# YEDITEPE UNIVERSITY FACULTY OF MEDICINE PHASE I ACADEMIC PROGRAM BOOK 2016 - 2017

Student's;				
Name	:			
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# YEDITEPE UNIVERSITY FACULTY OF MEDICINE PHASE I

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# YEDİTEPE UNIVERSITY FACULTY OF MEDICINE AIM OF MEDICAL EDUCATION PROGRAM

\*"Consensus Commission Report" based on draft compiled at "Workshop for Revision of Aim and

Outcomes of Medical Education Program at Yeditepe University Faculty of Medicine"

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### AIM

The aim of medical education program is to graduate physicians who

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

# YEDİTEPE UNIVERSITY FACULTY OF MEDICINE PROGRAM OUTCOMES OF MEDICAL EDUCATION \*.\*\*

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

### **PODG.1. Basic Professional Competencies**

### **POD.1.1. Clinical Competencies**

- **PO.1.1.1.** *values* preventive health services, *offers* primary prevention (i.e. prevention of diseases for the protection of health), secondary prevention (i.e. early diagnosis and treatment) tertiary prevention (i.e. rehabilitation) and quaternary prevention (i.e. prevention of excessive and unnecessary diagnosis and treatment) services, *provides* consultancy on these issues.
- **PO.1.1.2.** *employs* a patient-centered approach in patient management.
- **PO.1.1.3.** *recognizes* most frequently occurring or significant clinical complaints, symptoms, signs, findings and their emergence mechanisms in clinical conditions.
- PO.1.1.4. takes medical history from the applicant himself/herself or from the individual's companions.
- **PO.1.1.5.** *does* general and focused physical and mental examination.
- **PO.1.1.6.** *interprets* findings in medical history, physical and mental examination.
- **PO.1.1.7.** *employs* diagnostic procedures that are used frequently at the primary health care level.
- **PO.1.1.8.** *selects* tests that have evidence-based high efficacy at the primary health care level and *interprets* results.
- PO.1.1.9. makes clinical decisions using evidence-based systematic data in health care service.
- **PO.1.1.10.** *performs* medical interventional procedures that are used frequently at the primary health care level.
- **PO.1.1.11.** *manages* healthy individuals and patients in the context of health care services.
- PO.1.1.12. keeps medical records in health care provision and uses information systems to that aim.

### POD.1.2. Competencies related to Communication

- **PO.1.2.1.** throughout his/her career, *communicates* effectively with health care beneficiaries, coworkers, accompanying persons, visitors, patient's relatives, care givers, colleagues, other individuals, organizations and institutions.
- **PO.1.2.2.** *collaborates* as a team member with related organizations and institutions, with other professionals and health care workers, on issues related to health.
- **PO.1.2.3.** *recognizes* the protection and privacy policy for health care beneficiaries, co-workers, accompanying persons and visitors.
- PO.1.2.4. communicates with all stakeholders taking into consideration the socio-cultural diversity.

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

- PO.1.3.1. manages and leads within the health care team in primary health care organization.
- **PO.1.3.2.** *recognizes* the principles of health management and health sector economy, models of organization and financing of health care services.
- **PO.1.3.3.** *recognizes* the resources in the health care service, the principles for cost-effective use.

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

- **PO.1.4.1.** *recognizes* the health status of the individual and the community and the factors affecting the health, *implements* the necessary measures to prevent effects of these factors on the health.
- **PO.1.4.2.** *recognizes* and *manages* the health determinants including conditions that prevent access to health care.

### POD.1.5. Competencies related to Research

PO.1.5.1. develops, prepares and presents research projects

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

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

### PODG.2. Professional Values and Perspectives

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

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

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

- **PO.2.2.1.** *recognizes* basic ethical principles completely, and *distinguishes* ethical and legal problems.
- **PO.2.2.2.** *pays importance to* the rights of patient, patient's relatives and physicians, and *provides* services in this context.

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

- **PO.2.3.1.** *relates* historical, anthropological and philosophical evolution of medicine, with the current medical practice.
- **PO.2.3.2.** *recognizes* the individual's behavior and attitudes and factors that determine the social dynamics of the community.

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

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

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

- **PO.2.5.1.** *displays* a patient-centered and holistic (biopsychosocial) approach to patients and their problems.
- PO.2.5.2. respects patients, colleagues and all stakeholders in health care delivery.
- **PO.2.5.3.** *displays* the proper behavior in case of disadvantaged groups and situations in the community.
- PO.2.5.4. takes responsibility for the development of patient safety and healthcare quality.
- PO.2.5.6. evaluates own performance as open to criticism, realizes the qualifications and limitations.

### **PODG.3. Personal Development and Values**

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

- **PO.3.1.1.** *embraces* the importance of lifelong self-learning and *implements*.
- **PO.3.1.2.** *embraces* the importance of updating knowledge and skills; *searches* current advancements and *improves* own knowledge and skills.
- **PO.3.1.3.** *uses* English language at least at a level adequate to follow the international literature and to establish communication related to the profession.

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

- PO.3.2.1. recognizes and investigates postgraduate work domains and job opportunities.
- **PO.3.2.2.** *recognizes* the application requirements to postgraduate work/job domains, and *distinguishes* and *plans* any requirement for further training and work experience.
- **PO.3.2.3.** *prepares* a resume, and *recognizes* job interview methods.

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

- PO.3.3.1. implements the rules of healthy living.
- PO.3.3.2. displays appropriate behavior specific to work under stressful conditions.
- PO.3.3.3. uses self-motivation factors.

# COORDINATION COMMITTEE (TEACHING YEAR 2016–2017)

Elif Çiğdem KASPAR, Ph.D, Assist. Prof. (Coordinator) Soner DOĞAN Ph.D, Assoc. Prof. (Co-coordinator) Bilge GÜVENÇ TUNA Ph.D, Assist. Prof. (Co-coordinator) Aylin YABA UÇAR, Ph.D, Assist. Prof. (Co-coordinator)

### **ICP-I COORDINATION COMMITTEE**

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

### **DESCRIPTION AND CONTENT**

Normal Physiology, Basic Sciences and Medical Terms.

Introduction to Basic Sciences, Cell, Tissue I, Tissue II, Energy and Metabolism.

Organic Chemistry, Biophysics, Medical Biology, Medical History, Anatomy, Anatomical Drawing, Physiology, Histology & Embryology, Medical Biochemistry, Medical Microbiology, Family Medicine, Medical Education, Biostatistics, Humanities, Behavioral Sciences, Ethics, Turkish Language and Literature, Principles of Atatürk and Modern History of Turkey.

### AIM AND LEARNING OBJECTIVES of PHASE I

### **AIM**

**To convey** basic knowledge on medical history, organic chemistry, biology, biophysics, biochemistry, biostatistics, anatomy, physiology, embryology, histology, microbiology, behavioral sciences, civilization history and medical ethics.

**To convey** complementary educational experiences by improving biopsychosocial approach on medical practice.

To prepare students to clinical practice.

### **LEARNING OBJECTIVES**

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

### **KNOWLEDGE**

- 1.0. explain information about medical history, anatomy, physiology, embryology, histology, organic chemistry, biology, biophysics, biochemistry, biostatistics, microbiology, behavioral sciences, civilization history and medical ethics and elective courses.
- 2.0. for biophysics;
  - 2.1. explain basic terms and concepts.
  - 2.2. explain its essential application areas in medicine.
- 3.0. explain the structure and function of the cell at cellular level.
- 4.0. list the developmental processes from zygote to organogenesis.
- 5.0. define four essential tissues forming the body, cells and intercellular materials.
- 6.0. define the link between the structure and function of tissues.
- 7.0. define muscular, vascular and nervous system.
- 8.0. list basic properties and classes of microorganisms.
- 9.0. describe basic terms and concepts about first aid.
- 10.0. describe basic terms and concepts of communication skills.
- 11.0. describe basic terms and concepts about epidemiology.
- 12.0. list fundamental steps of a research study.
- 13.0. describe basic terms of concepts of biostatistics.
- 14.0. explain case scenario related basic medical science topics in a clinical context.

### **SKILLS**

- 1.0. apply first aid skills on anatomic model.
- 2.0. use communication skills in patient-doctor interviews in simulated settings.
- 3.0. present research data with tables and graphs.
- 4.0. apply basic laboratory techniques and use equipments.
- 5.0. use biopsychosocial approach on medical practice.
- 6.0. display (demonstrate) scientific reasoning, information literacy and skills of self-directed, life-long learning.

### **ATTITUDES**

1.0. value teamwork, interpersonal skills, and significance of psychosocial issues

### **BASIC MEDICAL SCIENCES I (MED 104)**

### AIM

**To convey** basic knowledge on medical history, organic chemistry, biology, biophysics, biochemistry, biostatistics, anatomy, physiology, embryology, histology, microbiology, behavioral sciences, civilization history and medical ethics.

### **LEARNING OBJECTIVES**

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

### **KNOWLEDGE**

- explain information about medical history, anatomy, physiology, embryology, histology, organic chemistry, biophysics, biochemistry, microbiology, behavioral sciences, civilization history and medical ethics
- 2.0. for biophysics
  - 2.1.explain basic terms and concepts.
  - 2.2. explain its essential application areas in medicine.
- 3.0. explain the structure and function of the cell at cellular level.
- 4.0. list the developmental processes from zygote to organogenesis.
- 5.0. define four essential tissues forming the body, cells and intercellular materials.
- 6.0. define the link between the structure and function of tissues.
- 7.0. define muscular, vascular and nervous system.
- 8.0. list basic properties and classes of microorganisms.
- 9.0. describe basic terms and concepts about epidemiology.
- 10.0. list fundamental steps of a research study.
- 11.0. describe basic terms of concepts of biostatistics.
- 12.0. explain case scenario related basic medical science topics in a clinical context.

### **SKILLS**

- 1.0. apply basic laboratory techniques and use equipments.
- 2.0. display (demonstrate) scientific reasoning, information literacy and skills of selfdirected, life-long learning.

### **ATTITUDES**

1.0. value teamwork, interpersonal skills, and significance of psychosocial issues

### **INTRODUCTION to CLINICAL PRACTICE I (ICP-I) (MED 102)**

### AIM

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

### **LEARNING OBJECTIVES**

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

### **KNOWLEDGE**

- 1.0. describe basic terms and concepts about first aid.
- 2.0. describe basic terms and concepts of communication skills.

### **SKILLS**

- 1.0. apply first aid skills on anatomic model.
- 2.0. use communication skills in patient-doctor interviews.

### Description

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

### **Credit Facility:**

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

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

First year medical students gain knowledge on First Aid approaches, develop skills in Basic Life Support, Patient/Casualty Transportation and Bandaging Techniques regarding to First Aid. They also acquire basic knowledge on communication and experience patient-doctor encounter with simulated patients (SP's)\*.

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

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

### **Clinical Skills Laboratory**

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

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

Encounters with specially trained individuals, known as simulated patients (SPs), simulate specific cases in outpatient and emergency settings. The pool of SPs consist of adults, from various backgrounds. Clinical cases are created through research and extensive training of the patients portraying these roles.

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

Rules for Attendance of the Students: Students are grouped into 4 and group lists are announced in the announcement board at the beginning of the year. Any changes to practical groups on a week by week basis, will only be considered in exceptional situations such as a medical one. Any changes must be requested by a petition along with relevant documentation to the course coordinator. Any change in sessions will only be accepted interchangeably with another student in another group based on availability of work spaces and course coordinator's discretion (based on evidence provided). Students are required to follow the rules of professional ethics in the laboratory at any time.

When an OSCE is conducted both students and faculty members complete a written evaluation of the event for the improvement of the course and OSCE.

### **ANATOMICAL DRAWING (MED 103)**

### AIM

- 1.0. to convey basic knowledge on anatomical drawing rules and drawing technique.
- 2.0. to equip with skills of three dimensional interpretation of bones and muscles in human body.
- 3.0. to equip with skills of drawing bones and muscles in human body.
- 4.0. to equip with skills of visually explain clinical conditions to patient.

### **LEARNING OBJECTIVES**

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

### **KNOWLEDGE**

- 1.0. list rules associated with anatomical drawing.
- 2.0. represent real axonometrical view under 120° angle based on frontal, horizontal and profile views of human body.

### **SKILLS**

- 1.0. draw frontal, horizontal and profile views of muscles in human body.
- 2.0. draw frontal, horizontal and profile views of bones in human body.
- 3.0. explain visually clinical conditions to patients.

### **ASSESSMENT PROCEDURE:**

For the assessments of the medical students for the anatomical drawing class, it is calculated out of 100 points; 70 points of which comes from the 10 different drawing home works (each has equal value) and 30 points comes from the theoretical exams. Passing grade is 50 points and above.

### **ELECTIVE COURSES**

Elective courses aim to provide complementary educational experiences to the medical school curriculum in order to improve comprehension of biopsychosocial approach of medical students, besides offering an opportunity to extend knowledge of interest in specific domains. For further information on elective course contents, please see: <a href="http://med.yeditepe.edu.tr/ders-programlari">http://med.yeditepe.edu.tr/ders-programlari</a>

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

Code	Subject		
MED 611	Medical Anthropology		
Goals	This course aims to provide, different perspectives of medical issues according to anthropological holistic approach for medical students. To present how social science interprets concepts of health, sickness, illness and disease. To show how culture bound symptoms can vary from culture to culture. To discuss all health problems are universal or cultural and how anthropology describes medical phenomenon by theoretically and methodologically.		
Content	To explain that what is anthropology? What is medical anthropology? What is the relationships between social science and medical? Why we need to be explain some concepts according to perspectives of medical anthropology? The meaning of symptoms: cultural bound symptoms, the personal and social meaning of illness, the stigma and shame of illness, What is the positioning of medical doctors for patients and caregivers; Doctor-Patient relations, patients associations, Biological Citizenship, Medicalized Selves, Biopolitics.		
Course Learning Outcomes	At the end of this course, the student should be able to		
		PERCENTAGE	
Assessment	Assignments	1	100
	Total	1	100

Code	Subject			
MED 612	Creative Drama			
Goals	The aim of this course is the development of independence, creativity, self-control and problem-solving potential and the development of communication skills of medical students by using drama and creativity through improvisation of exercises			
Content	Discovering, learning and teaching approaches that are student-centered in a curiosity focused setting with various cognitive and active learning styles.			
Course Learning Outcomes	At the end of this course, the student should be able to  • show drama skills in vocational areas benefiting from access to creativity, collaboration and empathy which are the ways of learning through play and improvisation.			
	NUMBER PERCENTAGE			
Assessment	Assignments	1	50	
ASSESSITIETIL	Final Examination	1	50	
	Total		100	

Code	Subject		
MED 613	Medical Humanities		
Goals	This course aims to offer a wide variety of subjects related with art, history, cultural values, social movements, philosophy and many other areas. Main targets of this course are to improve Professionalism and Communication Skills and to support the students to develop an understanding about human and his interaction with universe.		
Content	Main concepts of professionalism such as altruism, accountability, excellence, duty, honor and integrity, respect for others and communication skills will be covered through the lectures of history of medicine in an anthropological concept, medicine in literature		
Course Learning Outcomes	and visual arts, and cinemeducation.  At the end of this course, the student should be able to  • gain an understanding of the history of medicine as one of social and cultural transformation in the conception of professionalism, disease and what constitutes illness and health through the centuries.  • develop the skills to write an essay using primary source documents in the context of the history of medicine.  • gain view of different reflections of medicine in literature and visual arts.  • develop a point of view to use literature and visual arts as an imagination instrument of compassion, to tolerate ambiguity, to dwell in paradox, to consider multiple points of view.  • develop better observational and interpretive skills, by using the power of visual arts to elicit an emotional response in the observer.  • gain understanding about the main values and various dimensions of professionalism.  • gain insight about his/her own values and develop humanistic values.  • develop a deeper understanding of human being in various contexts.  • gain understanding about the various factors which influence health in individual and community level.  • gain understanding to use films as a comprehensive guide in medical practice.  • reflect through films to improve their cognitive and emotional awareness.		
		NUMBER	PERCENTAGE
A	Assignments	1	50
Assessment	Final Examination	1	50
	Total		100

Code	Subject			
MED 614	<b>Business Etiquette and Personal Im</b>	nage		
Goals	The aim of this course is to equip the students with skills in creating personal image for successful business life and with appropriate behavior in social platforms.			
Content	Business Etiquette creation techniques and personal image methodologies with case studies.			
Course Learning Outcomes	At the end of this course, the student should be able to  create personal brand for successful business life.  use behavioral codes for business etiquette.			
	NUMBER PERCENTAG			
	Midterm Exam	1	25	
Assessment	Assignments (Homework)	1	25	
Assessment	Evaluation of Group Presentations	1	5	
	45			
	Total		100	

Code	Subject			
MED 615	Futurism and Idea Creation			
Goals	The aim of this course is to convey to the students knowledge on innovative approaches for visionary life, describe the philosophy of futurism.			
Content	Strategies for futurism and applied cas	se studies for personal i	nnovation.	
Course Learning Outcomes	At the end of this course, the student should be able to  use futuristic strategies to create innovative approaches.  use innovative and creative thinking techniques in professional life.			
	NUMBER         PERCENTAGE           Midterm Exam         1         25			
Assessment	Assignments (Homework)	1	25	
Assessment	Evaluation of Group Presentations	1	5	
	Final Exam 1 45			
	Total		100	

