
15.00- 15.50	Lecture Antimicrobial Agents: Mechanisms of Resistance <i>Güner Söyletir</i>	Grup C	Lecture Treatment of Genetic Disease - Introduction to Gene Therapy <i>Burak Altay Dalan</i>	Group E	Independent Learning
16.00- 16.50	Lecture Antimicrobial Agents: Mechanisms of Resistance <i>Güner Söyletir</i>	Grup D	Independent Learning		Independent Learning
17.00-17.50	Independent Learning	Independent Learning	Independent Learning		Independent Learning

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

COMMITTEE II - RESPIRATORY SYSTEM
VI. WEEK / 27 Nov – 1 Dec Nov 2023

	Monday 27-Nov-2023	Tuesday 28-Nov-2023	Wednesday 29-Nov-2023	Thursday 30-Nov-2023	Friday 1-Dec-2023
09.00- 09.50	Independent Learning	Independent Learning	Independent Learning	Independent Learning	Independent Learning
10.00- 10.50		Assessment Session (Anatomy, Physiology and Histology&Embryology, MicrobiologyPractical Exams)		Assessment Session Committee II (MCQ)	
11.00- 11.50					
12.00- 12.50					
13.00- 13.50	Lunch Break			Program Evaluation Session Review of the Exam Questions, Evaluation of the Committee II Program <i>Secretary of the Committee</i>	Lunch Break
14.00- 14.50	Independent Learning	Independent Learning	Independent Learning	Independent Learning	Independent Learning
15.00- 15.50					
16.00- 16.50					
17.00- 17.50					

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

MED - 203 - COMMITTEE III - GASTROINTESTINAL SYSTEM and METABOLISM
DISTRIBUTION of LECTURE HOURS
December 4, 2023– January 19, 2024
COMMITTEE DURATION: 7 WEEKS

MED 203	DISCIPLINE / COMPONENTS				
	ANATOMY	21	2GX6H	0	27
	BIOCHEMISTRY	33	4GX1H	0	34
	BIOPHYSICS	10	0	0	10
	BIOSTATISTICS	4	0	0	4
	HISTOLOGY & EMBRYOLOGY	13	2GX4H	0	17
	IMMUNOLOGY	2	0	0	2
	MEDICAL BIOLOGY	4	0	0	4
	MEDICAL MICROBIOLOGY	17	1GX2H 4GX2H	0	21
	PATHOLOGY	6	0	0	6
	PHYSIOLOGY	17	4GX1H	0	18
	SCIENTIFIC RESEARCH and PROJECT-II	0	0	5GX3H	3
	PBL	0	0	6	6
	TOTAL	127	11	9	143
MED 202	INTRODUCTION to CLINICAL PRACTICE- II	5	5GX4H		9

INDEPENDENT LEARNING HOURS	104
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Coordination Committee	Head	İnci ÖZDEN, PhD Prof.
	Secretary	Müge KOPUZ ALVAREZ NOVAL, PhD Assist. Prof
	Member	Mehtap KAÇAR, MD PhD 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 LAB: Edibe BİLİŞLİ KARA, DVM. LAB: Ahmet SAÇ, MD
BIOCHEMISTRY	İnci ÖZDEN, PhD Prof. LAB: Jale ÇOBAN, MD Prof. LAB: Yeşim ÖZARDA, MD, Prof. LAB: Müge KOPUZ ALVAREZ NOVAL, PhD Assist. Prof.
BIOPHYSICS	Akif MEHERREM, PhD Assist. Prof. Bilge GÜVENÇ TUNA, PhD Assoc. Prof.
BIOSTATISTICS	E. Çiğdem KELEŞ, PhD Assist. Prof.
HISTOLOGY & EMBRYOLOGY	Aylin YABA UÇAR, PhD Prof. Alev CUMBUL, PhD Assoc. Prof.
IMMUNOLOGY	Gülderen YANIKKAYA DEMİREL, MD PhD Prof.
MEDICAL BIOLOGY	Ayşe ÖZER, PhD Prof. Soner DOĞAN, PhD Prof. Deniz KIRAÇ, PhD Prof. Seda GÜLEÇ YILMAZ, PhD Assoc. Prof
MEDICAL MICROBIOLOGY	Aynur EREN, MD Prof. Güner Söyletir, MD PhD Prof. Pınar ÇIRAGİL, MD Prof. Sibel Ergüven, MD Prof. LAB: Zehra KIRPİTÇİ, PhD LAB: Selvi DUMAN BAKIREZER, PhD
PATHOLOGY	Aydın SAV MD Prof.
PHYSIOLOGY	Bayram YILMAZ, PhD Prof. Mehtap KAÇAR, MD PhD Prof. Burcu GEMİCİ BAŞOL, PhD. Prof.
SCIENTIFIC RESEARCH AND PROJECT-II	Aylin YABA UÇAR PhD Prof.(Responsible Faculty Member) Soner DOĞAN, PhD Prof.

OTHER COURSES

MED 202 INTRODUCTION TO CLINICAL PRACTICE II	
DISCIPLINE	LECTURERS
CLINICAL SKILLS LAB	Abidin Yusuf Kavurmacı, MD Esra Bayar, MD Hande Candemir, MD

COMMITTEE III - GASTROINTESTINAL SYSTEM and METABOLISM

AIM and LEARNING OBJECTIVES

AIMS

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

LEARNING OBJECTIVES

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

KNOWLEDGE

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

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

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

LEARNING OBJECTIVES	DISCIPLINE	DISTRUBITION of LAB ASSESSMENT POINTS	
		LPE	QUIZ
3.0-4.0	ANATOMY	60	
6.0, 8.0.-11.0.	BIOCHEMISTRY	5	
5.0.	HISTOLOGY & EMBRYOLOGY	20	
12.0.	MICROBIOLOGY	4	1
7.0.	PHYSIOLOGY	10	
TOTAL		100	

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

Total value of LPE is equal to 100 points

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

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 / 04 – 08 Dec 2023

	Monday 04-Dec-2023	Tuesday 05-Dec-2023	Wednesday 06-Dec-2023	Thursday 07-Dec-2023		Friday 08-Dec-2023
09.00- 09.50	PBL	Lecture Bio-thermodynamics, Laws of Thermodynamics <i>Akif Meherrem</i>	Lecture Anaerobes <i>Pınar Çıragil</i>	Laboratory / Histology & Embryology Histology of GIS I (Tongue, Lip, Esophaus, Stomach) <i>Aylin Yaba Uçar</i> <i>Alev Cumbul</i> Group 1		Lecture Esophagus & Stomach <i>Erdem Söztutar</i>
10.00- 10.50		Lecture Bio-thermodynamics, Laws of Thermodynamics <i>Akif Meherrem</i>	Lecture Anaerobes <i>Pınar Çıragil</i>			Lecture Esophagus & Stomach <i>Erdem Söztutar</i>
11.00- 11.50		Lecture Gastrointestinal Functions <i>Burcu Gemici Başol</i>	Lecture Digestion and Absorption of Lipids <i>İnci Özden</i>	Group 2		Lecture Histology of Alimentary Canal; Tongue, Esophagus <i>Alev Cumbul</i>
12.00- 12.50	Introduction to Committee III Secretary of Committee	Lecture Gastrointestinal Functions <i>Burcu Gemici Başol</i>	Lecture Digestion and Absorption of Lipids <i>İnci Özden</i>			Lecture Histology of Alimentary Canal; Stomach <i>Alev Cumbul</i>
13.00- 13.50	Lunch Break					
14.00- 14.50	Lecture GIT Development <i>Erdem Söztutar</i>	Lecture Test Hypotheses and Significance-Chi-Square Test <i>E. Çiğdem Keleş</i>	Lecture Oral Cavity <i>Erdem Söztutar</i>	ICP / CSL: Nasogastric Tube Administration <i>ICP Lecturer</i> Group A		Lecture Propulsion and Mixing Movements in the GI Tract <i>Burcu Gemici Başol</i>
15.00- 15.50	Lecture GIT Development <i>Erdem Söztutar</i>	Lecture Test Hypotheses and Significance-Chi-Square Test <i>E. Çiğdem Keleş</i>	Lecture Oral Cavity <i>Erdem Söztutar</i>	Group A	SRPC SGS Group B <i>Soner Doğan</i>	Lecture Propulsion and Mixing Movements in the GI Tract <i>Burcu Gemici Başol</i>
16.00- 16.50	Lecture Enterobacterales <i>Güner Söyletir</i>	Lecture Histology of Upper Gastrointestinal Tract; Oral Cavity <i>Alev Cumbul</i>	Lecture Interrelationship of Biology of Major Organs <i>Soner Doğan</i>			Laboratory / Anatomy Oral Cavity <i>Erdem Söztutar & Edibe Bilişli & Ahmet Saç</i> Group 1
17.00-17.50	Lecture Enterobacterales <i>Güner Söyletir</i>	Independent Learning	Independent Learning			Group 2