Code	Subject				
MED 616	Medical Management, Leadership and	Coaching			
Goals	The aim of this course is to develop leadership skills to manage a team and organizational skills in the case of emergency and lack of crew. Moreover, empathy skills will be developed to create better relationship with the patients, coworkers and customers.				
Content	Leadership Styles, Skills needed in Med, Strategies for New Generation Leadership, Empathy Techniques, Problem Solving with Empathy, and Conciliation with Empathy.				
Course Learning Outcomes	At the end of this course, the student should be able to     develop leadership skills to manage teams.     use empathy techniques for conciliation with their patients and co-workers.				
	NUMBER PERCENTA				
	Midterm Exam 1 25				
Assessment	1	25			
Assessment	Evaluation of Group Presentations	1	5		
	Final Exam 1				
	Total		100		

Code	Subject		
MED 617	Stress and Time Management		
Goals	This course aimes to teach how to deal with stress under different conditions. Besides, effective production skills under stress and time constraints will be subject of the course. This course also will be very helpful for career development. The tools will be offered to students for better communication, presentation and managerial skills.		
Content	In the content of this course; stress and time management for effective production, personal goal settings, motivation and effective communication will be used. Breathing techniques, diction exercises and body language will help to improve student's personal development. Moreover, managerial skills development subjects will be held. Presentations and homework will be used as effective learning tools in this course.		
Course Learning Outcomes	At the end of this course, the student should be able to  apply stress and time management skills in their personal development and career.		
		NUMBER	PERCENTAGE
	Midterm Exam	1	25
Assessment	Research & Observation Homework	1	25
Assessment	Evaluation of Group Presentations	1	5
	Final Exam	1	45
	Total	4	100

Code	Subject		
MED 618	Medicine & Pharmaceutical Industry		
Goals	The aim of this course is to introduce the scope of the pharmaceutical industry with relevance to laws/regulations governing the operations, research and development, drug promotion and pharmacovigilance. In this course, the students will have face-to-face negotiations with pharmaceutical industry executives and exchange opinions about career opportunities about the pharmaceutical industry.		
Content	The course consists of leconegotiations with the pharmac		e workshops and face-to-face
Course Learning Outcomes	At the end of this course, the student should be able to  • explain the scope of the pharmaceutical industry and career opportunities.  • describe laws and regulations governing the operations in the pharmaceutical industry.  • explain research and development activities in the pharmaceutical industry.  • define WHO Model List of Essential Medicines (EML) & WHO Orphan Medicines Programme.  • explain the importance of biopharmaceutical companies &how biopharmaceuticals are produced.  • define pharmacovigilance and describe safety monitoring of medicinal products.  • explain ethical criteria for medicinal drug promotion.		
		NUMBER	PERCENTAGE
	Midterm Exam	1	30
Assessment	Assignments (Homework)	1	40
	Final Exam	1	30
	Total		100

Code	Subject					
MED 619	Storytelling Techniques	Storytelling Techniques				
Goals	This course aims to equip students with storytelling techniques to make smart decisions, communicate better, think creatively and use this modern technique to manage their professional relations.					
Content	Strategies for storytelling techniques and applications.					
Course Learning Outcomes	At the end of this course, the student should be able to  use storytelling techniques in workplace to make decisions, communicate better and think creatively.					
		NUMBER	PERCENTAGE			
	Midterm Exam	1	25			
Assassment	Assignments (Homework)	1	25			
Assessment	Evaluation of Group Presentations	1	5			
	Final Exam	1	45			
	Total		100			

Code	Subject				
MED 620	Art, Culture and Life Style for Healtl	hCare Members	3		
Goals		is course aims	us for their business life; and will join to develop their social and intellectual shion and life style knowledge.		
Content	Life Style Coaching for participants, 0 Movements, Sportive Life Coaching.	Cultural Festival	s Through Europe, Art Exhibitions and		
Course Learning Outcomes	At the end of this course, the student should be able to				
		NUMBER	PERCENTAGE		
	Midterm Exam	1	25		
Assessment	Assignments (Homework)	1	25		
Assessinein	Evaluation of Group Presentations	1	5		
	Final Exam	1	45		
	Total		100		

Code	Subject				
MED 621	Epidemiological Research and Evidence Based Medicine				
Goals	The aim is to provide understanding of epidemiological language and terminology by reading, examining and discussing various types of epidemiological research papers and to develop the desire and enthusiasm for epidemiological studies.				
Content	Different sessions for each type of epidemiological research will be held. The selected research types are case report, cross-sectional, case- control, cohort study, and randomized controlled trial.				
Course Learning Outcomes	At the end of this course, the student should be able to  comprehend various types of epidemiological research.  explain basic epidemiological terminology.				
		NUMBER	PERCENTAGE		
	Midterm Exam	1	25		
	Assignments (Homework)	1	10		
Assignments (Home	Evaluation of Group Presentations	1	20		
	Final Exam	1	45		
	Total		100		

### SPECIFIC SESSIONS / PANELS

### **Introductory Session**

### Aim of the session:

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

### Objectives of the Session:

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

### Rules of the Session:

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

### Implementation of the Session:

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

- Organizational Chart of Yeditepe University Faculty of Medicine Undergraduate Program (YUFM/UG-ME), Work Descriptions and Introduction of Committees 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 (only in Phase I and Phase II)
- 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 <u>Committee Evaluation Session</u> will be held on the last day of each committee after the committee exam.
- 2. Students are required to attend the session.
- 3. The Committee coordinator will lead the session.
- 4. The faculty members who had contributed questions in the committee exam should attend the session.
- 5. Students must comply with the feedback rules while giving verbal feedback and all participants shall abide by rules of professional ethics.

### **Committee Improvement Session**

### Aim:

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

### Objectives:

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

### Rules:

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

### Implementation:

### **Before the Session**

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

### **During the Session**

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

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

### **After the Session**

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

### A SHORT GUIDE FOR STUDENTS TO PROBLEM-BASED LEARNING (PBL)

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

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

PBL is a learning method where students perceive their knowledge gaps, decide on learning issues and achieve these, while working in small groups on a case to solve a patient's problems. So, PBL starts by a clinical case of a patient. While working on the patient's problems you will identify your learning needs and study these. During this whole process you will work with a group of 8-12 students and a tutor.

### **How it works?**

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

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

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

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

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

Your aim will be to find out the reasons, and in some cases, the solutions of the problems presented. It is clear (and we know) that <u>you do not have enough knowledge to understand and solve all the problems presented to you.</u>

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	Learning issues
		(Required)	(Learning objectives)
		information	
Example	Example	Example	Example
Fever	Throat infection	Throat examination	Causes of fever
Cough	Pneumonia	Chest examination	How is body temperature controlled?
Pallor	Anemia	Chest X-ray	Anatomy of the throat
		Blood count	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 STUDENT ASSESSMENT FORM\***

Ph	ase Committee						
PB	L Scenario Name						
Fac	cilitator Name						
Stı	ident Name						
	TERACTION WITH	Not observed	Poor	Fair	Average	Good	Excellent
GIV	ANTIGITATION TO GROOT	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
		0	1	2	3	4	5
5.	Determines valid learning issues						
6.	Finds valid sources						
7.	Critically analyses the sources						

Not observed	Poor	Fair	Average	Good	Excellent
0	1	2	3	4	5
Not observed	Poor	Fair	Average	Good	Excellent
0	1	2	3	4	5
observed	Poor	Fair	Average	Good	Excellent
0	1	2	3	4	5
4 4b 0 0 0 d 0 d					
	Not observed 0	Not observed Poor 0 1  Not observed Poor 0 1  Not observed Poor 1  Not observed Poor 1	Observed Poor Fair O 1 2  Not Observed Poor Fair O 1 2  Not Observed Poor Fair O 1 2	Observed  O  O  Observed  O  O  Observed  O  O  Observed  O  O  O  O  O  O  O  O  O  O  O  O  O	Not observed Poor Fair Average Good  Not observed Poor Fair Average Good  Not observed Poor Fair Average Good  Not observed Poor Fair Average Good  Not observed Poor Fair Average Good  Not observed Poor Fair Average Good  Not observed Poor Fair Average Good

<sup>\*</sup>Assessment form should be filled in at the end of scenario (i.e. following the completion of three consecutive sessions).

### INDEPENDENT LEARNING

### **Description:**

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

### Aim:

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

### **Objectives:**

With this instructional strategy, students will develop;

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

### Rules:

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

### What a student should do for learning independently?

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

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

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

### Reference:

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

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

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

### **ASSESSMENT PROCEDURE**

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

- Exams:
  - o Committee Exam (CE)
  - Mid-term Exam (MTE)
  - o Final Exam (FE)
  - o Incomplete Exam (ICE)
  - Make-up Exam (MUE)
- Scores\*:
  - o Committee Score (CS)
  - o Committees Mean Score (CMS)
  - o Introduction to Clinical Practice Score (ICPS)
  - Anatomical Drawing Score (ADS)
  - o Common Compulsary Course Score (CCCSs)
  - Elective Course Score (ECSs)
  - o Scientific Project Score (SPS)
  - Final Exam Score (FES)
  - o 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
		EMQ: Extended Matching Questions	CE	CS
		MEQ: Modified Essay Questions	CE	CS
		FSAQ: Fill-in-the- Blank Short Answer Questions	MUE	CS
Competency-based Assessment	OSCE: Objective Structured Clinical Examination	OSCE Checklist		ICPS
	OSPE: Objective Structured Practical Examination	OSPE Checklist		cs
	LPE: Laboratory Practical Exam	LPE Checklist		CS
Performance-based Assessment	PWPE: Project Writing and Presenting Evaluation	PWPE Checklist		SPS
	DOPS: Direct Observation of Procedural Skills	DOPS Checklist		CS
	AID: Anatomical Images Drawing			ADS
	PBL-P: Evaluation of PBL Student's Performance	PBL Student Evaluation Form		CS

<sup>\*</sup> All scores have a range of 0-100 points.

	Exams Information (MED 104, MED 102)					
CE	For the proportional correspondence of individual learning objectives, please see the committee's					
	assessment matrix table/page.					
MTEICP	MTE <sub>ICP</sub> 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	MUE will be held only twice in a term.					
	MUE consists of FSAQs.					
	MUE content will be developed by the coordination committees.					

	Scores Information					
(MED 104,MED 102,MED 103, HUM 103,	TKL 201, TKL 202, HTR 301, HTR 302, MED 190, MED 191, MED 192,MED 193)					
CS	The committee score is based on various question types/numbers and/or					
	assessment tools (MCQ, EMQ, MEQ or Checklists).					
	Please see the committee's assessment matrix table/page for the					
	specifications. Contribution of student's performance during PBL sessions to					
	CSs of Committee II, III and V is 5%.					
CMS	= Average of CSs					
ICPS	= (40% MTE <sub>ICP</sub> ) + (60% Final OSCE)					
ADS	= (70% AID <sub>AD</sub> ) + (30% FE <sub>AD</sub> )					
CCCSs	= Score information will be announced by Course Coordinator.					
ECSs	= Score information will be announced by Course Coordinator.					
SPS	= Score information is shown in below Scientific Projects Assessment Table.					
FES	= Final Exam Score					
ICES	= Incomplete Exam Score					
TS	= 96% of CMS + 4% of SPS					
for students, who are exempted from FE						
TS	= 96% of (60% of CMS + 40% of FES or ICES) + 4% of SPS					
for students, who are not exempted from FE						

Pass or	Fail	Calculations	of	the	Courses

### Basic Medical Sciences I (MED 104)

*Pass; TS* ≥ *50* 

Fail; FES < 50 (barrier point), ICES < 50 (barrier point), or/and TS < 50

The student is exempted from FE, if the CMS is ≥ 75 and all CSs are ≥ 50

The FE and ICE <u>barrier point is not applied</u> to the students whose all CSs are ≥ 50

### Introduction to Clinical Practice I (MED 102)

Pass; ICPS ≥ 50
Fail; ICPS < 50

### **Anatomical Drawing (MED 103)**

*Pass; ADS* ≥ *50 Fail; ADS* < *50* 

### **Common Compulsary Courses**

(HUM 103, TKL 201, TKL 202, HTR 301, HTR 302)

Pass; CCCSs ≥ 50
Fail; CCCSs < 50

### **Elective Courses**

(MED 190, MED 191, MED 192, MED 193)

**Pass**; ECSs ≥ **50 Fail**; ECSs < **50** 

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

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

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

**EMQ** are similar to multiple choice questions but with one key difference, that they test knowledge in a far more applied, in depth, sense. EMQ is based on a single theme, two or more questions and has a long option list.

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

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

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

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

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

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

**DOPS** is designed specifically to assess practical skills in a workplace setting. A student is observed and scored via a checklist by an assessor while performing a routine practical procedures (i.e. microscopy).

### **SCIENTIFIC PROJECTS - I**

The purpose of Scientific Projects class is to teach the medical students how to read and write a scientific article. Throughout the year, each Phase One student is expected to prepare an article report and present it in class. Students are free to choose their articles from given journal list for article reading part. All article reports are due before the end of first half of the educational year. In second half; students are given four different scenarios of scientific data and are expected to write an article on their choice of scenarios, individually. All articles will be presented as posters at Scientific Day of Yeditepe School of Medicine, during May, 2016. Scientific Projects course has 4% contribution to Term Score (TS).

### SCIENTIFIC PROJECTS ASSESSMENT TABLE

CRITERIA	Unsatisfactory	Below Expectations	Meets Expectations	Above Expectations	Clearly Outstanding	Not Addressed / Observed
Abstract Writing	1	2	3	4	5	0
Introduction	1	2	3	4	5	0
Methods Part (including statistics, ethical issues etc)	1	2	3	4	5	0
Presentation of results (Tables, graphs etc.)	1	2	3	4	5	0
Discussion	1	2	3	4	5	0
References	1	2	3	4	5	0
Article as a whole (representing the given mock data)	1	2	3	4	5	0
Overall presentation	1	2	3	4	5	0
TOTAL POINTS	40 x 2,5=	100 pts (if a	all criteria l	nas 5 point	s)	

### **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-

- o Students must not give or receive assistance of any kind during the exam.
- Gaining access to exam questions before the exam.
- o 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.
- o 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.
- o Taking an exam book or other exam materials from the exam room.
- Taking an exam in place of another student.
- o Arranging to have another person take an exam for the student.
- Disobeying to the conduct of supervisor during the exam.
- o Disclosing the contents of an exam to any other person.
- o Failing to remain in the exam room for a given period of time by the supervisors.
- Failing to follow other exam instructions.

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

### **WEEKLY COURSE SCHEDULE and LOCATIONS**

	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY
09:00-09:50	MED 104	MED 104 (B 311)	MED 104 (B 311)	MED 104 (B 311)	MED 104 (B 311)
10:00-10:50	MED 104	MED 102** (CSL)	MED 104 (B 311)	MED 104 (B 311)	MED 104 (B 311)
11:00-11:50	MED 104	MED 102 (CSL)	MED 104 (B 311)	MED 104 (B 311)	MED 104 (B 311)
12:00-12:50	MED 104	MED 102 (CSL)	MED 104 (B 311)	MED 104 (B 311)	MED 104 (B 311)
13:00-13:50					
14:00-14:50	TKL201&202 (B 311)	MED 103 (C 937)	MED 104 (B 311)	MED 104 (B 311)	MED 104 (B 311)
15:00-15:50	TKL201&202 (B 311)	MED 103 (C 937)	MED 104 (B 311)	MED 104 (B 311)	MED 104 (B 311)
16:00-16:50	HTR 301 (B311) (FALL)	Humanities HUM 103 (FALL) HTR 302 (SPRING) (B311)	MED 104 (B 311)	Elective Course (SPRING)	MED 104 (B 311)
17:00-17:50	HTR 301 (B311) (FALL)	HUM 103 (B311) (FALL) HTR 302 (SPRING) (B311)	- MED 104 (B 311)	Elective Course (SPRING)	MED 104 (B 311)

MED 104 Basic Medical Sciences (B 311) or Laboratories\*

MED 102 Introduction to Clinical Practice I (CSL)\*\* or (B 311)\*\*\*

MED 103 Anatomical Drawing (C 937)

**TKL 201 & 202** Turkish Language & Literature (B 311)

HTR 301 & 302 Atatürk's Principles & History of Modern Turkey (B 311)

HUM 103 Humanities (İnan Kıraç Conference Hall)

MED 611-621 Elective Courses (see <a href="https://www.med.yeditepe.edu.tr">www.med.yeditepe.edu.tr</a>)

PBL Problem Based Learning (see <a href="https://www.med.yeditepe.edu.tr">www.med.yeditepe.edu.tr</a>)

B 311 Ground Floor

C 937 5<sup>th</sup> Floor

<sup>\*</sup>MED 104 Laboratories will be in skill laboratories of related departments.

<sup>\*\*</sup> MED 102 Practical Lectures will be in Clinical Skills Laboratory (CSL) (Ground Floor)

<sup>\*\*\*</sup>Theoretical lectures will be in B311.

### **ACADEMIC CALENDAR 2016 - 2017**

### COMMITTEE I

### **INTRODUCTION TO BASIC MEDICAL SCIENCES (7 Weeks)**

Beginning of Committee	September 19, 2016	Monday
End of Committee	November 4, 2016	Friday
Committee Practical Exams	October 31, 2016	Monday
Committee Theoretical Exam	November 4, 2016	Friday

National Holiday October 28-29, 2016 Friday -Saturday

# COMMITTEE II CELL (8 Weeks)

Beginning of Committee	November 07, 2016	Monday
End of Committee	December 30, 2016	Friday
Committee Practical Exams	December 28, 2016	Monday
Committee Theoretical Exam	December 30, 2016	Friday

Commemoration of Atatürk November 10, 2016 Thursday New Year January 01, 2017 Sunday

# COMMITTEE III TISSUE I (6 Weeks)

Beginning of Committee	January 02, 2017	Monday
End of Committee	February 24, 2017	Friday
Committee Anatomy Practical Exam	February 20, 2017	Monday
Committee Physiology Practical Exam	February 21, 2017	Tuesday
Committee Theoretical Exam	February 24, 2017	Friday

MIDTERM BREAK January 16, 2017 January 27, 2017

# COMMITTEE IV TISSUE II (8 Weeks)

( /		
Beginning of Committee	February 27, 2017	Monday
End of Committee	April 21, 2017	Friday
Committee Anatomy Practical Exam	April 17, 2017	Monday
Committee Biostatistics Exam	April 17, 2017	Monday
Committee Medical Biology Practical Exam	April 19,2017	Wednesday
Committee Theoretical Exam	April 21, 2017	Friday

White Coat Ceremony and Physicians' Day
National Holiday

March 14, 2017

April 23, 2017

Sunday

### **COMMITTEE V**

April 24, 2017	Monday
June 02, 2017	Friday
May 30, 2017	Tuesday
May 30, 2017	Tuesday
June 02, 2017	Friday
	June 02, 2017 May 30, 2017 May 30, 2017

Labor's Day	May 1, 2017	Monday
National Holiday	May 19, 2017	Friday

### **Basic Medical Sciences I**

Make-up Exam	June 12-13, 2017	Monday-Tuesday
Final Exam	June 20, 2017	Tuesday
Incomplete Exam	July 20, 2017	Thursday

### ICP- I:

Midterm Exam	February 7, 2017	Tuesday
Make-up Exam	May 31, 2017	Wednesday
Final Exam	June 05-06 2017	Monday-Tuesday
Incomplete Exam	July 21, 2017	Friday

### **ELECTIVE Lectures-Spring 2016-17**

Final Exam	May 29, 2017	Monday
Incomplete Exam	June 8, 2017	Thursday

### Turkish Language & Literature TKL

Midterm Exam	October 31, 2016	Monday (14:00-16:00)
Fall Final Exam	December 19, 2016	Monday (14:00-16:00)
Spring Final Exam	May 22, 2017	Monday (14:00-16:00)

### Atatürk's Principles & History of Modern

<u>ruikey</u>		
Fall Midterm Exam	November 7, 2016	Tuesday (16:00-18:00)
Fall Final Exam	January 02, 2017	Monday (16:00-18:00)
Spring Midterm Exam	March 28, 2017	Tuesday (16:00-18:00)
Spring Final Exam	May 13, 2017	Saturday (10:00-18:00)

HTR

### <u>Humanities</u> HUM

Fall Final Exam	December 24,2016	Saturday (14:00-16:00)
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1. Coordination Committee Meeting	: October 20, 2016 14:00 Thursday	
2. Coordination Committee Meeting	: January 5, 2017 14:00 Thursday (with student participation)	
3. Coordination Committee Meeting	: May 10, 2017 16:00 Wednesday (with student participation)	
4. Coordination Committee Meeting	: July 4, 2017 14:00 Tuesday	

### **RECOMMENDED TEXTBOOKS**

NO	DEPARTMENT	ТЕХТВООК	AUTHOR	PUBLISHER
1	ANATOMY	Gray's Anatomy for Students	R.L. Drake et al	Churchill Livingstone
		Hollinshead's Textbook of Anatomy	Cornelius Rosse & Penelope Gaddum-Rosse	Lippincott Raven
		A Textbook of Neuroanatomy	Maria Patestas & Leslie P. Gartner	Blackwell
2	BIOCHEMISTRY	Textbook of Biochemistry with Clinical Correlations	Thomas M. Devlin	Wiley-Liss Publishing Company
		Harper's Illustrated Biochemistry	Robert K. Murray et al	Mc-Graw-Hill Companies
		Lehninger Principles of Biochemistry	David L. Nelson, Michael M. Cox	W.H. Freeman Publishing Company
3	BIOPHYSICS	Introductory Biophysics: Perspectives on the Living State	J.R. Claycomb, J.P. Tran	Jones & Bartlett Publishers
4	BIOSTATISTICS	Primer of Biostatistics	Stanton Glantz	Mc-Graw-Hill Companies
5	HISTOLOGY	Junqueira's Basic Histology: Text and Atlas 13 <sup>th</sup> Ed.	Anthony Mescher	Mc-Graw-Hill Companies
	EMBRYOLOGY	The Developing Human: Clinically Oriented Embryology, 10 <sup>th</sup> Ed.	Keith L. Moore & T. V. N. Persaud	Saunders
6	MEDICAL BIOLOGY	Molecular Biology of the Cell	Bruce Alberts et al	Garland Science
7	MEDICAL ETICS	Clinical Bioethics: Theory and Practice in Medical- Ethical Decision Making	James E. Drane	Sheed & Ward
	MEDICAL HISTORY	Medical History for Students	John R. Green	Thomas
8	MICROBIOLOGY	Medical Microbiology: with Student Consult	P. R. Murray et al	Saunders
9	ORGANIC CHEMISTRY	Organic Chemistry	John E. McMurry	Cengage Learning
10	PHYSIOLOGY	Guyton Physiology	John E. Hall	Saunders
10		Human Physiology	Stuart Fox	Mc-Graw-Hill Science

#### COMMITTEES

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

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

Beside 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 201 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.

#### **COMMITTEE I - INTRODUCTION TO BASIC MEDICAL SCIENCES**

# DISTRIBUTION of LECTURE HOURS September 19, 2016 - November 04, 2016 COMMITTEE DURATION: 7 WEEKS

MED 104	BASIC MEDICAL SCIENCES I	THEO.	PRAC.	TOTAL
	DISCIPLINE	99	8	107
	ANATOMY	9	2 Gr x 2 H	11
	BIOPHYSICS	18	0	18
	HISTOLOGY & EMBRYOLOGY	6	2 Gr x 2 H	8
	MEDICAL BIOLOGY	37	3 Gr x 4 H	41
	MEDICAL HISTORY & ETHICS	10	0	10
	MICROBIOLOGY	3	0	3
	ORGANIC CHEMISTRY	12	0	12
	PHYSIOLOGY	2	0	2
	SCIENTIFIC PROJECT I	2	0	2

MED 103	ANATOMICAL DRAWING	0	14	14
MED 102	ICP I	17	0	17
HTR 301-302	ATATURK'S PRINCIPLES & HISTORY OF MODERN TURKEY	14	0	14
HUM 101-102	HUMANITIES	14	0	14
TKL 201-202	TURKISH LANGUAGE & LITERATURE	14	0	14

TOTAL	450	00	400
IOIAL	158	22	180
			ı

Coordination Committee Head		Turgay İSBİR, Prof.
	Secretary	E. Çiğdem KASPAR, Assist. Prof.
	Member	Bilge GÜVENÇ TUNA, Assist. Prof.
	Member	Alev CUMBUL, Assist. Prof.

## COMMITTEE I - INTRODUCTION TO BASIC MEDICAL SCIENCES LECTURERS

BASIC MEDICAL SCIENCES I	
DISCIPLINE	FACULTY
ANATOMY	Erdem SÖZTUTAR, MD, Lecturer
BIOPHYSICS	Bilge GÜVENÇ TUNA, PhD, Assist. Prof.
	Ünal USLU, MD, Assoc. Prof.
HISTOLOGY & EMBRYOLOGY	Alev CUMBUL, PhD, Assist. Prof.
	Aylin YABA UÇAR, PhD, Assist. Prof.
	Turgay İSBİR, PhD, Prof.
MEDICAL BIOLOGY	Soner DOĞAN, PhD, Assoc. Prof.
	Deniz KIRAÇ, PhD, Assist. Prof.
MEDICAL HISTORY & ETHICS	Elif VATANOĞLU LUTZ, MD, Assoc. Prof.
MEDICAL MICROBIOLOGY	Çağatay ACUNER, MD, Assoc. Prof.
ORGANIC CHEMISTRY	Enise Ece GÜRDAL HAKGÖR, PhD, Assist. Prof.
BHASIOI OCA	Bayram YILMAZ, PhD, Prof.
PHYSIOLOGY	Mehtap KAÇAR, MD, PhD, Assoc. Prof.
SCIENTIFIC PROJECT I	Gülderen YANIKKAYA DEMİREL, MD, Assoc. Prof.

	Güldal İZBIRAK, MD, Assoc.Prof.
INTRODUCTION TO CLINICAL	Hülya AKAN, MD, Assoc. Prof.
PRACTICE I (ICP- I)	Özlem TANRIÖVER, MD, Assoc.Prof.
	Arzu AKALIN, MD, Assist. Prof.
ANATOMICAL DRAWING	Refik AZİZ, PhD, Assist. Prof.
ATATURK'S PRINCIPLES & HISTORY OF MODERN TURKEY	Davut EKŞİ, PhD, Instructor
HUMANITIES	
TURKISH LANGUAGE & LITERATURE	Bedri SELİMHOCAOĞLU, Instructor

## COMMITTEE I – INTRODUCTION TO BASIC MEDICAL SCIENCES AIM and LEARNING OBJECTIVES

#### AIM

- 1. **to convey** basic term and concepts on medical history, anatomy, physiology, embryology, histology, medical biology, biophysics, organic chemistry and microbiology.
- 2. to convey basic knowledge on viability.
- 3. to convey knowledge on cellular structure and functions.

#### **LEARNING OBJECTIVES**

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

- 1.0. define fundamental concepts of anatomy
  - 1.1. define anatomy, its historical development and basic anatomical terms.
  - 1.2. explain basic concepts related to regional and systemic anatomy, and osteology.
- 2.0. define anatomical properties and clinical implications for bones of the upper and lower limbs.
- 3.0. explain basic terms and concepts related to basic physics, basic biophysics, system. international units, biomaterials, bio-optics, radiation physics, biomechanics, bioelectronics.
- 4.0. explain mechanic, electrical and optical processes that are characteristics of living organisms
- 5.0. classify microscope types and list using area
- 6.0. explain methods used in histology and their usage purposes.
- 7.0. explain human genome project and the importance of the results.
- 8.0. explain the structure and function of eukaryotic subcellular organelles.
- 9.0. identify the molecules involved in the communication between the cells.
- 10.0. explain the mechanism of signal transduction,
- 11.0. describe the programmed cell death.
- 12.0. define the concepts of medicine disease and health in the evolutionary perspective.
- 13.0. explain disease and health theories in prehistoric era
- 14.0. explain history of discovery for important microorganisms causing infections in humans
- 15.0. define structure of atom and chemical bonds.
- 16.0. for organic compounds
  - 16.1. define functional groups
  - 16.2. classify possible reactions
- 17.0. define homeostasis

## COMMITTEE I - INTRODUCTION TO BASIC MEDICAL SCIENCES COMMITTEE ASSESSMENT MATRIX

LEARNING OBJECTIVES	LECTURER / INSTRUCTOR	DISTRUBITION of MCQs		s	
OBJECTIVES		CE	FE	ICE	TOTAL
1.0, 2.0	Dr. Erdem Söztutar	8	4	4	16
3.0, 4.0	Dr. B.Güvenç Tuna	17	9	9	35
5.0 - 6.0	Dr. Ü. Uslu	6	3	3	12
3.0 - 0.0	Dr. A. Cumbul	U	3	3	12
7.0 – 11.0	Dr. T. İsbir	34	17	17	68
7.0 - 11.0	Dr. S. Doğan	34	17	17	00
12.0, 13.0	Dr. E. Vatanoğlu	9	4	4	17
14.0	Dr. Çağatay Acuner	3	1	1	5
15.0,16.1,16.2	Dr. E. Hakgör	11	6	6	23
17.0	Dr. B. Yılmaz			1	4
	TOTAL			45/200#	180
LEARNING OBJECTIVES	DISCIPLINE	DISTE	RUBITION	of EMQ PO	INTS
OBJECTIVES			С	E	
3.0, 4.0	BIOPHYSICS		3	}	
7.0 – 11.0	MEDICAL BIOLOGY		7	7	
	TOTAL		1	0	
LEARNING OBJECTIVES	DISCIPLINE	NE DISTRUBITION of LAB POINTS			
		DOPS LPE		PΕ	
1,0, 2.0	ANATOMY			2	5
5.0 - 6.0	HISTOLOGY & EMBRYOLOGY	2	5	-	i
7.0 – 11.0	MEDICAL BIOLOGY	- 50			0
	TOTAL		10	00	

Total number of MCQs are 90 (each question has equal value)

Total number of EMQs are 10 (each question has equal value)

Total value of DOPS and LPE are equal to 100 points

CS = 90% CE (MCQ+EMQ) + 10% (DOPS+LPE)

\*In FE and ICE, 45 out of 200 MCQs will be from this Committee (Each question has equal value.)

#### Abbreviations:

MCQ: Multiple Choice Question
EMQ: Extending Matching Question

DOPS: Direct Observation of Procedural Skills

LPE: Practical Lecture Evaluation

CE: Committee Exam
CS: Committee Score
FE: Final Exam
ICE: Incomplete Exam

### COMMITTEE I - INTRODUCTION TO BASIC MEDICAL SCIENCES I. WEEK / 19 - 23 Sep 2016

			1. WEEK / 19 – 23 Sep 2016		
	Monday	Tuesday	Wednesday	Thursday	Friday
09.00- 09.50	19-Sep-2016 Independent Learning	20-Sep-2016 Independent Learning	21-Sep-2016  Independent Learning	22-Sep-2016  Independent Learning	23-Sep-2016  Lecture  Microscopy (Brightfield, Fluorescent, Confocal)  Alev Cumbul
10.00- 10.50	Introductory Session Introduction to Faculty Dean	Lecture / ICP I Introduction to the First Aid Programmes Güldal İzbırak	Lecture History and Scope of Microbiology Medical Microbiology	Lecture Origin of Life Turgay İsbir	Lecture Electronmicroscopy Alev Cumbul
11.00- 11.50	Introductory Session Introduction to Committee I Phase I Coordinator	Lecture / ICP I Basic Human Body Arzu Akalın	Lecture History and Scope of Microbiology Medical Microbiology	Lecture Origin of Life Turgay İsbir	Lecture Introduction to Medicinal Organic Chemistry Ece Gürdal Hakgör
12.00- 12.50	Lunch Break	Lunch Break	Lunch Break	Lunch Break	Lecture Introduction to Organic Chemistry Ece Gürdal Hakgör
13.00- 13.50	Independent Learning	Lecture / ICP I Scene Assessment Arzu Akalın	Lecture Introduction to Medical Biology Turgay İsbir	Independent Learning	Lunch Break
14.00- 14.50	Common Compulsory Course	Common Compulsory Course Anatomical Drawing	Lecture Introduction to Biophysics; Medicine, Science or Art Bilge Güvenç Tuna	Independent Learning	Lecture Cellular Organization of Life Turgay İsbir
15.00- 15.50	Turkish Language & Literature Bedri Selimhocaoğlu	Anatomicai Drawing Refik Aziz	Lecture Physical Measurements and Units, Unit Standards Bilge Güvenç Tuna	Lecture Statics (Mass and Weight), Gravitation Law Bilge Güvenç Tuna	<b>Lecture</b> Cellular Organization of Life Turgay İsbir
16.00- 16.50	Common Compulsory Course Ataturk's Principles & History of Modern Turkey	Common Compulsory Course Humanities Instructor	<b>Lecture / ICP I</b> Legal Aspect of First Aid <i>Elif Vatanoğlu Lutz</i>	Lecture Introduction to Histology; Basic Terminology <i>Ünal Uslu</i>	<b>Lecture</b> Cellular Organization of Life Turgay İsbir
17.00-17.50	Davut Ekşi	instructor .	Lecture / ICP I Legal Aspect of First Aid Elif Vatanoğlu Lutz	Independent Learning	Lecture Cellular Organization of Life Turgay İsbir

### COMMITTEE I - INTRODUCTION TO BASIC MEDICAL SCIENCES II. WEEK / 26 Sep - 30 Sep 2016

	Monday	Tuesday	Wednesday	Thursday	Friday
09.00- 09.50	26-Sep-2016	27-Sep-2016  Lecture  Newton's Laws of Motion  Bilge Güvenç Tuna	28-Sep-2016  Lecture Acids & Bases Ece Gürdal Hakgör	29-Sep-2015  Lecture  Nature of Light,  Electromagnetic Spectrum  Bilge Güvenç Tuna	30-Sep-2015  Lecture  Alkanes & Cycloalkanes  Ece Gürdal Hakgör
10.00- 10.50		Lecture Center Of Mass, Moment Bilge Güvenç Tuna	<b>Leture</b> Acids & Bases Ece Gürdal Hakgör	Lecture Reflection and Refraction of Light Bilge Güvenç Tuna	Leture Alkanes & Cycloalkanes Ece Gürdal Hakgör
11.00- 11.50	Independent Learning	<b>Lecture / ICP I</b> Basic Life Support <i>Güldal İzbırak</i>	Lecture Approaches to Medicine/ Medicine in Prehistoric Times Elif Vatanoğlu Lutz	Lecture History and Scope of Microbiology Medical Microbiology	Lecture Methods of Histology; Tissue Processing Alev Cumbul
12.00- 12.50		Lecture / ICP I Basic Life Support Güldal İzbırak	Lecture Approaches to Medicine/ Medicine in Prehistoric Times Elif Vatanoğlu Lutz	Independent Learning	Lecture Methods of Histology; Immunohistochemistry Alev Cumbul
13.00- 13.50	Lunch Break	Lunch Break	Lunch Break	Lunch Break	Lunch Break
14.00- 14.50	Common Compulsory Course	Common Compulsory Course	Lecture Energy Protection Principle Bilge Güvenç Tuna	Lecture Introduction to Anatomy Erdem Söztutar	Laboratory / Histology Assessment (DOPs) Microscopy
15.00- 15.50	Turkish Language & Literature  Bedri Selimhocaoğlu	Anatomical Drawing Refik Aziz	Lecture Energy, Work and Power, Mechanical efficiency Bilge Güvenç Tuna	<b>Lecture</b> Terminology in Anatomy <i>Erdem Söztutar</i>	Group B Group A Independent Learning
16.00- 16.50	Lecture Common Compulsory Course Ataturk's Principles &	Common Compulsory Course Humanities Conferences	Independent Learning	Independent Learning	Group A Independent Group B
17.00-17.50	History Of Modern Turkey <i>Davut Ekşi</i>	Instructor			Learning