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

COMMITTEE III - GASTROINTESTINAL SYSTEM and METABOLISM

II. WEEK /11 – 15 Dec 2023

	Monday 11-Dec-2023	Tuesday 12-Dec-2023	Wednesday 13-Dec-2023	Thursday 14-Dec-2023	Friday 15-Dec-2023	
09.00-09.50	PBL	Lecture Histology of Alimentary Canal; Small Intestine <i>Aylin Yaba Uçar</i>	Lecture Nonfermenters <i>Güner Söyletir</i>	<i>Laboratory / Histology & Embryology Histology of GIS II (Jejunum, Colon, Salivary GI, Liver) Aylin Yaba Uçar Alev Cumbul Group 1</i>	Lecture Gland Associated with the Digestive System; Liver <i>Aylin Yaba Uçar</i>	
10.00-10.50		Lecture Histology of Alimentary Canal; Small Intestine <i>Aylin Yaba Uçar</i>	Lecture Gram (-) curved bacilli <i>Güner Söyletir</i>		ILecture Gland Associated with the Digestive System; Gall Bladder <i>Aylin Yaba Uçar</i>	
11.00-11.50		Lecture Test Hypotheses and Significance-Chi-Square Test <i>E. Çiğdem Keleş</i>	Laboratory / Anatomy The stomach & Duodenum <i>Erdem Söztutar Edibe Bilişli Ahmet Saç Group 2</i>	Group 2	Lecture Secretory Functions of the Alimentary Tract <i>Burcu Gemici Başol</i>	
12.00-12.50	Independent Learning	Lecture Test Hypotheses and Significance-Chi-Square Test <i>E. Çiğdem Keleş</i>	Group 1		Secretory Functions of the Alimentary Tract <i>Burcu Gemici Başol</i>	
13.00-13.50	Lunch Break					
14.00-14.50	Lecture Transport of Lipids in Plasma <i>İnci Özden</i>	Lecture Lipogenesis, Triacylglycerol Synthesis <i>İnci Özden</i>	Lecture Cholesterol Metabolism <i>İnci Özden</i>	ICP / CSL: Nasogastric Tube Administration <i>ICP Lecturer Group B</i>		
15.00-15.50	Lecture Transport of Lipids in Plasma <i>İnci Özden</i>	Lecture Lipogenesis, Triacylglycerol Synthesis <i>İnci Özden</i>	Lecture Cholesterol Metabolism <i>İnci Özden</i>	Group B	SRPC SGS Group C <i>Soner Doğan</i>	Lecture Lipolysis <i>İnci Özden</i>
16.00-16.50	Lecture The Theroth and First Laws of Thermodynamics. Enrgy Transformation <i>Akif Meherrem</i>	Lecture Duodenum <i>Erdem Söztutar</i>	Lecture Nutrigenomics <i>Soner Doğan</i>			Lecture Inflammation <i>Aydin Sav</i>
17.00-17.50	Lecture The Theroth and First Laws of Thermodynamics. Enrgy Transformation <i>Akif Meherrem</i>	Lecture Duodenum <i>Erdem Söztutar</i>	Lecture Nutrigenomics <i>Soner Doğan</i>			Lecture Wound Healing <i>Aydin Sav</i>

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

COMMITTEE III - GASTROINTESTINAL SYSTEM and METABOLISM

III. WEEK / 18 – 22 Dec 2023

	Monday 18-Dec-2023	Tuesday 19-Dec-2023	Wednesday 20-Dec-2023	Thursday 21-Dec-2023	Friday 22-Dec-2023
9.00- 09.50	Lecture Gland Associated with the Digestive System; Pancreas <i>Aylin Yaba Uçar</i>	Lecture Applications of the First Law to Isochoric, Isobaric Processes, Enthalpy <i>Akif Meherrem</i>	Lecture Large Intestine <i>Erdem Söztutar</i>	Lecture Regulation of Feeding and Obesity <i>Bayram Yılmaz</i>	Lecture Hepatitis viruses <i>Güner Söyletir</i>
10.00- 10.50	Lecture Gland Associated with the Digestive System; APUD System <i>Aylin Yaba Uçar</i>	Lecture Applications of the First Law to Isochoric, Isobaric Processes, Enthalpy <i>Akif Meherrem</i>	Lecture Large Intestine <i>Erdem Söztutar</i>	Lecture Regulation of Feeding and Obesity <i>Bayram Yılmaz</i>	Lecture Hepatitis viruses <i>Güner Söyletir</i>
11:00-11:50	Lecture Energetics and Metabolic Rate <i>Bayram Yılmaz</i>	Lecture Ketone Bodies <i>İnci Özden</i>	Lecture Digestion and Absorption of Proteins <i>İnci Özden</i>	Laboratory / Anatomy Small and Large Intestine <i>Erdem Söztutar</i> <i>Edibe Bilişli</i> <i>Ahmet Saç</i> Group 1	Lecture Metabolisms of Individual Amino Acids <i>İnci Özden</i>
12:00-12:50	Lecture Energetics and Metabolic Rate <i>Bayram Yılmaz</i>	Lecture Ketone Bodies <i>İnci Özden</i>	Lecture Digestion and Absorption of Proteins <i>İnci Özden</i>	Group 2	Lecture Metabolisms of Individual Amino Acids <i>İnci Özden</i>
13.00- 13.50	Lunch Break				
14.00- 14.50	Lecture Oxidation of Fatty Acids <i>İnci Özden</i>	Lecture Digestion and Absorption in the Gastrointestinal Tract <i>Burcu Gemici Başol</i>	Lecture Development of Gastrointestinal Tract; Alimentary Canal <i>Alev Cumbul</i>	ICP / CSL: Nasogastric Tube Administration <i>ICP Lecturer</i> Group C	Independent Learning
15.00- 15.50	Lecture Oxidation of Fatty Acids <i>İnci Özden</i>	Lecture Digestion and Absorption in the Gastrointestinal Tract <i>Burcu Gemici Başol</i>	Lecture Development of Gastrointestinal Tract; Alimentary Canal <i>Alev Cumbul</i>	Group C	Independent Learning
16.00- 16.50	Lecture Enteroviruses <i>Güner Söyletir</i>	Lecture Small Intestine <i>Erdem Söztutar</i>	Lecture Congenital Anomalies of Gastrointestinal Tract <i>Alev Cumbul</i>		Independent Learning
17.00-17.50	Lecture Viruses of diarrhoea <i>Güner Söyletir</i>	Lecture Small Intestine <i>Erdem Söztutar</i>	Lecture Drug Addiction <i>Ece Genç</i> <i>Location: Fine Arts Building, 8th Floor, Conference Hall</i>		Independent Learning

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

COMMITTEE III - GASTROINTESTINAL SYSTEM and METABOLISM

IV. WEEK / 25 – 29 Dec 2023

	Monday 25-Dec-2023	Tuesday 26-Dec-2023	Wednesday 27-Dec-2023	Thursday 28-Dec-2023	Friday 29-Dec-2023
09.00- 09.50	Lecture Body Temperature and Its Regulation <i>Bayram Yılmaz</i>	Lecture Molecular Basis of Colocortal Cancer <i>Ayşe Özer</i>	Lecture Gastrointestinal and urogenital protozoa <i>Sibel Ergüven</i>	Lecture Purine and Pyrimidine Metabolism <i>İnci Özden</i>	Lecture Acute Inflammation <i>Aydın Sav</i>
10.00- 10.50	Lecture Body Temperature and Its Regulation <i>Bayram Yılmaz</i>	Lecture Metabolic Interrelationships and Provision of Tissue Fuels <i>İnci Özden</i>	Lecture Gastrointestinal and urogenital protozoa <i>Sibel Ergüven</i>	Lecture Purine and Pyrimidine Metabolism <i>İnci Özden</i>	Lecture Acute Inflammation <i>Aydın Sav</i>
11.00- 11.50	Lecture Urea Cycle <i>İnci Özden</i>	Lecture Metabolic Interrelationships and Provision of Tissue Fuels <i>İnci Özden</i>	Lecture Citric Acid Cycle <i>İnci Özden</i>	Laboratory / Anatomy The Pancreas and Spleen <i>Erdem Söztutar/Edibe Bilişli</i> <i>Ahmet Saç</i> Group 1	Lecture Metabolic Interrelationships and Provision of Tissue Fuels <i>İnci Özden</i>
12.00- 12.50	Lecture Urea Cycle <i>İnci Özden</i>	Lecture Liver as Organ <i>Bayram Yılmaz</i>	Lecture Citric Acid Cycle <i>İnci Özden</i>	Group 2	Lecture Metabolic Interrelationships and Provision of Tissue Fuels <i>İnci Özden</i>
13.00- 13.50	Lunch Break				
14.00- 14.50	Lecture Applications of the First Law to Isothermal and Ideobatic Processes <i>Akif Meherrem</i>	Lecture Physiology of Gastrointestinal Disorders <i>Mehtap Kaçar</i>	Lecture The Second Law of Thermodynamics <i>Akif Meherrem</i>	ICP / CSL: Nasogastric Tube Administration <i>ICP Lecturer</i> Group D	Lecture Peritoneal and Abdominal Cavity <i>Erdem Söztutar</i>
15.00- 15.50	Lecture Applications of the First Law to Isothermal and Ideobatic Processes <i>Akif Meherrem</i>	Lecture Physiology of Gastrointestinal Disorders <i>Mehtap Kaçar</i>	Lecture Entropy and Free Enery. Distribution in Bio-molecular Systems <i>Akif Meherrem</i>	Group D	Lecture Abdominal Wall Topographic Anatomy <i>Erdem Söztutar</i>
16.00- 16.50	Lecture Liver <i>Erdem Söztutar</i>	Laboratory / Anatomy Liver and Biliary System <i>Erdem Söztutar/Edibe Bilişli</i> <i>Ahmet Saç</i> Group 2	Lecture The Pancreas and Spleen <i>Erdem Söztutar</i>		Independent Learning
17.00-17.50	Lecture Biliary System <i>Erdem Söztutar</i>	Group 1	Independent Learning		Independent Learning

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

COMMITTEE III - GASTROINTESTINAL SYSTEM and METABOLISM
V. WEEK / 02 – 05 Jan 2024

	Monday 01-Jan-2024	Tuesday 02-Jan-2024	Wednesday 03-Jan-2024		Thursday 04-Jan-2024		Friday 05-Jan-2024
09.00- 09.50	NEW YEAR	Lecture Cestods <i>Sibel Ergüven</i>	Lecture Mucosal Immunity <i>Gülderen Yanıkkaya Demirel</i>		Laboratory / Microbiology Laboratory methods in Parasitology <i>Sibel Ergüven</i> Group A, B, C, D		Lecture Review of the Digestive System <i>Erdem Söztutar</i>
10.00- 10.50		Lecture Trematodes <i>Sibel Ergüven</i>	Lecture Mucosal Immunity <i>Gülderen Yanıkkaya Demirel</i>				Lecture Review of the Digestive System <i>Erdem Söztutar</i>
11:00-11:50		Lecture Xenobiotic Metabolism <i>İnci Özden</i>	Lecture Medical Entomology <i>Sibel Ergüven</i>		Laboratory / Anatomy Abdominal Cavity, Peritoneum, Nerves and Vessels <i>Erdem Söztutar/Edibe Bilişli</i> <i>Ahmet Saç</i> Group 2		Lecture Overview of Metabolism <i>İnci Özden</i>
12:00-12:50		Lecture Xenobiotic Metabolism <i>İnci Özden</i>	Laboratory Lecture Lipid Determination in Blood <i>Jale Çoban & Yeşim Özarda & Müge Kopuz Alvarez Noval</i> Group A, B, C, D		Group 1		Lecture Overview of Metabolism <i>İnci Özden</i>
13.00- 13.50	Lunch Break						
14.00- 14.50	NEW YEAR	Lecture Nematodes <i>Sibel Ergüven</i>	Laboratory / Physiology Digestive System <i>Bayram Yılmaz & Mehtap Kaçar & Burcu Gemicı Başol</i> Group A	Laboratory / Biochemistry Lipid Determination in Blood <i>Jale Çoban & Yeşim Özarda & Müge Kopuz Alvarez Noval</i> Group B	ICP / CSL: Nasogastric Tube Administration <i>ICP Lecturer</i> Group E		<i>Introduction to Elective Courses</i>
15.00- 15.50		Lecture Nematodes <i>Sibel Ergüven</i>	Group B	Group A	Group E	SRPC SGS Group A <i>Soner Doğan</i>	
16.00- 16.50		Lecture Nerves and Vessels of the GIT <i>Erdem Söztutar</i>	Group C	Group D			Lecture Chronic Inflammation <i>Aydın Sav</i>
17.00-17.50		Lecture Nerves and Vessels of the GIT <i>Erdem Söztutar</i>	Group D	Group C			Lecture Chronic Inflammation <i>Aydın Sav</i>

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

COMMITTEE III - GASTROINTESTINAL SYSTEM and METABOLISM

VI. WEEK / 08 – 12 Jan 2024

	Monday 08-Jan-2024	Tuesday 09-Jan-2024	Wednesday 10-Jan-2024	Thursday 11-Jan-2024	Friday 12-Jan-2024
09.00- 09.50	Independent Learning	Independent Learning	Independent Learning	MIDTERM OSCE EXAM	MIDTERM OSCE EXAM
10.00- 10.50	Independent Learning	Laboratory / Microbiology Identification of gram (-) bacilli <i>Güner Söyletir & Pınar Çıragil & Aynur Eren Topkaya & Zehra Kipritçi & Selvi Duman Bakirezer</i> Groups A,B,C,D	Independent Learning		
11:00-11:50	ICP REVIEW Group A	Laboratory / Microbiology Identification of gram (-) bacilli I <i>Güner Söyletir & Pınar Çıragil & Aynur Eren Topkaya & Zehra Kipritçi & Selvi Duman Bakirezer</i> Group D	Laboratory / Microbiology Identification of gram (-) bacilli II <i>Güner Söyletir & Pınar Çıragil & Aynur Eren Topkaya & Zehra Kipritçi & Selvi Duman Bakirezer</i> Group A		
12:00-12:50	ICP REVIEW Group B	Group C	Group B		
13.00- 13.50	Lunch Break				
14.00- 14.50	ICP REVIEW Group C	Group B	Group C	MIDTERM OSCE EXAM	MIDTERM OSCE EXAM
15.00- 15.50	ICP REVIEW Group D	Group A	Group D		
16.00- 16.50	ICP REVIEW Group E	Independent Learning	Independent Learning		
17.00-17.50	Independent Learning	Independent Learning	Independent Learning		

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

COMMITTEE III - GASTROINTESTINAL SYSTEM and METABOLISM

VII. WEEK / 15 – 19 Jan 2024

	Monday 15-Jan-2024	Tuesday 16-Jan-2024	Wednesday 17-Jan-2024	Thursday 18-Jan-2024	Friday 19-Jan-2024
09.00- 09.50	Independent Learning	Assessment Session (Anatomy, Physiology, Biochemistry, Microbiology and Histology&Embryology Practical Exams)	Independent Learning	Independent Learning	Independent Learning
10.00- 10.50					Assessment Session Committee III (MCQ)
11.00- 11.50					
12.00- 12.50					
13.00- 13.50	Lunch Break				Program Evaluation Session Review of the Exam Questions, Evaluation of the Committee III Program <i>Secretary of the Committee</i>
14.00- 14.50	Independent Learning	Independent Learning	Independent Learning	Independent Learning	Independent Learning
15.00- 15.50					
16.00- 16.50					
17.00-17.50					

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

MIDTERM BREAK: JANUARY 22 – FEBRUARY 4, 2024

MED - 203 - COMMITTEE IV - NERVOUS SYSTEM
DISTRIBUTION of LECTURE HOURS
FEBRUARY 5 - MARCH 29, 2024
COMMITTEE DURATION: 8 WEEKS

COURSES	BASIC MEDICAL SCIENCES II	THEORETICAL	PRACTICAL	SMALL GROUP DISCUSSION	TOTAL
MED 203	DISCIPLINE				
	ANATOMY	42	2GX14H	0	56
	BIOPHYSICS	3	0	0	3
	BIOSTATISTICS	4	0	0	4
	HISTOLOGY & EMBRYOLOGY	13	2GX2H	0	15
	IMMUNOLOGY	2	0	0	2
	MEDICAL BIOLOGY	2	0	0	2
	PHARMACOLOGY	9	2GX1H	0	10
	PHYSIOLOGY	34	4GX6H	0	40
	SCIENTIFIC RESEARCH and PROJECT-II	0	0	5GX3H	3
	PBL	0	0	6	6
	TOTAL	112	23	9	144
MED 202	INTRODUCTION to CLINICAL PRACTICE- II	7	5GX3H	0	23
MED 614-631	ELECTIVE COURSES	14	0	0	14

INDEPENDENT LEARNING HOURS	146
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Coordination Committee	Head	Bayram YILMAZ, PhD Prof.
	Secretary	Deniz KIRAÇ, PhD Prof
	Member	Mehtap KAÇAR, MD PhD Prof.
	Member	Alev CUMBUL, MD Assoc. Prof.

COMMITTEE IV- NERVOUS SYSTEM LECTURERS

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

OTHER COURSES

MED 202 INTRODUCTION TO CLINICAL PRACTICE II	
DISCIPLINE	LECTURERS
CLINICAL SKILLS LAB	Ezgi Aytaç, MD

COMMITTEE IV - NERVOUS SYSTEM

AIM and LEARNING OBJECTIVES

AIMS

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

LEARNING OBJECTIVES

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

KNOWLEDGE

- 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, describe the anatomy of structures forming eyes and ears,
 - 3.3. describe the anatomy of skin and its derivatives and the mammary glands
 - 3.4. describe descending and ascending pathways,
 - 3.5. associate with adjacent tissue and organs,
 - 3.6. explain functional and clinical reflections.
- 4.0 For central and peripheral nervous system and special senses,
 - 4.1. classify embryological origins and developmental stages Nervous System
 - 4.2. classify embryological origins and developmental stages Eye and Ear
 - 4.3. classify embryological origins and developmental stages Skin
 - 4.4. explain of the histological properties Nervous System
 - 4.5. explain of the histological properties Eye and Ear
 - 4.6. describe histological properties of Skin
- 5.0 Explain nervous conduction, ion channels and intracellular, extracellular ion concentration differences.
- 6.0 Describe neuron, neuroglia, neurotransmitters and nerve fibers.
- 7.0 Explain the synthesis and inactivation of neurotransmitters.
- 8.0 Describe the energy mechanisms of brain.
- 9.0 In the nervous system;
 - 9.1. explain parts and functions of brain cortex,
 - 9.2. describe sensorial transmission pathways and special senses,
 - 9.3. describe control of motor function (cortex, cerebellum, basal ganglions and brain stem)
 - 9.4. describe functions of hypothalamus.
- 10.0 Explain the relationship of learning-memory with hippocampus.
- 11.0 For brain waves and reflexes;
 - 11.1. describe,
 - 11.2. explain how they are measured in clinics.
- 12.0 Explain biochemical basics of vision, hearing and taste senses
- 13.0 In drug metabolism;
 - 13.1. explain mechanisms and factors affecting absorption, explain mechanisms and factors affecting distribution,
 - 13.2. explain mechanisms and factors affecting excretion.
- 14.0 For drug pharmacokinetics;
 - 14.1. explain clinical importance,
 - 14.2. analyze examples.
- 15.0 Describe the properties of neuroimmunology
- 16.0 Describe how to prepare a scientific research presentation
- 17.0 Prepare a research article presentation
- 18.0 Explain the steps of a statistical hypothesis test according to the properties of a given data.
- 19.0 For statistical hypothesis,
 - 19.1. list the statistical hypothesis test according to the properties of given data
 - 19.2. choose the appropriate statistical hypothesis test according to the properties of given data.
- 20.0 Explain case scenario related basic medical science topics in a clinical context.