### COMMITTEE I - INTRODUCTION TO BASIC MEDICAL SCIENCES III. WEEK / 3 - 7 Oct 2016

	Monday 03-Oct-2016	Tuesday 04-Oct-2016	Wednesday 05-Oct-2016	Thursday 06-Oct-2016	Friday 07-Oct-2016	
09.00- 09.50	03-OCI-2016	Independent Learning	Lecture Approaches to Medicine/ Medicine in Prehistoric Times Elif Vatanoğlu Lutz	Lecture Cell Adhesion Turgay İsbir	Lecture Assyro-Babylon Medicine Elif Vatanoğlu Lutz	
10.00- 10.50	Independent Learning	Lecture Other Histologic Methods Alev Cumbul	Lecture Approaches to Medicine/ Medicine in Prehistoric Times Elif Vatanoğlu Lutz	<b>Lecture</b> Cell Adhesion <i>Turgay İsbir</i>	<b>Lecture</b> Assyro-Babylon Medicine <i>Elif Vatanoğlu Lutz</i>	
11.00- 11.50		<b>Lecture / ICP I</b> Shock and Bleeding Control <i>Hülya Akan</i>	<b>Lecture</b> Cellular Organization of Life <i>Turgay İsbir</i>	<b>Lecture</b> Cell Signalling Events <i>Turgay İsbir</i>	<b>Lecture</b> Alkenes Ece Gürdal Hakgör	
12.00- 12.50		Lecture / ICP I Burns, Freezing, Frostbite Hülya Akan	Lecture Cytoskeleton Turgay İsbir	Lecture Lenses; Lens-maker Equation Bilge Güvenç Tuna	<b>Lecture</b> Alkenes Ece Gürdal Hakgör	
13.00- 13.50	Lunch Break	Lunch Break	Lunch Break	Lunch Break	Lunch Break	
14.00- 14.50	Common Compulsory Course	Common Compulsory Course	<b>Lecture</b> Cytoskeleton <i>Turgay İsbir</i>	Lecture Cell Signalling Events Turgay İsbir	Lecture Cell Signalling Events Turgay İsbir	
15.00- 15.50	Turkish Language & Literature Bedri Selimhocaoğlu	Anatomical Drawing <i>Refik Aziz</i>	<b>Lecture</b> Cytoskeleton <i>Turgay İsbir</i>	Lecture Cell Signalling Events Turgay İsbir	Laboratory / Med. Biology Introduction to Medical Biology Turgay İsbir Soner Doğan & Deniz Kıraç	
16.00- 16.50	Common Compulsory Course Ataturk's Principles & History Of Modern Turkey	Common Compulsory Course Humanities Instructor	<b>Lecture</b> Cytoskeleton <i>Turgay İsbir</i>	Lecture Cellular Organization of Life Biological Energy Systems Enzymes and Kinetics Soner Doğan	Group A Group B	
17.00-17.50	Davut Ekşi		<b>Lecture</b> Cell Adhesion <i>Turgay İsbir</i>	Lecture Cell Membrane Soner Doğan	Independent Learning	

### COMMITTEE I - INTRODUCTION TO BASIC MEDICAL SCIENCES IV. WEEK / 10 – 14 Oct 2016

	Monday 10-Oct-2016	Tuesday 11-Oct-2016	Wednesday 12-Oct-2016	Thursday 13-Oct-2016	Friday 14-Oct-2016
09.00- 09.50		<b>Lecture / ICP I</b> Foreign Objects <i>Hülya Akan</i>	Lecture Intercellular Cell Signalling Turgay İsbir	Lecture / Scientific Project I  How to Read and Write an Article  Gülderen Yanıkkaya Demirel	Lecture Stereochemistry Ece Gürdal Hakgör
10.00- 10.50	Independent Learning	Lecture / ICP I Fractures and Dislocation Hülya Akan	<b>Lecture</b> Intercellular Cell Signalling <i>Turgay İsbir</i>	Lecture / Scientific Project I How to Read and Write an Article Gülderen Yanıkkaya Demirel	Lecture Stereochemistry Ece Gürdal Hakgör
11.00- 11.50		<b>Lecture</b> Cell Signalling Events <i>Turgay İsbir</i>	<b>Lecture</b> Intercellular Cell Signalling <i>Turgay İsbir</i>	<b>Lecture</b> Programmed Cell Death <i>Turgay İsbir</i>	Lecture Bones of the Upper Limb Erdem Söztutar
12.00- 12.50		Lecture Cell Signalling Events Turgay İsbir	<b>Lecture</b> Optical Aberrations Bilge Güvenç Tuna	<b>Lecture</b> Programmed Cell Death <i>Turgay İsbir</i>	Lecture Bones of the Upper Limb Erdem Söztutar
13.00- 13.50	Lunch Break	Lunch Break	Lunch Break	Lunch Break	Lunch Break
14.00- 14.50	Common Compulsory Course	Common Compulsory Course	Lecture Introduction to Osteology Erdem Söztutar	Lecture Bio-optics: Vision and Eye, Refraction errors Bilge Güvenç Tuna	Laboratory / Med. Biology The Preparation of Aqueous Solutions Turgay İsbir Soner Doğan & Deniz Kıraç
15.00- 15.50	Turkish Language & Literature <i>Bedri Selimhocaoğlu</i>	Anatomical Drawing Refik Aziz	<b>Lecture</b> Bones of the Soulder <i>Erdem Söztutar</i>	Lecture Optical Properties of Microscopes Bilge Güvenç Tuna	Group A Independent Learning Group B Group C Independent Learning
16.00- 16.50	Common Compulsory Course Ataturk's Principles &	Common Compulsory Course	Lecture / ICP I Injuries Arzu Akalın	Laboratory / Med. Biology The Preparation of Aqueous Solutions Turgay İsbir Soner Doğan & Deniz Kıraç	Laboratory / Med. Biology The Preparation of Aqueous Solutions Turgay İsbir Soner Doğan & Deniz Kıraç
17.00-17.50	Ataturk's Principles & History of Modern Turkey Davut Ekşi	Humanities Instructor	Independent Learning	Group A Group B Independent Learning Group C Independent Learning	Group A Independent Learning Group B Independent Learning

### COMMITTEE I - INTRODUCTION TO BASIC MEDICAL SCIENCES V. WEEK / 17 - 21 Oct 2016

		nday et-2016	Tuesday 18-Oct-2016	Wednesday 19-Oct-2016	Thursday 20-Oct-2016	Friday 21-Oct-2016
09.00- 09.50	Independent Learning		Lecture Programmed Cell Death Turgay İsbir	Independent Learning	Independent Learning	Lecture Benzene & Aromaticity Ece Gürdal Hakgör
10.00- 10.50			<b>Lecture</b> Programmed Cell Death <i>Turgay İsbir</i>	Lecture Optical Properties of Microscopes Bilge Güvenç Tuna	<b>Lecture</b> Electric Charges, Electric Field Bilge Güvenç Tuna	Lecture Benzene & Aromaticity Ece Gürdal Hakgör
11.00- 11.50	Laboratory / Anatomy Bones of The Shoulder and Upper Limb  Erdem Söztutar & Sinem Gergin Group B  Group A  Independent Learning		<b>Lecture / ICP I</b> The Unconscious Causalty Güldal İzbırak	<b>Lecture</b> Assyro-Babylon Medicine <i>Elif Vatanoğlu Lutz</i>	Lecture Membrane Impedance, Bioelectrical Activity Bilge Güvenç Tuna	Lecture Electric Current Effects on Human Tissue Bilge Güvenç Tuna
12.00- 12.50	Group A Independent Learning	Group B	<b>Lecture / ICP I</b> Poisoning <i>Arzu Akalın</i>	<b>Lecture</b> Assyro-Babylon Medicine <i>Elif Vatanoğlu Lutz</i>	Lunch Break	Lecture Electrical Security Systems Bilge Güvenç Tuna
13.00- 13.50	Lunch	Break	Lunch Break	Lunch Break	<b>Lecture</b> Bones of the Pelvis <i>Erdem Söztutar</i>	Lunch Break
14.00- 14.50	Common Compulsory Course Turkish Language & Literature Bedri Selimhocaoğlu		Common Compulsory Course	<b>Lecture</b> Egyptian Medicine <i>Elif Vatanoğlu Lutz</i>	Lecture Bones of the Pelvis& Lower Limb Erdem Söztutar	
15.00- 15.50			Anatomical Drawing <i>Refik Aziz</i>	<b>Lecture</b> Egyptian Medicine <i>Elif Vatanoğlu Lutz</i>	<b>Lecture</b> Bones of the Pelvis & Lower Limb <i>Erdem Söztutar</i>	Independent Learning
16.00- 16.50	Common Compulsory Course Ataturk's Principles &		Common Compulsory Course Humanities	Independent Learning	Independent Learning	
17.00-17.50		odern Turkey It Ekşi	Instructor	Independent Learning	пиерепиент Learning	

#### COMMITTEE I - INTRODUCTION TO BASIC MEDICAL SCIENCES VI. WEEK / 24 – 28 Oct 2016

		onday oct-2016	Tuesday 25-Oct-2016	Wednesday 26-Oct-2016	Thursday 27-Oct-2016	Friday 28-Oct-2016		
09.00- 09.50	Lecture Introduction to Physiology and Homeostasis Bayram Yılmaz		Independent Learning	Independent Learning				
10.00- 10.50	Lecture Introduction to Physiology and Homeostasis Bayram Yılmaz		Lecture Introduction to Physiology and Homeostasis		Lecture Cell Cycle and Mitosis- Meiosis (Introduction to Cellular Homoestosis) Turgay Isbir	Lecture / ICP I Insect Bite Özlem Tanrıöver		
11.00- 11.50	Laboratory / Anatomy Bones of the Pelvis & Lower Limb Erdem Söztutar & Sinem Gergin Group A Independent Learning		Bones of the Pelvis & Lower Limb  Erdem Söztutar & Sinem Gergin  Group A		Lecture Cell Cycle and Mitosis- Meiosis (Introduction to Cellular Homoestosis) Turgay İsbir	Lecture / ICP I Patient-Causalty Transportation Techniques Özlem Tanrıöver		Independent Learning
12.00- 12.50	Group A	Group B Independent Learning	<b>Lecture / ICP I</b> Drowning <b>Güldal İzbırak</b>	Lunch Break	Independent Learning			
13.00- 13.50	Lunch Break		Lunch Break	Lecture Cellular Homoestosis and Cell Growth Turgay İsbir				
14.00- 14.50	Common Compulsory Course Turkish Language & Literature Bedri Selimhocaoğlu		Common Compulsory	Lecture Cellular Homoestosis and Cell Growth Turgay İsbir				
15.00- 15.50			<b>Course</b> Anatomical Drawing <i>Refik Aziz</i>	Lecture Cellular Organization of Life Biological Energy Systems Enzymes and Kinetics Soner Doğan		NATIONAL HOLIDAY		
16.00- 16.50	Common Compulsory Course Ataturk's Principles &		Common Compulsory Course	<b>Lecture</b> Cell Membrane Soner Doğan				
17.00-17.50		Modern Turkey rut Ekşi	Humanities <i>Instructor</i>	<b>Lecture</b> Cell Membrane <i>Soner Doğan</i>				

#### COMMITTEE I - INTRODUCTION TO BASIC MEDICAL SCIENCES VII. WEEK / 31 Oct - 04 Nov 2016

	Monday 31-Oct-2016	Tuesday 01-Nov-2016	WEEK / 31 Oct – 04 Nov 2016  Wednesday 02-Nov-2016	Thursday 03-Nov-2016	Friday 04-Nov-2016	
09.00- 09.50	Assessment Session Medical Biology				Independent Learning	
10.00- 10.50	(Practical Exam)	Independent Learning	Independent Learning	Independent Learning		
11.00- 11.50	Assessment Session Anatomy				Assessment Session Committee I (MCQ-EMQ)	
12.00- 12.50	(Practical Exam)					
13.00- 13.50	Lunch Break	Lunch Break	Lunch Break	Lunch Break	Lunch Break	
14.00- 14.50	Common Compulsory Course Turkish Language & Literature	Common Compulsory Course Anatomical Drawing			Program Evaluation Session Review of the Exam Questions, Evaluation of the Committee I	
15.00- 15.50	Bedri Selimhocaoğlu	Refik Aziz	Independent Learning	Independent Learning	Program Head of Committee	
16.00- 16.50	Common Compulsory Course	Common Compulsory Course				
17.00-17.50	Ataturk's Principles & History Of Modern Turkey <i>Davut Ekşi</i>	Humanities <i>Instructor</i>			Independent Learning	

#### **COMMITTEE II - CELL**

#### **DISTRIBUTION of LECTURE HOURS**

### November 07, 2016 - December 30, 2016

#### **COMMITTEE DURATION: 8 WEEKS**

MED 104	BASIC MEDICAL SCIENCES I	THEO.	PRAC.	PBL	TOTAL
	DISCIPLINE	101	9	7	117
	ANATOMY	8	2Grx3H		11
	BIOPHYSICS	14	0		14
	HISTOLOGY and EMBRYOLOGY	14	0		14
	MEDICAL BIOLOGY	31	3Grx4H		35
	MEDICAL HISTORY & ETHICS	6	0		6
	MICROBIOLOGY	8	0		8
	ORGANIC CHEMISTRY	12	0		12
	PHYSIOLOGY	6	3Grx2H		8
	SCIENTIFIC PROJECT I	2	0		2
MED 103	ANATOMICAL DRAWING	0	14		14
MED 102	ICP-I	0	4Grx6H		6
HTR 301-302	ATATURK'S PRINCIPLES & HISTORY OF MODERN TURKEY	14	0		14
HUM 101-102	HUMANITIES	14	0		14
TKL 201-202	TURKISH LANGUAGE & LITERATURE	14	0		14
	TOTAL	143	29	7	179

Coordination Committee	Head	Ünal USLU, Assoc. Prof.
	Secretary	Soner DOĞAN, Assoc. Prof
	Member	Bilge GÜVENÇ TUNA, Assist. Prof.
	Member	Erdem SÖZTUTAR, MD, Lecturer

PBL Coordinators	Coordinator	Sabri KAMAHLI, Prof. Dr.		
Coordinator		İbrahim Çağatay ACUNER, Assoc. Prof.Dr.		
	Co-Coordinator	Serdar ÖZDEMİR, Assist. Prof. Dr.		

## COMMITTEE II – CELL LECTURERS

BASIC MEDICAL SCIENCES I					
DISCIPLINE	FACULTY				
ANATOMY	Yüksel AYDAR, Prof. Dr.				
ANATOMIT	Erdem SÖZTUTAR, Lecturer, Dr.				
BIOPHYSICS	Bilge GÜVENÇ TUNA, Assist. Prof. Dr.				
	Ünal USLU, Assoc. Prof. Dr.				
HISTOLOGY & EMBRYOLOGY	Alev CUMBUL, Assist. Prof. Dr.				
	Aylin YABA UCAR, Assist. Prof. Dr.				
	Turgay İSBİR, Prof. Dr.				
MEDICAL BIOLOGY	Soner DOĞAN, Assoc. Prof. Dr.				
	Deniz KIRAÇ, Assist. Prof. Dr.				
MEDICAL HISTORY & ETHICS	Elif VATANOĞLU LUTZ, Assoc. Prof. Dr.				
MICROBIOLOGY	Çağatay ACUNER, Assoc. Prof. Dr.				
ORGANIC CHEMISTRY	Ece GÜLDAL HAKGÖR, Assist. Prof. Dr.				
5111/0101 0 01/	Bayram YILMAZ, Prof. Dr.				
PHYSIOLOGY	Mehtap KAÇAR, Assoc. Prof. Dr.				
SCIENTIFIC PROJECT I	Gülderen YANIKKAYA DEMİREL, Assoc. Prof.				

	Güldal İZBIRAK, Assoc.Prof. Dr.		
INTRODUCTION TO CLINICAL	Hülya AKAN, Assoc. Prof. Dr.		
PRACTICE I (ICP-I)	Özlem TANRIÖVER, Assoc.Prof.		
	Arzu AKALIN, Assist. Prof. Dr.		
ANATOMICAL DRAWING	Refik AZİZ, Assist.Prof. Dr.		
ATATURK'S PRINCIPLES & HISTORY OF MODERN TURKEY	Davut EKŞİ, Instructor		
HUMANITIES			
TURKISH LANGUAGE & LITERATURE	Bedri SELİMHOCAOĞLU, Instructor		

#### COMMITTEE II - CELL

#### AIM and LEARNING OBJECTIVES

#### AIM

- 1.0 **to convey** basic term and concepts on medical history, anatomy, physiology, embryology, histology, medical biology, biophysics, organic chemistry and microbiology.
- 2.0 **to convey** knowledge on cellular structure and functions.
- 3.0 **to convey** knowledge on process from zygote to formation of organs.
- 4.0 **to convey** knowledge on system-specific (bones, skull, vertebra, and thorax) anatomy and its clinical applications.

#### LEARNING OBJECTIVES

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

- 1.0. define anatomical terms of basic bone structures.
  - 1.1 explain basic concepts related to regional and systemic anatomy, and osteology.
- 2.0. define anatomical properties and clinical implications for bones of the pelvis, thorax and vertebral column, ribs and strernum, neurocranium, viscocranium.
- 3.0. explain basic terms and concepts about radiation biophysics, radiation safety and use of lasers.
- 4.0. list effects of radiation to the organism, its evaluation methods on the cellular basis and protection approaches.
- 5.0. explain histological characteristics of cell membrane and functions
- 6.0. summarize the structure of cytoplasmic organelles and relate it to their functions
- 7.0. list the cytoskeleton element and describe probable functions
- 8.0. explain histological characteristics of cell nucleus.
- 9.0. list the difference between mitosis and meiosis.
- 10.0. list the difference between male and female gametogenesis.
- 11.0. list developmental events respectively from zygote to gastrulation.
- 12.0. define basic ions that are diffused in intracellular and extracellular fluids and their concentrated regions.
- 13.0. explain transfer mechanisms of cellular membrane and the connection of these mechanisms with material and energy requirements.
- 14.0. explain the roles of DNA and RNA in the maintenance of living organism.
- 15.0. list the protein synthesis steps and define the mechanisms of regulation of gene expression.
- 16.0. define types of mutations and emphasize the importance of gene polymorphisms in human health and variability.
- 17.0. define plasmids and their use in molecular biology,
- 18.0. explain the identification methods of chromosomes and their use in medical clinics.
- 19.0. define the correlation of medicine, art and philosophy from prehistoric ages to date.
- 20.0. for microorganisms;
  - 20.1. classify
  - 20.2. list general characteristics.
- 21.0. define structure of organic compounds and their chemical reactions
- 22.0. define structures and reactions of macromolecules such as amino acid, protein, lipid and carbohydrate.
- 23.0. explain case scenario related basic medical science topics in a clinical context.

## COMMITTEE II – CELL COMMITTEE ASSESSMENT MATRIX

LEARNING		DISTRUBITION of MCQs					
OBJECTIVES	LECTURER / INSTRUCTOR	CE	FE	ICE	TOTA L		
1.0, 2.0	Dr. Erdem Söztutar	8	4	4	16		
3.0, 4.0	Dr. Bilge G. Tuna	13	7	7	27		
5.0 – 11.0	Dr. Unal Uslu	13	7	7	27		
5.0 - 11.0	Dr. Alev Cumbul	13	/	/	21		
14.0 -18.0	Dr. Turgay Isbir	28	14	14	56		
14.0 - 10.0	Dr. Deniz Kıraç						
19.0	Dr. Elif Vatanoğlu	5	3	3	11		
20.1, 20.2	Medical Microbiology	7	4	4	15		
21.0, 22.0	Dr. Ece Hakgör	11	6	6	23		
12.0-13.0	Dr. Bayram Yilmaz	5	3	3	11		
	TOTAL	90	48/200#	48/200#	186		
LEARNING	DISCIPLINE	DIST	RUBITION	of EMQ PO	DINTS		
OBJECTIVES			(	E	E		
3.0, 4.0, 23.0	BIOPHYSICS			3			
5.0-11.0, 23.0	HISTOLOGY and EMBRYOLOGY			2			
14.0 – 18.0,23.0	MEDICAL BIOLOGY			5			
	TOTAL	10					
LEARNING OBJECTIVES	DISCIPLINE	DIST	RUBITION	of LAB PC	DINTS		
				PE			
1.0, 2.0	ANATOMY			30			
11.0 – 15.0	MEDICAL BIOLOGY			50			
9.0, 10.0	PHYSIOLOGY			20			
	TOTAL		1	00			

Total number of MCQs are 90 (each question has equal value)

Total number of EMQs are 10 (each question has equal value)

Total value of LPE are equal to 100 points

Learning objectives related to PBL sessions are assesed by EMQs of related disiplines.

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

\*In FE and ICE 48 out of 200 MCQs will be from this Committee (Each question has equal value).

#### **Abbreviations:**

MCQ: Multiple Choice Question EMQ: Extending Matching Question

DOPS: Direct Observation of Procedural Skills

LPE: Practical Lecture Evaluation

CE: Committee Exam
CS: Committee Score
FE: Final Exam
ICE: Incomplete Exam

PBL-P: Evaluation of PBL Student's Performance

#### COMMITTEE II – CELL I. WEEK / 07 – 11 Nov 2016

	Monday 07-Nov-2016	Tuesday 08-Nov-2016	Wednesday 09-Nov-2016	Thursday 10-Nov-2016	Friday 11-Nov-2016	
09.00- 09.50	PBL Session	Independent Learning  Clinical Skills Learning  ICP I		Commemoration of Atatürk	PBL Session	
11.00- 11.50		Basic Life Support Güldal İzbırak & Arzu Akalın	Independent Learning		Independent Learning	
12.00- 12.50	Independent Learning	Group A Group B Independent Learning Group C Independent Learning Group D Independent Learning		Lunch Break	Lunch Break	
13.00- 13.50	Lunch Break	Lunch Break	Lunch Break	Lecture Deoxyribonucleic Acid and Ribonucleic Acid Turgay İsbir	Lecture Deoxyribonucleic Acid and Ribonucleic Acid (Central Dogma) Turgay İsbir	
14.00- 14.50	Common Compulsory Course	Common Compulsory Course	Introductory Session Introduction to Committee II Secretary of Committee II	<b>Lecture</b> Deoxyribonucleic Acid and Ribonucleic Acid <i>Turgay İsbir</i>	Lecture Protein Synthesis and Turnover Turgay İsbir	
15.00- 15.50	Turkish Language & Literature Bedri Selimhocaoğlu	Anatomical Drawing <i>Refik Aziz</i>	Lecture Cell; General Specification Alev Cumbul	Lecture Deoxyribonucleic Acid and Ribonucleic Acid (Central Dogma) Turgay İsbir	Lecture Cell Cycle and Mitosis-Meiosis Deniz Kıraç	
16.00- 16.50	Common Compulsory Course Ataturk's Principles & History of Modern Turkey	Common Compulsory Course Humanities	Lecture Radiation Biophysics: Nucleus and Radioactivity Bilge Güvenç Tuna	Independent Learning	Lecture Cell Cycle and Mitosis-Meiosis Deniz Kıraç	
17.00-17.50	Davut Ekşi	Instructor	Lecture Nuclear stability Bilge Güvenç Tuna		Independent Learning	

#### COMMITTEE II – CELL II. WEEK / 14 – 18 Nov 2016

	Monday 14-Nov-2016	1	Tuesday 5-Nov-2016	Wednesday 16-Nov-2016	Thursday 17-Nov-2016	Friday 18-Nov-2016	
09.00- 09.50		Indepe	ndent Learning	PBL Session	Lecture Cell Membrane Structure & Function Alev Cumbul	Lecture Alcohols and Ethers Ece Gürdal Hakgör	
10.00- 10.50		Basi	Skills Learning ICP I c Life Support orrak & Arzu Akalın		Lecture Cell Organalles Alev Cumbul	Lecture Alcohols and Ethers Ece Gürdal Hakgör	
11.00- 11.50	Independent Learning	A dent ng B	C dent ng .D dent	Lecture Interaction of Radiation with Matter Bilge Güvenç Tuna	Lecture Protein Synthesis and Turnover Turgay İsbir	Laboratory / Med. Biology Mitosis and Meiosis Turgay İsbir Soner Doğan & Deniz Kıraç	
12.00- 12.50		Group A Independent Learning Group B	Group C Independent Learning Group D Independent Learning	Lunch Break	<b>Lecture</b> Biosynthesis of Nucleotides <i>Turgay İsbir</i>	Group A Group B Independent Learning Group C Independent Learning	
13.00- 13.50	Lunch Break	Lui	nch Break	Lecture General Structures of Bacteria, Mycoplasma, Chlamydia and Rickettsiae Medical Microbiology	Lunch Break	Lunch Break	
14.00- 14.50	Common Compulsory Course Turkish Language & Literature	rkish Language & Literature Anatomical Drawing  Bedri Selimhocaoğlu Refik Aziz		Lecture General Structures of Bacteria, Mycoplasma, Chlamydia and Rickettsiae Medical Microbiology	Lecture Regulation of Gene Expression Turgay İsbir	Laboratory / Med. Biology Mitosis and Meiosis Turgay İsbir Soner Doğan & Deniz Kıraç	
15.00- 15.50				Lecture Interaction of X or Gamma Rays with Matter Bilge Güvenç Tuna		Group A ndependent Learning Group B Group C ndependent Learning	
16.00- 16.50	Common Compulsory Course	Common Compulsory Course		Lecture Photoelectric Action, Compton Action Bilge Güvenç Tuna	Independent Learning	Laboratory / Med. Biology Mitosis and Meiosis Turgay İsbir Soner Doğan & Deniz Kıraç	
17.00-17.50	Ataturk's Principles & Humanities History of Modern Turkey  Davut Ekşi  Humanities Instructor			<b>Lecture</b> Chinese Medicine Elif Vatanoğlu Lutz		Group A Independent Learning Group B Independent Learning	

#### COMMITTEE II – CELL III. WEEK / 21 – 25 Nov 2016

	Monday 21-Nov-2016	Tues 22-Nov			Wednesday 23-Nov-2016	Thursday 24-Nov-2016	Friday 25-Nov-2016
09.00- 09.50	Lecture Regulation of Gene Expression Turgay İsbir		Lecture Distribution of Substances in Body Fluids Bayram Yılmaz	Independent Lecture / Scientific Project I How to Read and Write an Article Gülderen Yanıkkaya Demirel	Lecture Carbonyl Compounds Ece Gürdal Hakgör		
10.00- 10.50	Independent Learning	Clinical Skills Learning ICP I Basic life support Güldal İzbırak & Arzu Akalın		rt	<b>Lecture</b> Cell Membrane Bayram Yılmaz	Lecture / Scientific Project I How to Read and Write an Article Gülderen Yanıkkaya Demirel	<b>Lecture</b> Carbonyl Compounds <i>Ece Gürdal Hakgör</i>
11.00- 11.50	independent Learning	up A nt Learning pp B nt Learning	Group C	up D nt Learning	Lecture Tools in Medical Biology Deniz Kıraç	Lecture Vertebral column, ribs and sternum Erdem Söztutar	Lecture Chromosome Structure and Function, Plasmids, Transposable Genetic Elements Turgay İsbir
12.00- 12.50		Group A Independent Learning Group B Independent Learning Group C Group C		Group I Independent L	<b>Lecture</b> Tools in Medical Biology <i>Deniz Kıraç</i>	Lecture Vertebral column, ribs and sternum Erdem Söztutar	Lecture Chromosome Structure and Function, Plasmids, Transposable Genetic Elements Turgay İsbir
13.00- 13.50	Lunch Break	Lunch E	Break		Lunch Break	Lunch Break	Lunch Break
14.00- 14.50	Common Compulsory Course Turkish Language & Literature	Common Compulsory Course Anatomical Drawing Refik Aziz			Lecture Cytoskeleton Alev Cumbul	Lecture Protein Synthesis and Turnover Turgay İsbir	Lecture Chromosome Structure and Function, Plasmids, Transposable Genetic Elements Turgay İsbir
15.00- 15.50	Bedri Selimhocaoğlu				Lecture Cell Nucleus and Cell Cycle Alev Cumbul	Lecture Genomics, Proteomics and Metabolomics Turgay İsbir	Lecture Chromosome Structure and Function, Plasmids, Transposable Genetic Elements Turgay İsbir
16.00- 16.50	Common Compulsory Course Ataturk's Principles & History of Modern Turkey	rurk's Principles & Common Compulsory Course		Course	Lecture Chinese Medicine Elif Vatanoğlu Lutz	Lecture Genomics, Proteomics and Metabolomics Turgay İsbir	Lecture Mitosis & Meiosis Alev Cumbul
17.00-17.50	Davut Ekşi			Independent Learning	Independent Learning	Independent Learning	

### COMMITTEE II – CELL IV. WEEK / 28 Nov – 02 Dec 2016

	Monday 28-Nov-2016	Tuesday 29-Nov-2016		Wednesday 30-Nov-2016	Thursday 01-Dec-2016		day c-2016
09.00- 09.50	Independent Learning	Independent Learning		Lecture General Structure of Viruses Medical Microbiology	<b>Lecture</b> Neurocranium <i>Erdem Söztutar</i>	Carboxylic Ac	ture ds and Nitriles lal Hakgör
10.00- 10.50	Laboratory / Anatomy Vertebral Column, Sternum, and the Ribs Yüksel Aydar & Erdem Söztutar Group B Independent Learning	Clinical Skills Learning ICP I Basic Life Support Güldal İzbırak & Arzu Akalın		Lecture General Structure of Viruses Medical Microbiology	<b>Lecture</b> Neurocranium <i>Erdem Söztutar</i>	<b>Lecture</b> Carboxylic Acids and Nitriles <i>Ece Gürdal Hakgör</i>	
11.00- 11.50	Group A Independent Group B Learning	up A andent ning up B andent ning up C andent	Group D	<b>Lecture</b> Tools in Medical Biology <i>Deniz Kıra</i> ç	<b>Lecture</b> Neurocranium <i>Erdem Söztutar</i>	Radiation Prot	ture ection (Safety) venç Tuna
12.00- 12.50	Lunch Break	Group A Independent Learning Group B Independent Learning Group C Independent Learning		Lunch Break	Lunch Break	Lunch	Break
13.00- 13.50	Independent Learning	Lunch Break		Lecture Introduction to Embryology and Human Devopmental Period Ünal Uslu	<b>Lecture</b> Half Value Layer, Attenuation <i>Bilge Güvenç Tuna</i>	Neuro	r / Anatomy cranium Erdem Söztutar Group B
14.00- 14.50	Common Compulsory Course	Common Compulsory Course Anatomical Drawing Refik Aziz		<b>Lecture</b> Gametogenesis; Spermatogenesis <i>Ünal Uslu</i>	<b>Lecture</b> Units of Radioactivity Bilge Güvenç Tuna	Group A	Group B Independent Learning
15.00- 15.50	Turkish Language & Literature Bedri Selimhocaoğlu			<b>Lecture</b> DNA Damage and Repair Mechanism Turgay İsbir	Lecture Transport of Substances Through the Cell Membrane Bayram Yılmaz		
16.00- 16.50	Common Compulsory Course Ataturk's Principles & History of Modern Turkey	Ataturk's Principles & Common Compulsory Course		Lecture DNA Damage and Repair Mechanism Turgay İsbir	Lecture Transport of Substances Through the Cell Membrane Bayram Yılmaz	Independent Learning	
17.00-17.50	Davut Ekşi			Independent Learning	Independent Learning		

#### COMMITTEE II - CELL V. WEEK / 05 - 09 Dec 2016

	Monday 05-Dec-2016	Tuesday 06-Dec-2016	Wednesday 07-Dec-2016	Thursday 08-Dec-2016	Friday 09-Dec-2016	
09.00- 09.50		Independent Learning	Lecture Carboxylic Acid Derivatives Ece Gürdal Hakgör	Lecture General structure of fungi Medical Microbiology	Laboratory / Med. Biology Nucleic Acid Purification Turgay İsbir Soner Doğan & Deniz Kıraç	
10.00- 10.50	Independent Learning	Clinical Skills Learning ICP I Patient-Causalty Transportation / Bandaging Techniques Özlem Tanrıöver & Hülya Akan	<b>Lecture</b> Carboxylic Acid Derivatives <i>Ece Gürdal Hakgör</i>	<b>Lecture</b> General structure of fungi <i>Medical Microbiology</i>	Group A Group B Independent Learning Group C Independent Learning	
11.00- 11.50	<b>3</b>	p A A Ident ing ing p D b D b D ing ing	Lecture Indian Medicine Elif Vatanoğlu Lutz	<b>Lecture</b> Mendelian Laws and Inheritance Turgay İsbir	Laboratory / Med. Biology Nucleic Acid Purification Turgay İsbir Soner Doğan & Deniz Kıraç	
12.00- 12.50		Group B Independent Learning Group C Independent Learning Group D Independent Learning	<b>Lecture</b> Indian Medicine <i>Elif Vatanoğlu Lutz</i>	<b>Lecture</b> Mendelian Laws and Inheritance <i>Turgay İsbir</i>	Group A Independent Learning Group B Group C Independent Learning	
13.00- 13.50	Lunch Break	Lunch Break	Lunch Break	Lunch Break	Lunch Break	
14.00- 14.50	Common Compulsory Course	Common Compulsory Course	Lecture Gametogenesis; Oogenesis; Ovarian Cycle Alev Cumbul	Lecture Radioisotopes in Medicine Bilge Güvenç Tuna	Laboratory / Med. Biology Nucleic Acid Purification Turgay İsbir Soner Doğan & Deniz Kıraç	
15.00- 15.50	Turkish Language & Literature Bedri Selimhocaoğlu	Anatomical Drawing <i>Refik Aziz</i>	Lecture Oogenesis; Follicular and Menstruel Cycle Alev Cumbul	<b>Lecture</b> Biological mechanisms of Radiation Bilge Güvenç Tuna	Group A Indepndent Learning Group B Indepndent Learning	
16.00- 16.50	Common Compulsory Course Ataturk's Principles &	Common Compulsory Course	<b>Lecture</b> Mutation and Polymorphism <i>Turgay İsbir</i>	Independent Learning		
17.00-17.50	History of Modern Turkey  Davut Ekşi  Humanities  Instructor		<b>Lecture</b> Mutation and Polymorphism <i>Turgay İsbir</i>	macponaciii Leaniiig	Independent Learning	