COMMITTEE IV - NERVOUS SYSTEM COMMITTEE ASSESSMENT MATRIX

LEARNING OBJECTIVES	DISCIPLINE	LECTURER/ INSTRUCTOR	DISTRUBITION of MCQs and SbMCQ			
			CE	FE	IE	TOTAL
3.0, 20.0	ANATOMY	Dr. A. Panteli	38	15	15	68
1.0	BIOPHYSICS	Dr. B. Güvenç Tuna	3	1	1	5
18.0-19.0	BIOSTATISTICS	Dr. E.Ç. Keleş	4	2	2	8
4.0, 20.0	HISTOLOGY & EMBRYOLOGY	Dr. A. Yaba Uçar	12	5	5	22
		Dr. A. Cumbul				
15.0	IMMUNOLOGY	Dr. G. Yanıkkaya Demirel	2	1	1	4
2.0	MEDICAL BIOLOGY	Dr. S. Güleç Yılmaz	2	1	1	4
13.0-14.0	PHARMACOLOGY	Dr. E. Genç Dr. Emine Nur Özdamar	8	3	3	14
5.0-12.0,20.0	PHYSIOLOGY	Dr. B. Yılmaz	30	12	12	54
		Dr. M. Kaçar				
		Dr. B. Gemici Başol				
20.0	PBL		1	0	0	1
TOTAL			100	41/200*	41/200*	182
LEARNING OBJECTIVES	DISCIPLINE	POINTS of ASSESSMENT METHODS				
		LPE				
3.0.	ANATOMY	60				
4.0.	HISTOLOGY & EMBRYOLOGY	10				
13.0-14.0	PHARMACOLOGY	5				
5.0-12.0.	PHYSIOLOGY	25				
TOTAL		100				

Total value of LPE is equal to 100 points

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

Abbreviations:

MCQ: Multiple Choice Questions

LPE: Laboratory Practical Exam

CE: Committee Exam

CS: Committee Score

FE: Final Exam

ICE: Incomplete Exam

Pts.: Points

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

COMMITTEE IV- NERVOUS SYSTEM

I. WEEK / 5-9 February 2024

	Monday 5-Feb-2024	Tuesday 6-Feb-2024	Wednesday 7-Feb-2024	Thursday 8-Feb-2024	Friday 9-Feb-2024
09.00-09.50	PBL	Independent Learning	Lecture Cranial Nerves <i>Aikaterini Panteli</i>	Lecture Sensory Receptors and Pathways <i>Bayram Yılmaz</i>	Independent Learning
10.00-10.50		Lecture Brainstem <i>Aikaterini Panteli</i>	Lecture Cranial Nerves <i>Aikaterini Panteli</i>	Lecture Peripheral Nervous System <i>Bayram Yılmaz</i>	Independent Learning
11.00-11.50		Lecture Brainstem <i>Aikaterini Panteli</i>	Lecture Cranial Nerves <i>Aikaterini Panteli</i>	Laboratory / Anatomy Brain stem <i>Aikaterini Panteli & Edibe Bilişli Kara & Ahmet Saç</i> Group 1	Laboratory / Anatomy Cranial Nerves <i>Aikaterini Panteli & Edibe Bilişli Kara & Ahmet Saç</i> Group 2
12.00-12.50	Introduction to Committee IV Secretary of Committee	Lecture Brainstem <i>Aikaterini Panteli</i>	Lecture Cranial Nerves <i>Aikaterini Panteli</i>	Group 2	Group 1
13.00-13.50	Lunch Break				
14.00-14.50	Program Improvement Sessions	Lecture Organization of Nervous System <i>Bayram Yılmaz</i>	Lecture Synapse and Neurotransmitters <i>Bayram Yılmaz</i>	ICP / CSL: Intraarterial Blood Sampling <i>ICP Lecturer</i> Group A	Independent Learning
15.00-15.50	Lecture Introduction to Neuroanatomy <i>Aikaterini Panteli</i>	Lecture Neuron and Neuroglia <i>Bayram Yılmaz</i>	Lecture Synapse and Neurotransmitters <i>Bayram Yılmaz</i>	Group A	Independent Learning
16.00-16.50	Lecture Spinal Cord <i>Aikaterini Panteli</i>	Laboratory/ Anatomy Spinal Cord <i>Aikaterini Panteli & Edibe Bilişli Kara & Ahmet Saç</i> Group 1	Independent Learning		Independent Learning
17.00-17.50	Lecture Spinal Cord <i>Aikaterini Panteli</i>	Group 2	Independent Learning		Independent Learning

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

COMMITTEE IV- NERVOUS SYSTEM
II. WEEK / 12-16 February 2024

	Monday 12-Feb-2024	Tuesday 13-Feb-2024	Wednesday 14-Feb-2024	Thursday 15-Feb-2024	Friday 16-Feb-2024		
09.00-09.50	PBL	Lecture Diencephalon <i>Aikaterini Panteli</i>	Lecture Drug Distribution <i>Ece Genç</i>	Lecture Physiology of Pain <i>Bayram Yılmaz</i>	Lecture Motor Functions of Spinal Cord <i>Bayram Yılmaz</i>		
10.00-10.50		Lecture Diencephalon <i>Aikaterini Panteli</i>	Lecture Drug Distribution <i>Ece Genç</i>	Lecture Physiology of Pain <i>Bayram Yılmaz</i>	Lecture Motor Functions of Spinal Cord <i>Bayram Yılmaz</i>		
11.00-11.50		Lecture Diencephalon <i>Aikaterini Panteli</i>	Lecture Histology of CNS; PNS, Meninges and Spinal Cord <i>Aylin Yaba Uçar</i>	Laboratory / Anatomy Cerebellum and Diencephalon <i>Aikaterini Panteli & Edibe Bilişli Kara & Ahmet Saç</i> Group 1	Laboratory / Anatomy Basal Ganglia <i>Aikaterini Panteli & Edibe Bilişli Kara & Ahmet Saç</i> Group 2		
12.00-12.50	Independent Learning	Lecture Scope of Pharmacology and Passage of Drugs Across Membranes <i>Ece Genç</i>	Lecture Histology of CNS; PNS, Meninges and Spinal Cord <i>Aylin Yaba Uçar</i>	Group 2	Group 1		
13.00-13.50	Lunch Break						
14.00-14.50	Lecture Cerebellum <i>Aikaterini Panteli</i>	Lecture Cutaneous Senses <i>Bayram Yılmaz</i>	Lecture Basal Ganglia <i>Aikaterini Panteli</i>	ICP / CSL: Intraarterial Blood Sampling <i>ICP Lecturer</i> Group B		Elective Courses Week I	IL
15.00-15.50	Lecture Cerebellum <i>Aikaterini Panteli</i>	Lecture Cutaneous Senses <i>Bayram Yılmaz</i>	Lecture Basal Ganglia <i>Aikaterini Panteli</i>	Group B	SRPC SGS Group C <i>Soner Doğan</i>		
16.00-16.50	Independent Learning	Independent Learning	Independent Learning			IL	Elective Courses Week I
17.00-17.50	Independent Learning	Independent Learning	Independent Learning				

COMMITTEE IV- NERVOUS SYSTEM
III. WEEK / 19-23 February 2024

	Monday 19-Feb-2024	Tuesday 20-Feb-2024	Wednesday 21-Feb-2024	Thursday 22-Feb-2024	Friday 23-Feb-2024	
09.00-09.50	Independent Learning	Lecture Limbic System <i>Aikaterini Panteli</i>	Laboratory / Physiology Reflexes- Electroencephalography <i>Bayram Yılmaz & Mehtap Kaçar & Burcu G.Başol</i> Group A	Independent Learning	Independent Learning	
10.00-10.50	Lecture Telencephalon <i>Aikaterini Panteli</i>	Lecture Limbic System <i>Aikaterini Panteli</i>		Lecture Cortical and Brainstem Control of Motor Function <i>Bayram Yılmaz</i>	Independent Learning	
11.00-11.50	Lecture Telencephalon <i>Aikaterini Panteli</i>	Lecture Dopamine and Drugs Effecting Dopaminergic System <i>Emine Nur Özdamar</i>	Group B	Lecture Cortical and Brainstem Control of Motor Function <i>Bayram Yılmaz</i>	Laboratory / Anatomy Limbic system <i>Aikaterini Panteli & Edibe Bilişli Kara & Ahmet Saç</i> Group 2	
12.00-12.50	Lecture Telencephalon <i>Aikaterini Panteli</i>	Lecture Serotonin and Drugs Effecting Serotonergic System of CNS <i>Emine Nur Özdamar</i>		Lecture Congenital Anomalies of Nervous System <i>Aylin Yaba Uçar</i>	Group 1	
13.00-13:50	Lunch Break					
14.00-14.50	Lecture Development of Central Nervous System; Early Stages <i>Aylin Yaba Uçar</i>	Laboratory / Anatomy Telencephalon <i>Aikaterini Panteli & Edibe Bilişli Kara & Ahmet Saç</i> Group 2	Group C	ICP / CSL: Intraarterial Blood Sampling <i>ICP Lecturer</i> Group C		Elective Courses Week II
15.00-15.50	Lecture Development of Central Nervous System; Late Stages <i>Aylin Yaba Uçar</i>	Group 1				
16.00-16.50	Independent Learning	Independent Learning	Group D	Group C	SRPC SGS Group D <i>Soner Doğan</i>	IL
17.00-17.50	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
IV. WEEK / 26 February- 1 March 2024