#### COMMITTEE II - CELL VI. WEEK / 12 - 16 Dec 2016

	Monday 12-Dec-2016	Tuesday 13-Dec-20	1	Wednesday 14-Dec-2016	Thursday 15-Dec-2016	Friday 16-Dec-2016	
09.00- 09.50		Clinical Skills Learning ICP I Patient-Causalty Transportation /Bandaging Techniques Özlem Tanrıöver & Hülya Akan		<b>Lecture</b> Amines Ece Gürdal Hakgör	Lecture General Structure of Parasites Medical Microbiology	Laboratory / Med. Biology Epigenetics (Population Genetics) Turgay İsbir Soner Doğan & Deniz Kıraç	
10.00- 10.50	Independent Learning	Group A Independent Learning Group B Group C	ent Learning oup D ent Learning	<b>Lecture</b> Amines Ece Gürdal Hakgör	Lecture General Structure of Parasites Medical Microbiology	Group A Group B Indep.endent Learning Group C Independent Learning	
11.00- 11.50		Group A Independent Learning Group B Group C Independent Learning Group C Independent Learning Group D Independent Learning		Lecture Greek Medicine and Contemporary Medicine Elif Vatanoğlu Lutz	Lecture Implantation Alev Cumbul	Laboratory / Med. Biology Epigenetics (Population Genetics) Turgay Isbir Soner Doğan & Deniz Kıraç	
12.00- 12.50		Lecture Mendelian Laws and Inheritance Turgay İsbir		Lecture Greek Medicine and Contemporary Medicine Elif Vatanoğlu Lutz	Lecture Medical Imaging: Applications of X-ray Attenuation & Detection Bilge Güvenç Tuna	Group A ndependent Learning Group B Group C ndependent Learning	
13.00- 13.50	Lunch Break	Lunch Brea	ak	Lunch Break	Lunch Break	Lunch Break	
14.00- 14.50	Common Compulsory Course	Anatomical Drawing		<b>Lecture</b> Fertilization <i>Ünal Uslu</i>	Lecture Mendelian Laws and Inheritance Turgay İsbir	Laboratory / Med. Biology Epigenetics (Population Genetics) Turgay İsbir Soner Doğan & Deniz Kıraç	
15.00- 15.50	Turkish Language & Literature Bedri Selimhocaoğlu			<b>Lecture</b> Blastulation <i>Ünal Uslu</i>	<b>Lecture</b> Viscocranium <i>Erdem Söztutar</i>	Group A Independent Learning Group B Independent Learning	
16.00- 16.50	Common Compulsory Course Ataturk's Principles &  Common Compulsory Course Humanities		•	<b>Lecture</b> Medical Imaging: Nuclear Medicine <i>Bilge Güvenç Tuna</i>	Lecture Viscocranium Erdem Söztutar	Independent Learning	
17.00-17.50	History of Modern Turkey <i>Davut Ekşi</i>	History of Modern Turkey Instructor		Independent Learning	Independent Learning		

#### COMMITTEE II - CELL VII. WEEK / 19 - 23 Dec 2016

		nday c-2016		Tuesda 20-Dec-2				Wednesday 21-Dec-2016		Thursday 22-Dec-2016	Friday 23-Dec-2016		
09.00- 09.50	Viscoo	eture eranium Söztutar	Independent Learning  Lecture Steroids Ece Güldal Hakgör		Lecture Biological Aspects of Development Turgay İsbir	Laboratory / Physiology Osmosis & Diffusion Mehtap Kaçar		sion					
10.00- 10.50	Viscoo	y / Anatomy cranium & Erdem Söztutar Group A Independent Learning	Clinical Skills Learning ICP I Patient-Causalty Transportation / Bandaging Techniques		<b>Lecture</b> Steroids <i>Ece Güldal Hakgör</i>			Lecture Biological Aspects of Development Turgay İsbir	Group A	Group B Independent Learning	Group C Independent Learning		
11.00- 11.50	Group B Independent Learning	Group A	Özlem Ta	anriöver 8	& Hülj	ya Akan	Laboratory / Med. Biology Gene İdentification in Cancer Turgay İsbir Soner Doğan & Deniz Kıraç		E Identification in Cancer  Turgay İsbir  Lasers in Medicine  Rilgo Güyene Tura		Laboratory / Physiology Osmosis & Diffusion Mehtap Kaçar		sion
12.00- 12.50	Independe	nt Learning	Group A Independent Learning	Group B Independent Learning	Group C	Group D Independent Learning	Group A Independent Learning	Group B Independent Learning	Group C	Lecture Lasers in Medicine Bilge Güvenç Tuna	Group A Independent Learning	Group B	Group C Independent Learning
10.00 10.00							Lunch Break			Lunch Break Lunch Br			
13.00- 13.50	Lunch	n Break	L	unch Br	eak		L	_unch Brea	ak	Lunch Break		Lunch Break	<
13.00- 13.50						Course	<b>Labora</b> Gene ide	unch Breatory / Med. entification i Turgay İsbi	Biology in Cancer	Lunch Break  Lecture Gastrulation; Primitive Streak, Notochord Formation Alev Cumbul	<b>Labor</b> Osr	Lunch Break atory / Phys mosis & Diffu Mehtap Kaça	<b>iology</b> sion
	Common Com Turkish Langua	pulsory Course age & Literature mhocaoğlu	Common		<b>Isory</b> Drawii		<b>Labora</b> Gene ide	tory / Med. entification i Turgay İsbi	Biology in Cancer	Lecture Gastrulation; Primitive Streak, Notochord Formation	<b>Labor</b> Osr	atory / Phys	<b>iology</b> sion
14.00- 14.50	Common Com Turkish Langua Bedri Selii Common Com	pulsory Course age & Literature	Common	i Compul atomical I Refik A	Isory Drawin ziz	ng	Labora Gene ide Soner E  Featuing  Labora Gene ide	tory / Med. entification i Turgay İsbi Doğan & Del	Biology in Cancer ir niz Kıraç  Debendent Biology in Cancer ir	Lecture Gastrulation; Primitive Streak, Notochord Formation Alev Cumbul  Lecture Osmotic Pressure and Permeability of The Cell Membrane	<b>Labor</b> Osr	atory / Phys mosis & Diffu Mehtap Kaça	iology sion

#### COMMITTEE II - CELL VIII. WEEK / 26 - 30 Dec 2016

	Monday 26-Dec-2016	Tuesday 27-Dec-2016	Wednesday 28-Dec-2016	Thursday 29-Dec-2016	Friday 30-Dec-2016	
09.00- 09.50	Clinical Skills Learning ICP I Patient-Causalty Transportation / Bandaging Techniques Özlem Tanrıöver & Hülya Akan		Assessment Session  Medical Biology			
10.00- 10.50	A Learning Learning C Learning D D	Independent Learning	(Practical Exam)	Independent Learning	Independent Learning	
11.00- 11.50	Group A Independent Learning Group B Independent Learning Group C Independent Learning		Assessment Session Physiology (Practical Exam)		g	
12.00- 12.50	Lunch Break Lunch Break Lunch Break		Lunch Break	Lunch Break	Lunch Break	
13.00- 13.50			Assessment Session		Independent Learning	
14.00- 14.50		Anatomy (Practical Exam)			Assessment Session Committee II	
15.00- 15.50	Independent Learning	Independent Learning		Independent Learning	(MCQ-EMQ)	
16.00- 16.50		Independent Learning			Program Evaluation Session Review of the Exam Questions, Evaluation of the Committee II	
17.00-17.50					Program Head of Committee	

## COMMITTEE III - TISSUE I DISTRIBUTION of LECTURE HOURS

#### **January 02, 2017 - February 24, 2017**

#### **COMMITTEE DURATION: 6 WEEKS**

MED 104	BASIC MEDICAL SCIENCES I	THEO.	PRAC.	PBL	TOTAL
	DISCIPLINE	51	18	7	76
	ANATOMY	16	2Grx5H		21
	BIOPHYSICS	7	0		7
	HISTOLOGY & EMBRYOLOGY	12	2Grx5H		17
	MEDICAL HISTORY & ETHICS	6	0		6
	PHYSIOLOGY	8	3Grx8H		16
	SCIENTIFIC PROJECT I	2	0		2

MD 102	ICP-I	9	1Grx3H	9
MED 103	ANATOMICAL DRAWING	0	8	8
HTR 301-302	ATATURK'S PRINCIPLES & HISTORY OF MODERN TURKEY	8	0	8
	ELECTIVE COURSE	6	0	6
TKL 201-202	TURKISH LANGUAGE & LITERATURE	8	0	8

TOTAL	82	26	7	115
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<b>Coordination Committee</b>	Head	Bayram YILMAZ PhD. Prof.
	Secretary	Bilge GÜVENÇ TUNA, PhD, Assist. Prof.
	Member	Erdem SÖZTUTAR, MD, Lecturer
	Member	Alev CUMBUL PhD Assist. Prof.

PBL Coordinators Coordinator		Sabri KAMAHLI, Prof. Dr.		
	Coordinator	İbrahim Çağatay ACUNER, Assoc. Prof.Dr.		
	Co-Coordinator	Serdar ÖZDEMİR, Assist. Prof. Dr.		

#### COMMITTEE III -TISSUE I LECTURERS

BASIC MEDICAL SCIENCES I			
DISCIPLINE	FACULTY		
ANATOMY	Yüksel AYDAR, PhD, Prof.		
ANATOWI	Erdem SÖZTUTAR, MD, Lecturer		
BIOPHYSICS	Bilge GÜVENÇ TUNA, PhD, Assist. Prof.		
	Ünal USLU, MD, Assoc. Prof.		
HISTOLOGY & EMBRYOLOGY	Alev CUMBUL, PhD, Assist. Prof.		
	Aylin YABA UÇAR, PhD, Assist. Prof.		
MEDICAL HISTORY & ETHICS	Elif VATANOĞLU LUTZ, MD, Assoc. Prof.		
PHYSIOLOGY	Bayram YILMAZ, PhD, Prof.		
PHYSIOLOGY	Mehtap KAÇAR, MD, PhD, Assoc. Prof.		
SCIENTIFIC PROJECT I	Gülderen YANIKKAYA DEMİREL, MD, Assoc. Prof.		

	Güldal İZBIRAK, MD, Assoc.Prof.		
INTRODUCTION TO CLINICAL PRACTICE I (ICP-I)	Hülya AKAN, MD, Assoc.Prof.		
	Özlem TANRIÖVER, MD, Assoc.Prof.		
	Arzu AKALIN, MD, Assist. Prof.		
ANATOMICAL DRAWING	Refik AZİZ, PhD, Assist.Prof.		
ATATURK'S PRINCIPLES & HISTORY OF MODERN TURKEY	Davut EKŞİ, PhD, Instructor		
TURKISH LANGUAGE & LITERATURE	Bedri SELİMHOCAOĞLU, Instructor		

## COMMITTEE III –TISSUE I AIM AND LEARNING OBJECTIVES

#### AIM

- to convey basic terms and concepts for anatomy, physiology, embryology, histology, biophysics, behavioral sciences, and medical ethics.
- 2. **to convey** knowledge on four fundamental tissues forming the body, cells forming these tissues.
- 3. **to convey** knowledge on excitation and contraction mechanisms of muscles.
- 4. **to convey** knowledge on system-specific (pelvis, joints of vertebrae, bones and joints of lower and upper extremities) anatomy and its clinical applications.

#### **LEARNING OBJECTIVES**

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

- 1.0. explain anatomical characteristics of joints in general.
- 2.0. define anatomical properties and clinical implications for skull bones, vertebrae and thorax.
- 3.0. describe the link between the anatomical characteristics of bones and joints of lower and upper extremities and their clinical reflections.
- 4.0. explain muscle contraction mechanism on the basis of Sliding Filament Theory.
- 5.0. know basic properties of digital biomedical signals
- 6.0. explain link between structure and role of tissues.
- 7.0. for epithel tissue;
  - 7.1. explain general specification,
  - 7.2. recognize eight covering epithelium subtypes,
  - 7.3. explain histological basis on which glands are classified
- 8.0. for muscle tissue;
  - 8.1. describe histological characteristics and relate main function,
  - 8.2. summarize the main similarities and differences between three different types of muscle.
- 9.0. for connective tissue;
  - 9.1. explain general specification.
  - 9.2. classify connective tissue proper.
- 10.0. list histologic properties of blood
- 11.0. define the correlation between ethics and philosophy in relation with main ethical theories.
- 12.0. define membrane and action potentials and sodium/potassium pumps.
- 13.0. list mechanisms of excitation and contraction in skeletal muscle.
- 14.0. explain role of autonomous nervous system in excitation of smooth muscle and heart muscle.
- 15.0. define EMG.
- 16.0. explain case scenario related basic medical science topics in a clinical contex.

## COMMITTEE III -TISSUE I COMMITTEE ASSESSMENT MATRIX

LEARNING	LECTURER /	DISTRUBITION of MCQs					
OBJECTIVES	INSTRUCTOR	CE	FE	IE	TOTAL		
10 20 20	Dr. Y. Aydar	29	7	7	43		
1.0, 2.0, 3.0	Dr. E. Söztutar	29	′	/	43		
4.0, 5.0	Dr. B.Güvenç Tuna	13	3	3	19		
6.0, -10.0	Dr. Ü. Uslu	22	6	6	34		
0.0, -10.0	Dr. A. Cumbul	22	0	0	34		
11.0	Dr. E. Vatanoğlu	11	3	3	17		
12.0 -15.0	Dr. B. Yılmaz	15	3	3	21		
	TOTAL	90	22/200#	22/200#	134		
LEARNING OBJECTIVES	DISCIPLINE	DI	STRUBITION	N of EMQ P	OINTS		
1.0 - 2.0 - 3.0	ANATOMY			3			
4.0, 5.0, 16.0	BIOPHYSICS			2			
	HISTOLOGY &						
6.0 – 10.0, 16.0	EMBRYOLOGY			3			
12.0 -15.0, 16.0	PHYSIOLOGY			2			
	TOTAL			10			
LEARNING OBJECTIVES	DISCIPLINE	DI	STRUBITIO	N of LAB P	OINTS		
			DOPS		LPE		
1.0 - 2.0 - 3.0	ANATOMY		-		30		
6.0 – 10.0	HISTOLOGY &		30				
	EMBRYOLOGY		JU	-			
12.0 -15.0	PHYSIOLOGY		-		40		
	TOTAL			100			

Total number of MCQs are 90 (each question has equal value)

Total number of EMQs are 10 (each question has equal value)

Total value of DOPS and LPE are equal to 100 points

Learning objectives related to PBL sessions are assesed by EMQs of related disiplines.

#### CS = 95% of [ 90% CE (MCQ+EMQ) + 10% (DOPS+LPE)] + 5% of PBL-P

\*In FE and ICE 22 out of 200 MCQs will be from this Committee (Each question has equal value).

#### **Abbreviations:**

MCQ: Multiple Choice Question
EMQ: Extending Matching Question
DOPS: Direct Observation of Procedural Skills

LPE: Practical Lecture Evaluation

CE: Committee Exam
CS: Committee Score
FE: Final Exam
ICE: Incomplete Exam

PBL-P: Evaluation of PBL Student's Performance

#### COMMITTEE III - TISSUE I I. WEEK / 02 - 06 Jan 2017

	Monday 02-Jan-2017	Tuesday 03-Jan-2017	Wednesday 04-Jan-2017		irsday an-2017	Friday 06-Jan-2017	
09.00- 09.50		Independent Learning		Skeletal Mus	cture scle Physiology m Yılmaz		
10.00- 10.50	PBL Session	Lecture / ICP I Introduction to Communication Skills Özlem Tanrıöver	Independent Learning	Neuromuscul	cture ar Transmission m Yılmaz	PBL Session	
11.00- 11.50		Lecture / ICP I Basic Communication Skills Arzu Akalın	Lecture  Membrane Potentials and  Action Potentials  Bayram Yılmaz	Assessm	y / Histology ent (DOPs) Epithel Tissue		
12.00- 12.50	Independent Learning	Lecture / ICP I Basic Communication Skills Arzu Akalın	Lecture Membrane Potentials and Action Potentials Bayram Yılmaz	Group A Independent Group B Learning		Independent Learning	
13.00- 13.50	Lunch Break	Lunch Break	Lunch Break	Lunc	h Break	Lunch Break	
14.00- 14.50	Introductory Session Introduction to Committee III Secretary of Committee III	Lecture Introduction to Arthrology Yüksel Aydar	Lecture Histology of Covering Epithelium; Surface Specification Ünal Uslu	Assessm	y / Histology ent (DOPs) Epithel Tissue	Lecture Histology of Muscle Tissue; General Specification Alev Cumbul	
15.00- 15.50	Lecture Histology of Covering Epithelium; Structure, Classification Ünal Uslu	Lecture Introduction to Arthrology Yüksel Aydar	<b>Lecture</b> Histology of Glandular Epithelium Ünal Uslu	Group A	Group B Independent Learning	Lecture Histology of Striated Skeletal Muscle Alev Cumbul	
16.00- 16.50	Assessment Session Common Compulsory Course Ataturk's Principles &		Independent Learning	Independent Learning		<b>Lecture</b> Joints of the upper limb <i>Yüksel Aydar</i>	
17.00-17.50	History of Modern Turkey <i>Davut Ekşi</i>	Independent Learning				Lecture Joints of the upper limb Yüksel Aydar	

#### COMMITTEE III - TISSUE I II. WEEK / 09 – 13 Jan 2017

	Mon 09-Jar		Tuesday 10-Jan-2017		nesday an-2017		sday 1-2017	Friday 13-Jan-2017		7
09.00- 09.50	50 Independent Learning		Independent Learning			Independent Learning		Laboratory / Physiology EMG I Bayram Yılmaz		siology
10.00- 10.50	•		<b>Lecture / ICP I</b> The Medical Interview <i>Güldal İzbırak</i>	PBL	Session	Contractile Mar Filamen	ture chinery; Sliding t Theory venç Tuna	Group A	Group B Independent Learning	Group C Independent Learning
11.00- 11.50	Group A Independent Learning	Group B	Lecture / ICP I The Medical Interview Güldal İzbırak	Lecture Greek Medicine and Contemporary Medicine Elif Vatanoğlu Lutz		Joints of the Ve	<b>ture</b> ertebral Column <i>l Aydar</i>	p A ndent ing	Group B	Group C Independent Learning
12.00- 12.50	Independer	nt Learning	<b>Lecture / ICP I</b> Interviewing Techniques <i>Güldal İzbırak</i>	Lecture Greek Medicine and Contemporary Medicine Elif Vatanoğlu Lutz		Lecture Joints of the Axial Skeleton Yüksel Aydar		Group A Independent Learning	Grou	Grou Indepe Lear
13.00- 13.50	Lunch Break		Lunch Break	Lunch Break Lunch Break		Lunch Break		k		
14.00- 14.50	Lec Histology of He	eart & Smooth	<b>Lecture</b> Joints of the Lower Limb	Assessm	y / Histology nent (DOPs)	Joints of the	y/Anatomy e lower limb Erdem Soztutar		etory / Phys EMG I ayram Yılma	
	Alev C		Yüksel Aydar	Histology of	Muscle Tissue	Group A	Group B Independent Learning	A ent g	B ent g	U
15.00- 15.50	Lec Development o Sys <i>Alev C</i>	of the Muscular	<b>Lecture</b> Joints of the Lower Limb Yüksel Aydar	Group A	Group B Independent Learning	Group A Independent Learning	Group B	Group A Independent Learning	Group B Independent Learning	Group C
16.00- 16.50	Independent Learning  Yüksel Aydar  Histology of Mu  Group A		Assessm	nent (DOPs)	Independe	nt Learning	Inden	endent Lea	arning	
17.00-17.50			Group B	macpenae	2009	таер	Chaom Loc			

MIDTERM BREAK

16 JAN 2017 - 27 JAN 2017

#### COMMITTEE III - TISSUE I III. WEEK / 30 Jan- 03 Feb 2017

	Monday 30-Jan-2017	Tuesday 31-Jan-2017	Wednesday 01-Feb-2017	Thursday 02-Feb-2017	Friday 03-Feb-2017	
09.00- 09.50	Laboratory / Anaton Joints of the Vertebral Co and Axial Skeleton Yüksel Aydar & Erdem So Group Group A Learn	Lecture Histology of Connective Tissue; Extracellular Matrix Alev Cumbul	Lecture Introduction to Ethics Elif Vatanoğlu Lutz	Independent Learning	Laboratory / Physiology EMG II Bayram Yılmaz	
10.00- 10.50	Group A Independent Group Learning	B Lecture / ICP I The Medical History Hülya Akan	Lecture Introduction to Ethics Elif Vatanoğlu Lutz	Independent Learning	Group A Group B Independent Learning Group C Independent Learning	
11.00- 11.50	Independent Learni	Lecture / ICP I The Medical History Hülya Akan	Lecture  Muscle Mechanics; Muscular  Force  Bilge Güvenç Tuna	Lecture / Scientific Project I How to Read and Write an Article Gülderen Yanıkkaya Demirel	Laboratory / Physiology EMG II Bayram Yılmaz	
12.00- 12.50	Lunch Break	Lecture / ICP I Giving Information Özlem Tanrıöver	Lecture  Mechanical Powers of Cardiac and Skeletal Muscles Bilge Güvenç Tuna	Lecture / Scientific Project I How to Read and Write an Article Gülderen Yanıkkaya Demirel	Group A Independent Learning Group B Group C Independent Learning	
13.00- 13.50	PROGRAM IMPROVEN SESSION Phase Coordinator	ENT Lunch Break	Lunch Break	Lunch Break	Lunch Break	
14.00- 14.50	Common Compulsory C		Lecture Joints of the Cranium and Fontanelles Yüksel Aydar	Lecture Histology of Connective Tissue; Cells Alev Cumbul	Laboratory / Physiology EMG II Bayram Yılmaz	
15.00- 15.50	Turkish Language & Lite Bedri Selimhocaoğlu		Lecture Joints of the Cranium and Fontanelles Yüksel Aydar	Lecture Histology of Connective Tissue Proper; Types Alev Cumbul	Group A Independent Learning Group B Independent Learning	
16.00- 16.50	Independent Learnii	Common Compulsory Course Ataturk's Principles &		ELECTIVE	Independent Learning	
17.00-17.50		History of Modern Turkey  Davut Ekşi	Lecture Smooth Muscle Physiology Bayram Yılmaz	WEEK I	independent Learning	

#### COMMITTEE III - TISSUE I IV. WEEK / 06 - 10 Feb 2017

		nday b-2017	Tuesday 07-Feb-2017	WEEK / 06 – 10 Feb 2017 Wednesday 08-Feb-2017	Thursday 09-Feb-2017	Friday 10-Feb-2017				
09.00- 09.50	Independent Learning		Independent Learning	Lecture Introduction to Ethics Elif Vatanoğlu Lutz	Lecture Physiology of Cardiac Muscle Bayram Yılmaz	Laboratory / Physiology Smooth Muscle Contractili Bayram Yılmaz		ntractility		
10.00- 10.50	Laboratory/Anatomy Joints of the Cranium and Fontanelles Yüksel Aydar & Erdem Söztutar Group A Independent Learning Group B			<b>Lecture</b> Introduction to Ethics <i>Elif Vatanoğlu Lutz</i>	<b>Lecture</b> Physiology of Cardiac Muscle Bayram Yılmaz	Group A	Group B Independent Learning	Group C Independent Learning		
11.00- 11.50	Group A	Group B Independent Learning	Assessment Session ICP I (MCQ-EMQ)	Lecture Digital Recording of Biomedical Signals Bilge Güvenç Tuna	<b>Lecture</b> Muscles of the Back <i>Erdem Söztutar</i>	Smooth	Muscle Con ayram Yılma	ntractility		
12.00- 12.50	Independe	nt Learning		Lecture Digital Recording of Biomedical Signals Bilge Güvenç Tuna	Lecture  Muscles of the Back and Nape  Erdem Söztutar	Group A Independent Learning	Group B	Group C Independent Learning		
13.00- 13.50	Lunch Break		Lunch Break	Lunch Break	Lunch Break	Lunch Break		k		
14.00- 14.50	Common Compulsory Course Turkish Language & Literature Bedri Selimhocaoğlu Common Con Anatomic		Common Compulsory Course		Common Compulsory Course	Lecture Introduction to Myology Erdem Söztutar	Lecture Biophysics of Smooth Muscle Contraction Bilge Güvenç Tuna	Smooth	atory / Phys Muscle Con ayram Yılma	ntractility
15.00- 15.50			Anatomical Drawing Refik Aziz	<b>Lecture</b> Introduction to Myology <i>Erdem Söztutar</i>	Lecture Biophysics of Smooth Muscle Contraction Bilge Güvenç Tuna	Group A Independent Learning	Group B Independent Learning	Group C		
16.00- 16.50	Lecture Blood; RBC and Platelets			Independent Learning	ELECTIVE	Indep	endent Lea	rning		
17.00-17.50			•	<b>s</b>	WEEK II			3		

#### COMMITTEE III - TISSUE I V. WEEK / 13 Feb - 17 Feb 2017

	Monday 13-Feb-2017	Tuesday 14-Feb-2017	Wednesday 15-Feb-2017	Thursday 16-Feb-2017	Friday 17-Feb-2017	
09.00- 09.50	Independent Learning	Independent Learning	Laboratory / Histology			
10.00- 10.50	Laboratory / Anatomy Muscles of the Back and Nape Yüksel Aydar & Erdem Söztutar Group B Independent Learning	Clinical Skills Learning ICP I Patient-Doctor Communication Skills General Approach Özlem Tanrıöver & Hülya Akan	Assessment (DOPs)  Make up Session	- Independent Learning	Independent Learning	
11.00- 11.50	Group A Independent Group B Learning	A Learning C Learning D	Laboratory / Physiology Cardiac Muscle with PhysioEx Bayram Yılmaz	muependent Learning	independent Learning	
12.00- 12.50	Independent Learning	Group A  Group B Independent Learning Group C Independent Learning Group D Independent Learning	Group B Independent Learning Group C Independent Learning			
13.00- 13.50	Lunch Break	Lunch Break	Lunch Break	Lunch Break	Lunch Break	
14.00- 14.50		Laboratory / Physiology Cardiac Muscle with PhysioEx Bayram Yılmaz				
15.00- 15.50	Common Compulsory Course Turkish Language & Literature Bedri Selimhocaoğlu	Common Compulsory Course Anatomical Drawing Refik Aziz	Group A Independent Learning Group B Group C Independent Learning	Independent Learning	Independent Learning	
16.00- 16.50		Common Compulsory Course	dent ing	ELECTIVE		
17.00-17.50	Independent Learning	Ataturk's Principles & History of Modern Turkey <i>Davut Ekşi</i>	Group A Independent Learning Group B Independent Learning	WEEK III		

#### COMMITTEE III - TISSUE I VI. WEEK / 20 - 24 Feb 2016

	Monday 20-Feb-2017	Tuesday 21-Feb-2017	Wednesday 22-Feb-2017	Thursday 23-Feb-2017	Friday 24-Feb-2017	
09.00- 09.50	Independent Learning	Independent Learning			Independent Learning	
10.00- 10.50	Assessment Session		Independent Learning	Independent Learning	Assessment Session	
11.00- 11.50	Anatomy (Practical Exam)	Assessment Session			Committee III (MCQ-EMQ)	
12.00- 12.50		Physiology (Practical Exam)				
13.00- 13.50	Lunch Break	Lunch Break	Lunch Break	Lunch Break	Lunch Break	
14.00- 14.50						
	Common Compulsory Course	Common Compulsory Course			Program Evaluation Session	
15.00- 15.50	Common Compulsory Course Turkish Language & Literature Bedri Selimhocaoğlu	Common Compulsory Course Anatomical Drawing Refik Aziz	Independent Learning	Independent Learning	Program Evaluation Session Review of the Exam Questions, Evaluation of the Committee III Program Head of Committee	
15.00- 15.50 16.00- 16.50	Turkish Language & Literature	Anatomical Drawing	Independent Learning	Independent Learning	Review of the Exam Questions, Evaluation of the Committee III Program	

## COMMITTEE IV - TISSUE II DISTRIBUTION of LECTURE HOURS

#### February 29, 2017 - April 21, 2017

### **COMMITTEE DURATION: 8 WEEKS**

MED 104	BASIC MEDICAL SCIENCES I	THEO.	PRAC.	TOTAL
	DISCIPLINE	105	18	123
	ANATOMY	22	2Grx9H	31
	BEHAVIORAL SCIENCES	14	0	14
	BIOCHEMISTRY	36	3Grx2H	38
	BIOPHYSICS	4	0	4
	BIOSTATISTICS	12	0	12
	HISTOLOGY & EMBRYOLOGY	7	2Grx5H	12
	MEDICAL BIOLOGY	8	3Grx2H	10
	SCIENTIFIC PROJECT I	2	0	2

MED 103	ANATOMICAL DRAWING	0	16	16
MED 102	ICP-I	0	21	21
HTR 301-302	ATATURK'S PRINCIPLES & HISTORY	16	0	16
111K 001 002	OF MODERN TURKEY	1	)	10
TKL 201-202	TURKISH LANGUAGE & LITERATURE	16	0	16
	ELECTIVE COURSE	14	0	14

TOTAL	151	55	206

Coordination Committee	Head	İnci ÖZDEN, PhD, Prof.
	Secretary	Aylin YABA UÇAR, PhD, Assist. Prof.
	Member	Deniz KIRAÇ, PhD, Assist. Prof.
	Member	Erdem SÖZTUTAR, MD, Lecturer

### COMMITTEE IV – TISSUE II LECTURERS

BASIC MEDICAL SCIENCES I				
DISCIPLINE	FACULTY			
	Yüksel AYDAR, PhD, Prof.			
ANATOMY	Erdem SÖZTUTAR, MD, Lecturer			
BEHAVIORAL SCIENCES				
	İnci ÖZDEN, PhD, Prof.			
BIOCHEMISTRY	Altay Burak DALAN, PhD, Assoc. Prof			
	Jale ÇOBAN, MD, Prof.			
BIOPHYSICS	Bilge GÜVENÇ TUNA, PhD, Assist. Prof.			
BIOSTATISTICS	E. Çiğdem KASPAR, PhD, Assist. Prof.			
	Ünal USLU, MD, Assoc. Prof.			
HISTOLOGY & EMBRYOLOGY	Alev CUMBUL, PhD, Assist. Prof.			
	Aylin YABA UÇAR, PhD, Assist. Prof.			
	Turgay İSBİR, PhD, Prof.			
MEDICAL BIOLOGY	Deniz KIRAÇ, PhD, Assist. Prof.			
	Soner DOĞAN, PhD, Assoc. Prof.			
SCIENTIFIC PROJECT I	Gülderen YANIKKAYA DEMİREL, MD, Assoc. Prof.			

INTRODUCTION TO CLINICAL PRACTICE I (ICP-I)	Güldal İZBIRAK, MD, Assoc.Prof.  Hülya AKAN, MD, Assoc.Prof.  Özlem TANRIÖVER, MD, Assoc.Prof.  Arzu AKALIN, MD, Assist. Prof.
ANATOMICAL DRAWING	Refik AZİZ, PhD, Assist.Prof.
ATATURK'S PRINCIPLES & HISTORY OF MODERN TURKEY	Davut EKŞİ, PhD, Instructor
HUMANITIES	
TURKISH LANGUAGE & LITERATURE	Bedri SELİMHOCAOĞLU, Instructor

# COMMITTEE IV – TISSUE II AIM AND LEARNING OBJECTIVES

#### AIM

- 1. **to convey** basic terms and concepts for anatomy, embryology, histology, biostatistics, biophysics, biochemistry, behavioral sciences, and medical biology.
- 2. **to convey** knowledge on four fundamental tissues forming the body, cells forming these tissues and the intercellular material.
- 3. **to convey** knowledge on system-specific (upper extremities, back and chest area muscles, vascular and nervous innervations) anatomy and its clinical applications.
- 4. to convey knowledge on basic metabolic pathways of the body.

#### **LEARNING OBJECTIVES**

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

- 1.0. define the basic characteristics of the anatomy of the peripheral nervous system, muscular and vascular systems.
- 2.0. describe anatomical features, vessels, nervous innervations of upper extremities, and back muscles
- 3.0. describe the clinical implications of the anatomical features of the upper limb.
- 4.0. list general paradigms and basic concepts of psychology.
- 5.0. define consciousness, altered states of consciousness, stages of sleep, and measurement of intelligence.
- 6.0. describe Piaget's cognitive development theory, attitudes, cognitive dissonance, experiments on conformity, obedience, halo effect, and management of authority.
- 7.0. explain classical conditioning, operant conditioning, punishment, reinforcement, reinforcement schedules, extinction, spontaneous recovery, and social-cognitive learning.
- 8.0. for carbohydrates, lipids, proteins, and nucleotides;
  - 8.1. describe their structure.
  - 8.2. define their structural and biochemical functions in tissues.
- 9.0. for enzymes;
  - 9.1. explain the general properties of enzymes.
  - 9.2. describe the kinetics of enzymes.
  - 9.3. list the enzymes of the respiratory chain in the order of their arrangement.
  - 9.4. explain the function of each enzyme of the respiratory chain
  - 9.5. explain the functions of enzymes involved in removal of Reactive Oxygen Species (ROS).
- 10.0. for substrate level phosphorylation;
  - 10.1. explain the mechanism.
  - 10.2. list the metabolic pathways.
- 11.0. explain basic physical properties of biomaterials (such as bone and vessels)
- 12.0. list distribution types and properties in statistics.
- 13.0. explain descriptive statistics.
- 14.0. for cartilage and bone tissue;
  - 14.1. explain general microscopic characteristics.
  - 14.2. list ossification steps.
- 15.0. for nervous tissue;
  - 15.1. define general histologic structure.
  - 15.2. list neuron and glia types.
- 16.0. recognize the components of extracellular matrix and their interactions with each other.