	Monday 26-Feb-2024	Tuesday 27-Feb-2024	Wednesday 28-Feb-2024	Thursday 29-Feb-2024		Friday 1-Mar-2024	
09.00-09.50	Lecture Ascending Pathways of the CNS <i>Aikaterini Panteli</i>	Independent Learning	Lecture Histology of Sensory Organs; Ear <i>Alev Cumbul</i>	Lecture Biology of Nervous System <i>Seda Güleç Yılmaz</i>		Laboratory / Anatomy Eye and Visual Pathways <i>Aikaterini Panteli & Edibe Bilişli Kara & Ahmet Saç</i> Group 1	
10.00-10.50	Lecture Descending Pathways of the CNS <i>Aikaterini Panteli</i>	Lecture Drug Metabolism <i>Ece Genç</i>	Lecture Development of Sensory Organs; Eye <i>Alev Cumbul</i>	Lecture Biology of Nervous System <i>Seda Güleç Yılmaz</i>		Group 2	
11.00-11.50	Lecture Functions of Cerebellum and Basal Ganglia in motor control <i>Bayram Yılmaz</i>	Lecture Vasculature of the CNS <i>Aikaterini Panteli</i>	Lecture States of Brain Activity- Sleep and Brain Waves <i>Bayram Yılmaz</i>	Laboratory / Anatomy Vasculature of CNS <i>Aikaterini Panteli & Edibe Bilişli Kara & Ahmet Saç</i> Group 1		Lecture Drug Excretion <i>Ece Genç</i>	
12.00-12.50	Lecture Functions of Cerebellum and Basal Ganglia in Motor Control <i>Bayram Yılmaz</i>	Lecture Vasculature of the CNS <i>Aikaterini Panteli</i>	Lecture States of Brain Activity- Sleep and Brain Waves <i>Bayram Yılmaz</i>	Group 2		Lecture Drug Excretion <i>Ece Genç</i>	
13.00-13:50	Lunch Break						
14.00-14.50	Lecture Meninges and Dural Venous Sinuses <i>Aikaterini Panteli</i>	Lecture Histology of Sensory Organs; Eye; Fibrous and Vascular Coat <i>Alev Cumbul</i>	Lecture Eye and Orbit <i>Aikaterini Panteli</i>	ICP / CSL: Intraarterial Blood Sampling <i>ICP Lecturer</i> Group D		Elective Courses Week III	IL
15.00-15.50	Lecture Meninges and Dural Venous Sinuses <i>Aikaterini Panteli</i>	Lecture Histology of Sensory Organs; Eye; Nervous Coat and Appendix <i>Alev Cumbul</i>	Lecture Eye and Orbit <i>Aikaterini Panteli</i>	Group D	SRPC SGS Group E <i>Soner Doğan</i>		
16.00-16.50	Independent Learning	Laboratory / Anatomy Meninges and Dural Venous Sinuses <i>Aikaterini Panteli & Edibe Bilişli Kara & Ahmet Saç</i> Group 2	Lecture Visual Pathways <i>Aikaterini Panteli</i>			IL	Elective Courses Week III
17.00-17.50	Independent Learning	Group 1	Independent Learning				

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

COMMITTEE IV – NERVOUS SYSTEM
V. WEEK / 4-8 March 2024

	Monday 4-Mar-2024	Tuesday 5-Mar-2024	Wednesday 6-Mar-2024	Thursday 7-Mar-2024	Friday 8-Mar-2024		
09.00-09.50	Lecture Physiology of Vision <i>Mehtap Kaçar</i>	Independent Learning	Laboratory / Physiology Visual Examination <i>Bayram Yılmaz & Mehtap Kaçar & Burcu G. Başol</i> Group B	Independent Learning	Lecture Taste and Smell Pathways <i>Aikaterini Panteli</i>		
10.00-10.50	Lecture Physiology of Vision <i>Mehtap Kaçar</i>	Lecture Physiology of Vision <i>Mehtap Kaçar</i>		Independent Learning	Lecture Taste and Smell Pathways <i>Aikaterini Panteli</i>		
11.00-11.50	Lecture Cerebral Cortex, Intellectual Functions of the Brain <i>Bayram Yılmaz</i>	Lecture Physiology of Vision <i>Mehtap Kaçar</i>	Group A	Lecture Development of Sensory Organs; Ear <i>Alev Cumbul</i>	Lecture Physiology of Hearing <i>Burcu Gemici Başol</i>		
12.00-12.50	Lecture Learning and Memory <i>Bayram Yılmaz</i>	Lecture Drug Application Routes and Pharmaceutical Forms of Drugs <i>Emine Nur Özdamar</i>		Lecture Development of Sensory Organs; Ear <i>Alev Cumbul</i>	Lecture Physiology of Hearing <i>Burcu Gemici Başol</i>		
13.00-13.50	Lunch Break						
14.00-14.50	Independent Learning	Laboratory / Pharmacology Drug Metabolism <i>Ece Genç & Emine Özdamar & Cenk Andaç</i> Group 1	Group D	ICP / CSL: Intraarterial Blood Sampling <i>ICP Lecturer</i> Group E		Elective Courses Week IV	IL
15.00-15.50	Independent Learning	Group 2		Group C	Group E		
16.00-16.50	Independent Learning	Independent Learning					
17.00-17.50	Independent Learning	Independent Learning					

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

COMMITTEE IV- NERVOUS SYSTEM
VI.WEEK / 11-15 March 2024

	Monday 11-Mar-2024	Tuesday 12-Mar-2024	Wednesday 13-Mar-2024	Thursday 14-Mar-2024	Friday 15-Mar-2024	
09.00-09.50	Independent Learning	Independent Learning	Lecture Neuroimmunology <i>Gülderem Yanıkkaya Demirel</i>	PHYSICIANS DAY	Lecture Autonomic Nervous System <i>Bayram Yılmaz</i>	
10.00-10.50	Lecture Ear <i>Aikaterini Panteli</i>	Lecture Introduction to Autonomic Nervous System <i>Aikaterini Panteli</i>	Lecture Neuroimmunology <i>Gülderem Yanıkkaya Demirel</i>		Lecture Autonomic Nervous System <i>Bayram Yılmaz</i>	
11.00-11.50	Lecture Ear <i>Aikaterini Panteli</i>	Lecture Sympathetic Nervous System <i>Aikaterini Panteli</i>	Lecture Parasympathetic Nervous System <i>Aikaterini Panteli</i>		Laboratory / Anatomy Sympathetic Nervous System <i>Aikaterini Panteli & Edibe Bilişli Kara & Ahmet Saç</i> Group 2	
12.00-12.50	Lecture Auditory Pathways <i>Aikaterini Panteli</i>	Lecture Sympathetic Nervous System <i>Aikaterini Panteli</i>	Lecture Parasympathetic Nervous System <i>Aikaterini Panteli</i>		Group 1	
13.00-13.50	Lunch Break					
14.00-14.50	Lecture Chemical Senses: Taste and Smell <i>Burcu Gemici Başol</i>	Lecture Test Hypotheses and Significance-Z-Test <i>Çiğdem Keleş</i>	Lecture Limbic System and the Hypothalamus <i>Bayram Yılmaz</i>	PHYSICIANS DAY	Elective Courses Week V	IL
15.00-15.50	Lecture Chemical Senses: Taste and Smell <i>Burcu Gemici Başol</i>	Lecture Test Hypotheses and Significance-Z-Test <i>Çiğdem Keleş</i>	Lecture Limbic System and the Hypothalamus <i>Bayram Yılmaz</i>			
16.00-16.50	Independent Learning	Laboratory / Anatomy Ear and Auditory Pathways <i>Aikaterini Panteli & Edibe Bilişli Kara & Ahmet Saç</i> Group 2	Independent Learning		IL	Elective Coures Week V
17.00-17.50	Independent Learning	Group 1	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 / 18-22 March 2024

	Monday 18-Mar-2024	Tuesday 19-Mar-2024	Wednesday 20-Mar-2024	Thursday 21-Mar-2024		Friday 22-Mar 2024	
09.00-09.50	Independent Learning	Laboratory/ Physiology Hearing test /Galvanized Skin Response Group C <i>Bayram Yılmaz & Mehtap Kaçar & Burcu Gemici Başol</i> Group C	Laboratory / Histology& Embryology Histology of CNS and Skin <i>Alev Cumbul & Aylin Yaba Uçar</i> Group 1	Lecture Cerebrospinal Fluid and Brain Metabolism <i>Bayram Yılmaz</i>		Lecture Auditory System Biophysics and Function <i>Bilge Güvenç Tuna</i>	
10.00-10.50	Lecture Skin, its derivatives and the Mammary Glands <i>Aikaterini Panteli</i>	Group D	Laboratory / Histology& Embryology Histology of CNS and Skin <i>Alev Cumbul & Aylin Yaba Uçar</i> Group 2	Lecture Cerebrospinal Fluid and Brain Metabolism <i>Bayram Yılmaz</i>		Lecture Review to Neuroanatomy <i>Aikaterini Panteli</i>	
11.00-11.50	Lecture Test Hypotheses and Significance- t-Test <i>Çiğdem Keleş</i>			Lecture Electrical Activity of Cortex and Evoked Potentials. Neural Coding <i>Bilge Güvenç Tuna</i>		Laboratory / Anatomy Skin And Mammary Glands <i>Aikaterini Panteli & Edibe Bilişli Kara & Ahmet Saç</i> Group 1	
12.00-12.50	Lecture Test Hypotheses and Significance- t-Test <i>Çiğdem Keleş</i>			Lecture Electrical Activity of Cortex and Evoked Potentials. Neural Coding <i>Bilge Güvenç Tuna</i>		Group 2	
13.00-13.50	Lunch Break						
14.00-14.50	Lecture Histology of Skin and Appendage; Epidermis, Dermis, Appendage <i>Aylin Yaba Uçar</i>	Group A	Independent Learning	ICP / CSL: Bladder Catheterization <i>ICP Lecturer</i> Group A		Elective Courses Week VI	IL
15.00-15.50	Lecture Development of Skin and Appendage <i>Aylin Yaba Uçar</i>		Independent Learning	Group A	SRPC SGS Group B <i>Soner Doğan</i>		
16.00-16.50	Laboratory / Anatomy Parasympathetic Nervous System <i>Aikaterini Panteli & Edibe Bilişli Kara & Ahmet Saç</i> Group 2	Group B	Independent Learning			IL	Elective Courses Week VI
17.00-17.50	Group 1		Independent Learning				

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

COMMITTEE IV- NERVOUS SYSTEM
VIII.WEEK / 25-29 March 2024

	Monday 25-Mar-2024	Tuesday 26-Mar-2024	Wednesday 27-Mar-2024	Thursday 28-Mar-2024	Friday 29-March-2024	
09.00-09.50	Independent Learning	Independent Learning	Independent Learning	Independent Learning	Independent Learning	
10.00-10.50		Assessment Session (Physiology, Pharmacology, Histology&Embryology and Anatomy Practical Exams)			Assessment Session Committee IV Exam (MCQ)	
11.00-11.50						
12.00-12.50						
13.00-13.50	Lunch Break				Program Evaluation Session Review of the Exam Questions, Evaluation of the Committee IV Program <i>Secretary of Committee IV</i>	
14.00-14.50	Independent Learning	Independent Learning	Independent Learning	Independent Learning	Elective Courses Week VII (Midterm)	IL
15.00-15.50					IL	Elective Courses Week VII (Midterm)
16.00-16.50						
17.00-17.50						

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

MED - 203 - COMMITTEE V - UROGENITAL and ENDOCRINE SYSTEMS
DISTRIBUTION of LECTURE HOURS
April 1st – May 31th, 2024
COMMITTEE DURATION: 8 WEEKS

COURSES	BASIC MEDICAL SCIENCES II	THEORETICAL	PRACTICAL	SMALL GROUP DISCUSSION	TOTAL
MED 203	DISCIPLINE /COMPONENTS				
	ANATOMY	15	2GX5H	0	20
	BIOCHEMISTRY	22	4GX1H 1GX1H	0	24
	BIOPHYSICS	3	0	0	3
	BIOSTATISTICS	4	1GX2H	0	6
	HISTOLOGY & EMBRYOLOGY	14	2GX2H	0	16
	IMMUNOLOGY	1	0	0	1
	MEDICAL BIOLOGY	5	0	0	5
	MEDICAL MICROBIOLOGY	16	0	0	16
	PATHOLOGY	7	1GX1H	0	8
	PHARMACOLOGY	13	2GX1H	0	14
	PHYSIOLOGY	32	1GX2H 4GX2H	0	36
	SCIENTIFIC RESEARCH and PROJECT-II	0	0	5GX3H	3
	PBL	0	0	6	6
	TOTAL	139	17		156
MED 202	INTRODUCTION to CLINICAL PRACTICE- II	5	5GX3H	0	8
MED 614-631	ELECTIVE COURSES	14	0	0	14

INDEPENDENT LEARNING HOURS	143
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Coordination Committee	Head	Burcu Gemici BASOL, PhD, Prof.
	Secretary	Soner DOGAN, PhD, Prof.
	Member	Bilge Guvenc TUNA, PhD, Assoc. Prof.
	Member	Akif MEHERREM, PhD, Assist. Prof.

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

MED 203 BASIC MEDICAL SCIENCES II	
DISCIPLINE	LECTURERS
ANATOMY	Erdem SÖZTUTAR, MD Assist. Prof. LAB: Edibe BİLİŞLİ KARA, DVM Instructor LAB: Ahmet SAÇ, MD Instructor
BIOCHEMISTRY	İnci ÖZDEN, PhD Prof. LAB: Yeşim ÖZARDA, MD Prof. LAB: Jale ÇOBAN, MD Prof. LAB: Müge KOPUZ, PhD
BIOPHYSICS	Akif MEHERREM, PhD Assist. Prof. Bilge GÜVENÇ TUNA, PhD Assoc. Prof.
BIOSTATISTIC	E. Çiğdem KELEŞ, PhD Assist. Prof.
HISTOLOGY & EMBRYOLOGY	Aylin YABA UÇAR, PhD Prof. Alev CUMBUL, PhD Assoc. Prof.
IMMUNOLOGY	Güleren YANIKKAYA DEMİREL, MD PhD Prof.
MEDICAL BIOLOGY	Ayşe Ozer, PhD Prof. Soner Dogan, PhD Prof. Deniz KIRAÇ, PhD Prof.
MICROBIOLOGY	Güner SÖYLETİR, MD PhD Prof. Pınar ÇIRAGİL, MD Prof.
PATHOLOGY	Aydın SAV MD Prof.
PHARMACOLOGY	Ece GENÇ, PhD Prof. Emine Nur ÖZDAMAR, MD Assist. Prof. Cenk ANDAÇ PhD Assist. Prof.
PHYSIOLOGY	Bayram YILMAZ, PhD Prof. Mehtap KAÇAR, MD PhD Prof. Burcu GEMİCİ BAŞOL, PhD Prof.
PBL	
SCIENTIFIC RESEARCH AND PROJECT COURSE-II	Aylin YABA UÇAR PhD Prof.(Responsible Faculty Member) Soner DOĞAN, PhD Prof.
ELECTIVE COURSES	

MED 202 INTRODUCTION TO CLINICAL PRACTICE II	
DISCIPLINE	LECTURERS
CLINICAL SKILLS LAB	Gökhan GENCER, MD. Assist. Prof. Pınar TURA, MD. Assist. Prof. Hande CANDEMİR, MD. Assist. Prof. Mustafa YÜKSEL, MD

COMMITTEE V-UROGENITAL AND ENDOCRINE SYSTEMS

AIM AND LEARNING OBJECTIVES

AIMS

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

LEARNING OBJECTIVES

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

KNOWLEDGE

- 1.0 Describe biology of endocrine system and molecular signal transduction pathways.
- 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 Explain the Histology of Endocrine System;
 - 4.1. general Aspect, Hypothalamus, Epiphysis
 - 4.2. explain the Histology of Endocrine System; Hypophysis
 - 4.3. explain the Histology of Endocrine System; Thyroid and Parathyroid and Suprarenal Glands
 - 4.4. classify embryological origins and explain developmental stages of Endocrine Organs
- 5.0 Explain the histological properties of Urinary System; General Aspect, Kidney Nephron
 - 5.1. explain the histological properties of Urinary System; Excretory Passage
 - 5.2. explain the Histology of The Male Genital System; Testis
 - 5.3. explain the Histology of The Male Genital System; Excretory Parts
 - 5.4. explain the Histology of The Female Genital System; Ovaries
 - 5.5. explain the Histology of The Female Genital System; Conducting Part
 - 5.6. Classify embryological origins and explain developmental stages of urinary system organs
 - 5.7. Classify embryological origins and explain developmental stages of male system organs
 - 5.8. Classify embryological origins and explain developmental stages of female system organs
 - 5.9. Associate the relation between birth anomalies and developmental processes of urogenital organs
- 6.0 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, and neoplastic diseases in organism, classification and staging of neoplasia.
- 12.0 Distinguish mechanisms of actions of drugs and explain toxicity of drugs.
- 13.0 Analyze events developing in response to drug receptor interactions.
- 14.0 Describe general principles of antimicrobial chemotherapy.
- 15.0 Describe general principles of cancer chemotherapy.
- 16.0 Describe pharmacology of inflammation and immunomodulation.
- 17.0 Describe the structural/biological features of microorganisms affecting urogenital tract
- 18.0 Describe the interrelationship of hormones and immunology
- 19.0 Describe the general principles of magnetic resonance imaging
- 20.0 For correlations between two continuous variables
 - 20.1. Explain linear correlations using scatter plot and correlation coefficients
 - 20.2. Classify the interpretations of the correlation coefficient
- 21.0 Explain linear regression equation and its features
- 22.0 Explain case scenario related basic medical science topics in a clinical context.
- 23.0 Define the prenatal diagnosis and teratology

COMMITTEE V - UROGENITAL and ENDOCRINE SYSTEMS
COMMITTEE ASSESSMENT MATRIX

LEARNING OBJECTIVES	DISCIPLINE	LECTURER/ INSTRUCTOR	DISTRUBITION of MCQsand SbMCQ			
			CE	FE	IE	TOTAL
2.0-3.0,22.0	ANATOMY	Dr. E.Söztutar	11	6	6	23
9.0-10.0	BIOCHEMISTRY	Dr. İ. Özden	18	8	8	34
19.0	BIOPHYSICS	Dr. B.G. Tuna	2	1	1	4
20.0-21.0	BIostatISTICS	Dr. E.Ç. Keleş	3	1	1	5
4.0-5.0,23.0	HISTOLOGY& EMBRYLOGY	Dr. A. Yaba Uçar Dr. A. Cumbul	10	5	5	20
18.0	IMMUNOLOGY	Dr. G. Yanıkkaya Demirel	1	1	1	3
1.0	MEDICAL BIOLOGY	Dr. A. Ozer Dr. S.Doğan Dr.D. Kıraç	4	2	2	8
17.0	MEDICAL MICROBIOLOGY	Dr. Güner Söyletir Dr.Pınar Çiragil	13	6	6	25
11.0	PATHOLOGY	Dr. A. Sav	5	2	2	9
12.0-16.0	PHARMACOLOGY	Dr. E. Genç Dr. E. N. Özdamar Dr. C. Andaç	9	4	4	17
6.0-8.0, 22.0	PHYSIOLOGY	Dr. B. Yılmaz Dr. M. Kaçar Dr. B. Gemicı Başol	23	10	10	43
22.0	PBL		1	0	0	1
TOTAL			100	46/200#	46/200#	192
LEARNING OBJECTIVES	DISCIPLINE	POINTS of ASSESSMENT METHODS				
		LPE	QUIZ			
2.0-3.0	ANATOMY	35				
8.0-9.0	BIOCHEMISTRY	5				
	BIostatISTICS	5				
4.0.	HISTOLOGY & EMBRYLOGY	10				
10.0.	PATHOLOGY	5				
11.0-15.0.	PHARMACOLOGY	5				
5.0-7.0	PHYSIOLOGY	35				
TOTAL		100				

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

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

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 val

COMMITTEE V – UROGENITAL and ENDOCRINE SYSTEMS
I.WEEK / 1 – 5 April 2024

	Monday 1-April-2024	Tuesday 2-April-2024	Wednesday 3-April-2024	Thursday 4-April-2024	Friday 5-April-2024		
09.00-09.50	PBL	Lecture Spirochete <i>Pınar Çıragil</i>	Lecture Mechanisms of Hormone Actions, Intracellular and Cell Surface Receptors <i>İnci Özden</i>	Lecture The Kidneys <i>Erdem Söztutar</i>	Lecture Mechanisms of Hormone Actions, Intracellular and Cell Surface Receptors <i>İnci Özden</i>		
10.00-10.50		Lecture Papilloma and polyoma viruses <i>Güner Söyletir</i>	Lecture Mechanisms of Hormone Actions, Intracellular and Cell Surface Receptors <i>İnci Özden</i>	Lecture The Kidneys <i>Erdem Söztutar</i>	Lecture Mechanisms of Hormone Actions, Intracellular and Cell Surface Receptors <i>İnci Özden</i>		
11.00-11.50		Lecture Body Fluids and Functions of Kidneys <i>Bayram Yılmaz</i>	Lecture Histology of Urinary System: General Aspect, Kidney Nephron <i>Aylin Yaba Uçar</i>	Lecture Urine Formation: Tubular Processing <i>Bayram Yılmaz</i>	Laboratory/ Anatomy Urinary System <i>Erdem Söztutar & Edibe Bilişli Kara & Ahmet Saç Group 1</i>		
12.00-12.50	Independent Learning	Lecture Micturition <i>Bayram Yılmaz</i>	Lecture Histology of Urinary System: Excretory Passage <i>Aylin Yaba Uçar</i>	Lecture Urine Formation: Tubular Processing <i>Bayram Yılmaz</i>	Group 2		
13.00-13.50	Lunch Break						
14.00-14.50	Introduction to Committee IV Secretary of Committee	Lecture Mechanism of Drug Action 1 <i>Ece Genç</i>	Lecture Urine Formation and Renal Blood Flow <i>Bayram Yılmaz</i>	ICP / CSL: Bladder Catheterization <i>ICP Lecturer Group B</i>		Elective Courses Week VIII	IL
15.00-15.50	Lecture Introduction to Urinary System <i>Erdem Söztutar</i>	Lecture Mechanism of Drug Action 2 <i>Ece Genç</i>	Lecture Urine Formation and Renal Blood Flow <i>Bayram Yılmaz</i>	Group B	SRPC SGS Group C <i>Soner Doğan</i>		
16.00-16.50	Lecture Urinary Tracts and Suprarenal Glands <i>Erdem Söztutar</i>	Independent Learning	Independent Learning			IL	Elective Courses Week VIII
17.00-17.50	Independent Learning	Independent Learning	Independent Learning				

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

COMMITTEE V- UROGENITAL and ENDOCRINE SYSTEMS

II. WEEK / 8-12 April 2024

	Monday 8-April-2024	Tuesday 9-April-2024	Wednesday 10-April-2024	Thursday 11-April-2024	Friday 12-April-2024
09.00-09.50	PBL	Laboratory / Anatomy Male Genital Organs <i>Erdem Söztutar & Edibe Bilişli Kara & Ahmet Saç</i> Group 2	NATIONAL HOLIDAY	NATIONAL HOLIDAY	NATIONAL HOLIDAY
10.00-10.50		Group 1			
11.00-11.50		Independent Learning			
12.00-12.50	Independent Learning	Independent Learning			
13.00-13.50	Lunch Break				
14.00-14.50	Lecture Introduction to Genital Systems <i>Erdem Söztutar</i>	Independent Learning			
15.00-15.50	Lecture Male Genital Organs <i>Erdem Söztutar</i>	Independent Learning			
16.00-16.50	Lecture Male Genital Organs <i>Erdem Söztutar</i>	Independent Learning			
17.00-17.50	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
III. WEEK / 15-19 April 2024

	Monday 15-April-2024	Tuesday 16-April-2024	Wednesday 17-April-2024	Thursday 18-April-2024	Friday 19-April-2024	
09.00-09.50	Independent Learning	Lecture Fluid and Electrolyte Balance <i>Bayram Yılmaz</i>	Laboratory / Physiology Glomerular Filtration &Metabolic Rate <i>Bayram Yılmaz & Mehtap Kaçar & Burcu G.Başol</i> Group A	Lecture Female Genital Organs <i>Erdem Söztutar</i>	Lecture Nerves of the Pelvis <i>Erdem Söztutar</i>	
10.00-10.50	Independent Learning	Lecture Fluid and Electrolyte Balance <i>Bayram Yılmaz</i>		Lecture Female Genital Organs <i>Erdem Söztutar</i>	Lecture Vasculature of the Pelvis <i>Erdem Söztutar</i>	
11.00-11.50	Independent Learning	Lecture Histology of Endocrine System: General Aspect, Hypothalamus,Epiphysis <i>Aylin Yaba Uçar</i>	Group B	Lecture Regulation of Acid-Base Balance <i>Bayram Yılmaz</i>	Independent Learning	
12.00-12.50	Independent Learning	Lecture Histology of Endocrine System: Hypophysis <i>Aylin Yaba Uçar</i>		Lecture Regulation of Acid-Base Balance <i>Bayram Yılmaz</i>	Independent Learning	
13.00-13:50						
14.00-14.50	Independent Learning	Independent Learning	Group C	ICP / CSL: Bladder Catheterization <i>ICP Lecturer</i> Group C		Elective Course Week IX
15.00-15.50	Independent Learning	Independent Learning				
16.00-16.50	Independent Learning	Independent Learning	Group D	Group C	SRPC SGS Group D <i>Soner Doğan</i>	IL
17.00-17.50	Independent Learning	Independent Learning				

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COMMITTEE V- UROGENITAL and ENDOCRINE SYSTEMS
IV. WEEK / 22-26 April 2024

	Monday 22-April-2024	Tuesday 23- April- 2024	Wednesday 24-April-2024	Thursday 25-April-2024	Friday 26-April-2024	
09.00-09.50	Lecture Biology of Endocrine System <i>Deniz Kırac</i>	NATIONAL HOLIDAY	Lecture Perineum and Ischiorectal Fossa <i>Erdem Söztutar</i>	Lecture Endocrine Organs <i>Erdem Söztutar</i>	Lecture Posterior Pituitary Hormones <i>Mehtap Kaçar</i>	
10.00-10.50	Lecture Biology of Endocrine System <i>Deniz Kırac</i>		Lecture Histology of Endocrine System: Thyroid and Parathyroid and Suprarenal Glands <i>Aylin Yaba Uçar</i>	Lecture Endocrine Organs <i>Erdem Söztutar</i>	Lecture Thyroid Metabolic Hormones <i>Mehtap Kaçar</i>	
11.00-11.50	Lecture Hormones of Hypothalamus and Pituitary <i>İnci Özden</i>		Lecture Hormones of Hypothalamus and Pituitary <i>İnci Özden</i>	Lecture Hormones of Adrenal Cortex and Adrenal Medulla <i>İnci Özden</i>	Laboratory / Anatomy Nerves and Vessels of the Pelvis <i>Erdem Söztutar & Edibe Bilişli Kara & Ahmet Saç</i> Group 2	
12.00-12.50	Lecture Thyroid Hormones <i>İnci Özden</i>		Lecture Hormones of Hypothalamus and Pituitary <i>İnci Özden</i>	Lecture Hormones of Adrenal Cortex and Adrenal Medulla <i>İnci Özden</i>	Group 1	
13.00-13:50	Lunch Break					
14.00-14.50	Independent Learning		Lecture Histology of The Male Genital System; Testis <i>Alev Cumbul</i>	Independent Learning	Elective Courses Week X	IL
15.00-15.50	Independent Learning		Lecture Histology of The Male Genital System; Excretory Parts <i>Alev Cumbul</i>	Independent Learning		
16.00-16.50	Laboratory / Anatomy Female Genital Organs <i>Erdem Söztutar & Edibe Bilişli Kara & Ahmet Saç</i> Group 1		Independent Learning	Independent Learning	IL	Elective Courses Week X
17.00-17.50	Group 2		Independent Learning	Independent Learning		

COMMITTEE V – UROGENITAL and ENDOCRINE SYSTEMS
V. WEEK / 29 April - 3 May 2024

	Monday 29-April-2024	Tuesday 30-April-2024	Wednesday 1-May-2024	Thursday 2-May-2024	Friday 3-May-2023		
09.00-09.50	Lecture Introduction to Endocrinology <i>Mehtap Kaçar</i>	Lecture Adrenocortical Hormones <i>Mehtap Kaçar</i>	NATIONAL HOLIDAY	ICP / CSL: Bladder Catheterization <i>ICP Lecturer</i> Group D		Independent Learning	
10.00-10.50	Lecture Pituitary Gland and Hypothalamic Control <i>Mehtap Kaçar</i>	Lecture Adrenocortical Hormones <i>Mehtap Kaçar</i>		Group D	SRPC SGS Group E <i>Soner Doğan</i>	Independent Learning	
11.00-11.50	Laboratory / Anatomy Perineum and Ischiorectal Fossa <i>Erdem Söztutar & Edibe Bilişli Kara & Ahmet Saç</i> Group 1	Lecture Histology of The Female Genital System; Ovaries <i>Alev Cumbul</i>				Independent Learning	
12.00-12.50	Group 2	Lecture Histology of The Female Genital System; Conducting Part <i>Alev Cumbul</i>				Independent Learning	
13.00-13.50	Lunch Break						
14.00-14.50	Laboratory / Histology Histology of ES & US (Kidney, Hypophysis, Thyroids, Pancreas) <i>Alev Cumbul & Aylin Yaba Uçar</i> Group 1	Lecture Hormone Signal Transduction (Estrogen) <i>Soner Dogan</i>		ICP / CSL: Bladder Catheterization <i>ICP Lecturer</i> Group E		Elective Courses Week XI	IL
15.00-15.50		Lecture Hormone Signal Transduction (Estrogen) <i>Soner Dogan</i>		Group E	SRPC SGS Group A <i>Soner Doğan</i>		
16.00-16.50	Group 2	Independent Learning				IL	Elective Courses Week XI
17.00-17.50		Independent Learning					

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

COMMITTEE V- UROGENITAL and ENDOCRINE SYSTEMS
VI. WEEK / 6-10 May 2024

	Monday 6-May-2024	Tuesday 7-May-2024	Wednesday 8-May-2024	Thursday 9-May-2024	Friday 10-May-2024	
09.00-09.50	Lecture Pharmacogenetics & Pharmacogenomics <i>Ece Genç</i>	Lecture Drug Toxicity-1 <i>Cenk Andaç</i>	Lecture Introduction to Rational Pharmacotherapy <i>Emine Nur Özdamar</i>	Lecture Development of Female Genital System and Anomalies <i>Alev Cumbul</i>	Independent Learning	
10.00-10.50	Lecture Pharmacogenetics & Pharmacogenomics <i>Ece Genç</i>	Lecture Drug Toxicity-2 <i>Cenk Andaç</i>	Lecture Eicosanoids <i>Emine Nur Özdamar</i>	Lecture Prenatal Diagnosis, Teratology and Congenital Anomalies <i>Alev Cumbul</i>	Independent Learning	
11.00-11.50	Lecture Insulin, Diabetes Mellitus <i>Mehtap Kaçar</i>	Lecture Development of Biopharmaceuticals <i>Cenk Andaç</i>	Lecture PTH, Calcitonin, Calcitriol <i>İnci Özden</i>	Lecture Regulation of Calcium & Phosphate Metabolism and Bone Formation <i>Bayram Yılmaz</i>	Independent Learning	
12.00-12.50	Lecture Insulin, Diabetes Mellitus <i>Mehtap Kaçar</i>	Lecture Development of Male Genital System and Anomalies <i>Alev Cumbul</i>	Lecture PTH, Calcitonin, Calcitriol <i>İnci Özden</i>	Lecture Regulation of Calcium & Phosphate Metabolism and Bone Formation <i>Bayram Yılmaz</i>	Independent Learning	
13.00-13:50	Lunch Break					
14.00-14.50	Lecture Post-receptor Events and Second Messengers <i>Cenk Andaç</i>	Lecture Regulation of Calcium & Phosphate Metabolism and Bone Formation <i>Bayram Yılmaz</i>	Lecture Male Reproductive Physiology <i>Mehtap Kaçar</i>	Independent Learning	Elective Courses Week XII	IL
15.00-15.50	Lecture Introduction to Drug Development <i>Cenk Andaç</i>	Lecture Regulation of Calcium & Phosphate Metabolism and Bone Formation <i>Bayram Yılmaz</i>	Lecture Male Reproductive Physiology <i>Mehtap Kaçar</i>	SRPC SGS Group B <i>Soner Doğan</i>		
16.00-16.50	Independent Learning	Independent Learning	Independent Learning		IL	Elective Courses Week XII
17.00-17.50	Independent Learning	Independent Learning	Independent Learning			

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

COMMITTEE V- UROGENITAL and ENDOCRINE SYSTEMS
VII. WEEK / 13-17 May 2024

	Monday 13-May-2024	Tuesday 14-May-2024	Wednesday 15-May-2024	Thursday 16-May-2024	Friday 17-May-2024	
09.00-09.50	Lecture Hormones and Immunity <i>Gülderem Yanıkkaya Demirel</i>	Lecture Vasoactive Compounds <i>Emine Nur Özdamar</i>	Lecture Introduction to Neoplasia and Biologic Behaviors of Neoplasm <i>Aydın Sav</i>	Lecture Oncogenesis, Incidence and Distribution of Cancer <i>Aydın Sav</i>	Laboratory / BIOCHEMISTRY Urine Analyses <i>Jale Çoban & Müge Kopuz Alvarez</i> <i>Noval & Yeşim Özarda</i> Group A	Laboratory/ Biostatistics Computer Applications of Tests of Significance <i>Çiğdem Keleş</i> Group B
10.00-10.50	Lecture Female Reproductive Physiology <i>Mehtap Kaçar</i>	Lecture Histamine and Antihistamines <i>Emine Nur Özdamar</i>	Lecture Introduction to Neoplasia and Biologic Behaviors of Neoplasm <i>Aydın Sav</i>	Lecture Oncogenesis, Incidence and Distribution of Cancer <i>Aydın Sav</i>	Group D	Group C
11.00-11.50	Lecture Female Reproductive Physiology <i>Mehtap Kaçar</i>	Lecture Physiology of Growth Hormones <i>Bayram Yılmaz</i>	Lecture Insulin, Glucagon <i>İnci Özden</i>	Lecture Insulin, Glucagon <i>İnci Özden</i>	Group B	Group A
12.00-12.50	Lecture Hormone Signal Transduction (Insulin) <i>Ayşe Ozer</i>	Lecture Pineal Gland & Melatonin <i>Bayram Yılmaz</i>	Lecture Insulin, Glucagon <i>İnci Özden</i>	Lecture Insulin, Glucagon <i>İnci Özden</i>	Group C	Group D
13.00-13.50	Lunch Break					
14.00-14.50	Laboratory / Histology Histology of Genital Systems (Testis, Vas Deferentes, Ovary, Uterus) <i>Alev Cumbul & Aylin Yaba Uçar</i> Group 2	Laboratory / Physiology Dissection and Examination of Endocrine System <i>Bayram Yılmaz & Mehtap Kaçar & Burcu G.Başol</i> Group A,B,C,D	Lecture Review of the Urinary System <i>Erdem Söztutar</i>	Independent Learning	Elective Courses Week XIII	IL
15.00-15.50			Laboratory / PHARMACOLOGY Efficacy and Potency Concepts <i>Ece Genç & Emine Nur Özdamar&Cenk Andaç</i> Group 1	Laboratory Lecture Urine Analyses <i>Jale Çoban & Müge Kopuz Alvarez</i> <i>Noval & Yeşim Özarda</i> Group A, B, C, D		
16.00-16.50	Group 1	Independent Learning	Group 2	Independent Learning	IL	Elective Courses Week XIII
17.00-17.50		Independent Learning	Independent Learning	Independent Learning		

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

COMMITTEE V – UROGENITAL and ENDOCRINE SYSTEMS
VIII. WEEK / 20-24 May 2024

	Monday 20-May-2024	Tuesday 21-May-2024	Wednesday 22-May-2024	Thursday 23-May-2024	Friday 24-May-2024	
09.00-09.50	Lecture <i>Insulin, Glucagon</i> <i>İnci Özden</i>	Lecture Pregnancy and Lactation <i>Mehtap Kaçar</i>	Lecture Histogenesis and Nomenclature <i>Aydın Sav</i>	Lecture Tissue Damage by Eating Disorders and Diabetes Mellitus <i>Aydın Sav</i>	ICP MAKEUP EXAM	
10.00-10.50	Lecture <i>Insulin, Glucagon</i> <i>İnci Özden</i>	Lecture Pregnancy and Lactation <i>Mehtap Kaçar</i>	Lecture Histogenesis and Nomenclature <i>Aydın Sav</i>	Laboratory/Pathology Inflammation and Neoplasia <i>Aydın Sav</i>		
11.00-11.50	Lecture Correlation <i>Çiğdem Keleş</i>	Lecture Hormones Regulating Calcium Metabolism <i>İnci Özden</i>	Lecture Minerals <i>İnci Özden</i>	Lecture Vitamins <i>İnci Özden</i>		
12.00-12.50	Lecture Correlation <i>Çiğdem Keleş</i>	Lecture Hormones Regulating Calcium Metabolism <i>İnci Özden</i>	Lecture Minerals <i>İnci Özden</i>	Lecture Vitamins <i>İnci Özden</i>		
13.00-13:50	Lunch Break					
14.00-14.50	Lecture Fetal and Neonatal Physiology <i>Bayram Yılmaz</i>	Lecture Linear Regression <i>Çiğdem Keleş</i>	Lecture Basics of MRI <i>Bilge Güvenç Tuna</i>	Lecture Seeing with Sound: Images from Echoes (Diagnostic Ultrasound Imaging) <i>Bilge Güvenç Tuna</i>	Elective Courses Week XIV	IL
15.00-15.50	Lecture Endocrine Distruptors <i>Bayram Yılmaz</i>	Lecture Linear Regression <i>Çiğdem Keleş</i>	Lecture Basics of MRI <i>Bilge Güvenç Tuna</i>	Independent Learning		
16.00-16.50	Independent Learning	Independent Learning	Independent Learning	Independent Learning	IL	Elective Courses Week XIV
17.00-17.50	Independent Learning	Independent Learning	Independent Learning	Independent Learning		

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COMMITTEE V – UROGENITAL and ENDOCRINE SYSTEMS
IX. WEEK / 27-31 May 2024

	Monday 27-May-2024	Tuesday 28-May-2024	Wednesday 29-May-2024	Thursday 30-May-2024	Friday 31-May-2024
09.00- 09.50	Independent Learning	Independent Learning	Independent Learning	Independent Learning	Independent Learning
10.00- 10.50	Assessment Session Practical Exams Anatomy, Physiology, Biochemistry, Microbiology, Pathology, Pharmacology, Biostatistics and Histology&Embryology				Assessment Session Theoretical Exam Committee V (MCQ)
11.00- 11.50					
12.00- 12.50					
13.00- 13.50	Lunch Break				Program Evaluation Session Review of the Exam Questions, Evaluation of the Committee V Program <i>Secretary of the Committee</i>
14.00- 14.50	Independent Learning	Independent Learning	Independent Learning	Independent Learning	Independent Learning
15.00- 15.50					
16.00- 16.50					
17:00-17:50					

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
- l) Consultant-student relationship is a dynamic and mutual process carried out within the campus and the hospital. It is recommended that the consultant and the student meet at least twice during a semester.

The expectations from the student are as follows:

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

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

*** Student counseling is conducted through the Yeditepe University Faculty of Medicine Education Management System (EYS). The names of the assigned advisors can be accessed via the EMS platform."**

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