### COMMITTEE IV – TISSUE II COMMITTEE ASSESSMENT MATRIX

LEARNING	LECTURER / INSTRUCTOR			DISTRUBI	TION of MCC	)s		
OBJECTIVES	LEGIGRER / INGTROGICK		CE	FE	IE	TOTAL		
40.00.00	Dr. E. Söztutar		40	40	40	39		
1.0, 2.0, 3.0	Dr. Y. Aydar		19	10	10	39		
4.0, - 7.0	Behavioral Science		12	7	7	26		
8.0 – 10.0	Dr. İ. Özden		32	17	17	66		
0.0 - 10.0	Dr. B. Dalan		32	17	17	00		
11.0	Dr. B.G. Tuna		4	2	2	8		
12.0,13.0	Dr. Ç. Kaspar		-	6	6	12		
14.0 – 15.0	Dr. Ü. Uslu		6	3	3	12		
14.0 – 15.0	Dr. A. Cumbul			3	3	12		
16.0	Dr. T. İsbir		7	4	4	15		
		TOTAL	80	49/200#	49/200#	178		
LEARNING	DISCIPLINE		DISTRUBITION of EMQ POINTS					
OD JECTIVEC			וט	STRUDITIO	TOI LING I O	11413		
OBJECTIVES		-			CE			
OBJECTIVES								
1.0 - 2.0 - 3.0	ANATOMY				CE	Q*		
	ANATOMY BIOCHEMISTRY			EMQ	CE ME	Q*		
1.0 - 2.0 - 3.0	_			<b>EMQ</b> 3	CE ME	Q*		
1.0 - 2.0 - 3.0 8.0 - 10.0	BIOCHEMISTRY			<b>EMQ</b> 3 6	CE ME	Q*		
1.0 - 2.0 - 3.0 8.0 - 10.0 12.0,13.0	BIOCHEMISTRY BIOSTATISTICS	TOTAL		<b>EMQ</b> 3 6	CE ME	Q* 		
1.0 - 2.0 - 3.0 8.0 - 10.0 12.0,13.0 14.0 - 15.0	BIOCHEMISTRY BIOSTATISTICS HISTOLOGY & EMBRYOLOGY	TOTAL		<b>EMQ</b> 3 6 -	CE ME	Q* 		
1.0 - 2.0 - 3.0 8.0 - 10.0 12.0,13.0	BIOCHEMISTRY BIOSTATISTICS	TOTAL		EMQ 3 6 - 1	CE ME	Q* 0 0		
1.0 - 2.0 - 3.0 8.0 - 10.0 12.0,13.0 14.0 - 15.0 LEARNING OBJECTIVES	BIOCHEMISTRY BIOSTATISTICS HISTOLOGY & EMBRYOLOGY  DISCIPLINE	TOTAL	DI	EMQ 3 6 - 1	CE ME	Q* 0 0		
1.0 - 2.0 - 3.0 8.0 - 10.0 12.0,13.0 14.0 - 15.0	BIOCHEMISTRY BIOSTATISTICS HISTOLOGY & EMBRYOLOGY	TOTAL	DI	EMQ 3 6 - 1 10	CE ME	Q* O INTS		
1.0 - 2.0 - 3.0 8.0 - 10.0 12.0,13.0 14.0 - 15.0 LEARNING OBJECTIVES	BIOCHEMISTRY BIOSTATISTICS HISTOLOGY & EMBRYOLOGY  DISCIPLINE	TOTAL	DI	EMQ 3 6 - 1 10	CE ME	Q* 0 0 INTS		
1.0 - 2.0 - 3.0 8.0 - 10.0 12.0,13.0 14.0 - 15.0 LEARNING OBJECTIVES	BIOCHEMISTRY BIOSTATISTICS HISTOLOGY & EMBRYOLOGY  DISCIPLINE  ANATOMY	TOTAL	DI	EMQ 3 6 - 1 10	CE  ME	Q* 0 0 INTS PE 0 0		
1.0 - 2.0 - 3.0 8.0 - 10.0 12.0,13.0 14.0 - 15.0 LEARNING OBJECTIVES 1.0 - 2.0 - 3.0 8.0 - 10.0	BIOCHEMISTRY BIOSTATISTICS HISTOLOGY & EMBRYOLOGY  DISCIPLINE  ANATOMY BIOCHEMISTRY	TOTAL	DI	EMQ 3 6 - 1 10 STRUBITION DOPS - -	CE  ME  10  10  N of LAB PO  LP  50	Q* 0 INTS PE		

TOTAL

100

Total number of MCQs are 90 (each question has equal value)

Total number of EMQs are 10 (each question has equal value)

Total value of DOPS and LPE are equal to 100 points

#### Commitee Score (CS) = 90% CE (MCQ+EMQ+MEQ) + 10% (DOPS+LPE)

#In FE and ICE 49 out of 200 MCQs will be from this Committee (Each question has equal value).

### Abbreviations:

**MCQ:** Multiple Choice Question **EMQ:** Extending Matching Question

MEQ: Modified Essay Questions \* Biostatistics exam will be given separately before the committee exam date.

**DOPS:** Direct Observation of Procedural Skills

LPE: Practical Lecture Evaluation

CE: Committee Exam
CS: Committee Score
FE: Final Exam
ICE: Incomplete Exam

#### COMMITTEE IV -TISSUE II I. WEEK / 27 Feb - 03 Mar 2017

	Monday 27-Feb-2017		uesday Feb-2017	Wednesd 01-Mar-20		Thursday 02-Mar-2017	Friday 03-Mar-2017
09.00- 09.50		Patient-Doct Skills Ge	Clinical Skills Learning ICP I Patient-Doctor Communication Skills General Approach Özlem Tanrıöver & Hülya Akan		Lecture Histology of Cartilage Tissue Alev Cumbul	Independent Learning	
10.00- 10.50	Independent Learning	Group A Independent Learning Group B	Group C Independent Learning Group D Independent Learning	Lecture Classification of Carboh Features of Carb İnci Özde	nydrates, General pohydrates	Lecture  Monosaccharide Derivatives, Disaccharides, Polysaccharides, Starch, Glycogen İnci Özden	Lecture Glycosaminoglycans, Structures and Functions inci Özden
11.00- 11.50				Lecture Classification of Carboh Features of Carb İnci Özde	nydrates, General pohydrates	Lecture  Monosaccharide Derivatives, Disaccharides, Polysaccharides, Starch, Glycogen İnci Özden	Lecture Glycosaminoglycans, Structures and Functions Inci Özden
12.00- 12.50		Introductory Session Introduction to Committee IV Head of Committee IV				Lunch Break	Lunch Break
13.00- 13.50	Lunch Break	Lun	Lunch Break Histology of Adipose Tissue  Alev Cumbul		Behavioral Science / Lecture Life Cycle: Pregnancy through Preschool Instructors	<b>Lecture</b> Extracellular Matrix Turgay İsbir	
14.00- 14.50	Common Compulsory Course Turkish Language & Literature		mpulsory Course	Lecture  Muscles of the Shoulder Girdle  Erdem Söztutar		Behavioral Science / Lecture Life Cycle; School age, Adolescence and Adulthood Instructors	Lecture Extracellular Matrix Turgay İsbir
15.00- 15.50	Bedri Selimhocaoğlu	Re	efik Aziz	Lecture  Muscles of the Shoulder Girdle and Axilla  Erdem Söztutar		Independent Learning	
16.00- 16.50	Lecture Introduction to Peripheral Nervous System Erdem Söztutar	Common Compulsory Course Ataturk's Principles & History of Modern Turkey Davut Ekşi		Laboratory / Anatomy  Muscles of the Shoulder Girdle and Axilla  Erdem Söztutar & Sinem Gergin  Group B  Independent Learning  Laboratory / Anatomy  Muscles of the Shoulder Girdle and Axilla Erdem Söztutar & Sinem Gergin  Group A Independent Learning  Group B Learning		ELECTIVE	Independent Learning
17.00-17.50	<b>Lecture</b> Spinal nerves Erdem Söztutar					WEEK IV	

#### COMMITTEE IV - TISSUE II II. WEEK / 06 - 10 Mar 2017

1	Monday Tuesday Wednesday Thursday Friday										
	Monday 06-Mar-2017	Tuesday 07-Mar-2017		anesday ∕ar-2017	Thursday 09-Mar-2017	Friday 10-Mar-2017					
09.00- 09.50	00-Mai-2017	Independent Learning	Classification Feature	ecture of Lipids, General es of Lipids i Özden	Independent Learning	Independent Learning					
10.00- 10.50	Independent Learning	Clinical Skills Learning ICP I Patient-Doctor Communication Skills General Approach Özlem Tanrıöver & Hülya Akan	Classification Feature	ecture of Lipids, General es of Lipids i Özden	Lecture Saturated and Unsaturated Fatty Acids, Essential Fatty Acids İnci Özden	<b>Lecture</b> Triacylglycerols <i>İnci Özden</i>					
11.00- 11.50		Group A Independent Learning Group B Independent Learning Group C Group D Group D	Lecture Extracellular Matrix Turgay İsbir		Lecture Lecture Saturated and Unsaturated Extracellular Matrix Fatty Acids, Essential Fatty						
12.00- 12.50		Indepo	Lunch Break		Lunch Break	Lunch Break					
13.00- 13.50	Lunch Break	Lunch Break	Lecture Extracellular Matrix Turgay İsbir		Extracellular Matrix		Behavioral Science / Lecture Life Cycle; Aging, Death and Bereavement Instructors	Lecture  Main Concepts in Biostatistics  E.Çiğdem Kaspar			
14.00- 14.50	Common Compulsory Course	Common Compulsory	Muscles Erdem Söztuta	ry / Anatomy s of the Arm ar & Sinem Gergin	Behavioral Science / Lecture Life Cycle; Aging, Death and Bereavement	Lecture  Main Concepts in Biostatistics  E.Çiğdem Kaspar					
	Turkish Language & Literature  Bedri Selimhocaoğlu	Course Anatomical Drawing	Group A Independent Learning	Group B	Instructors						
15.00- 15.50	Relik AZIZ		Group A	Group B Independent Learning	Lecture Mechanical Properties of Biomaterials Bilge Güvenç Tuna	Lecture Extracellular Matrix Turgay İsbir					
16.00- 16.50	<b>Lecture</b> Muscles of the Arm <i>Erdem Söztutar</i>	Common Compulsory Course Ataturk's Principles &	Independ	lent Learning	ELECTIVE	<b>Lecture</b> Extracellular Matrix <i>Turgay İsbir</i>					
17.00-17.50	<b>Lecture</b> Muscles of the Arm <i>Erdem Söztutar</i>	History of Modern Turkey  Davut Ekşi			WEEK V	Independent Learning					

#### COMMITTEE IV - TISSUE II III. WEEK / 13 – 17 Mar 2017

	Mon 13-Ma	nday r-2017	Tuesday 14-Mar-2017	Wednesday 15-Mar-2017	Thursday 16-Mar-2017	Friday 17-Mar-2017	
09.00- 09.50	Laboratory Assessme Histology of C Cartilage	ent (DOPs) onnective and		Lecture Glycerophospholipids, Sphingophospholipids İnci Özden	Lecture Development of the Axial Skeleton and Limb Alev Cumbul	<b>Lecture</b> Stress-Strain, Stiffness <i>Bilge Güvenç Tuna</i>	
10.00- 10.50	Group A Independent Learning	Group B	PHYSICIAN'S DAY	Lecture Glycerophospholipids, Sphingophospholipids Ínci Özden	Lecture Isoprene Derivative, Steroids, Bile Acids Inci Özden	Lecture Eicosanoids İnci Özden	
11.00- 11.50	Group B Group A Independent Independent		Lecture Isoprene Derivatives, Steroids, Bile Acids Inci Özden	<b>Lecture</b> Eicosanoids İnci Özden			
12.00- 12.50		Learning	Lunch Break	Lunch Break	Lunch Break	Lunch Break	
13.00- 13.50	Lunch	Lunch Break		Lecture Elasticity Bilge Güvenç Tuna	Behavioral Science / Lecture The Biological Bases of Behavior Instructors	<b>Lecture</b> Frequency Distributions <i>E.Çiğdem Kaspar</i>	
14.00- 14.50	Common Comp			Lecture Muscles of the Forearm Yüksel Aydar	Behavioral Science / Lecture The Biological Bases of Behavior Instructors	<b>Lecture</b> Graphics <i>E.Çiğdem Kaspar</i>	
15.00- 15.50		Turkish Language & Literature  Bedri Selimhocaoğlu		Lecture Muscles of the Forearm Yüksel Aydar	Lecture Frequency Distributions E.Çiğdem Kaspar	Lecture Measures of Central Tendencies E.Çiğdem Kaspar	
16.00- 16.50	Lecture Histology of Bone Tissue; Microscopic Structure Ünal Uslu  Lecture Histology of Bone Tissue; Ossification Ünal Uslu		WHITE COAT CEREMONY	Laboratory / Anatomy Muscles of the Forearm Yüksel Aydar & Sinem Gergin Group B Group A Independent Learning	ELECTIVE		
17.00-17.50				Laboratory / Anatomy Muscles of the Forearm Yüksel Aydar & Sinem Gergin Group A Independent Learning	WEEK VI	Independent Learning	

#### COMMITTEE IV - TISSUE II IV. WEEK / 20 – 24 Mar 2017

	Mon	day	Tuesday		Wedn	esday	Thursday	Friday
	20-Mar	·-2017	21-Mar-2017		22-Ma	r-2017	23-Mar-2017	24-Mar-2017
09.00- 09.50	Assessment Histology of Bon	Laboratory / Histology Assessment (DOPs) stology of Bone and Nervous Tissue		Independe	nt Learning	Independent Learning	Independent Learning	
10.00- 10.50	Group A	Group B Independent Learning	Clinical Skills Learning ICP I  Patient-Doctor Communication Skills, General Approach Özlem Tanriöver & Hülya Akan		Amino Aci Features, 0	ture ids, General Classification Dalan	Lecture Primary, Secondary, Tertiary, Quaternary Structures of Proteins Burak Dalan	<b>Lecture</b> Glycoproteins, Collagen, α-keratin <i>Burak Dalan</i>
11.00- 11.50	Group A Independent Learning	Group B	Group A Independent Learning Group B Independent Learning Group C	Learning Group D	Amino Aci Features, C	ture ids, General Classification Dalan	Lecture Primary, Secondary, Tertiary, Quaternary Structures of Proteins Burak Dalan	<b>Lecture</b> Glycoproteins, Collagen, α-keratin <i>Burak Dalan</i>
12.00- 12.50	Learning				Lunch Break		Lunch Break	Lunch Break
13.00- 13.50	Lunch	Break	Lunch Break		Muscles o	r / Anatomy f the Hand & Sinem Gergin Group B	Behavioral Science / Lecture Sleep and Sleep Disorders Instructors	Lecture Measures of Central Tendencies E.Çiğdem Kaspar
14.00- 14.50	Common Comp Turkish Langua	ge & Literature	Common Compulsory Course Anatomical Drawing Refik Aziz		Group A	Group B Independent Learning	Behavioral Science / Lecture Substance Releated Disorders Instructors	Lecture Measures of Central Tendencies E.Çiğdem Kaspar
15.00- 15.50	Bedri Selin	nhocaoğlu				<b>ture</b> I Plexus <i>'Aydar</i>	<b>Lecture</b> Shear stress, Poisson's Law <i>Bilge Güvenç Tuna</i>	<b>Lecture</b> Biology of Oxidative Stress <i>Turgay İsbir</i>
16.00- 16.50	Erdem Söztutar Ataturk' History of		Ataturk's Principles	mmon Compulsory Course Ataturk's Principles &		<b>ture</b> I Plexus <i>I Aydar</i>	ELECTIVE	Lecture Biology of Oxidative Stress Turgay İsbir
17.00-17.50			Hıstory of Modern Turkey <i>Davut Ekşi</i>		Independe	nt Learning	WEEK VII	Independent Learning

#### COMMITTEE IV - TISSUE II V. WEEK / 27 Mar – 31 Mar 2017

	Monday 27-Mar-2017	Tuesday 28-Mar-2017	Wednes	day	Thur 30-Ma			Friday 31-Mar-2017	
09.00- 09.50		Independent Learning	<b>Lectur</b> Nucleotic <i>Înci</i> Özd	des	Laboratory / Anatomy  Muscles of the Pelvic Girdle  Erdem Söztutar & Sinem Gergin  Group A Independent Learning  Group B		Laboratory / Med. Biology Oxidative Stress and Antioxidant System Turgay İsbir Soner Doğan & Deniz Kıraç		
10.00- 10.50	Independent Learning	Clinical Skills Learning ICP I Patient-Doctor Communication Skills Using SPs Güldal İzbırak & Arzu Akalın	ICP I Patient-Doctor Communication Skills Using SPs  Lecture Nucleotides Inci Özden  Lecture Enzymes, Kinetics, Regulatory Enzymes Leci Özdes		etics,Regulatory ymes Ozden	Group A	Group B Independent Learning	Group C Independent Learning	
11.00- 11.50		Group A Group B Independent Learning Group C Independent Learning Group D Independent	<b>Lectur</b> Measures of Centr <i>E.Çiğdem F</i>	ral Dispersion Kaspar	<b>Lec</b> t Enzymes, Kine Enzy <i>Inci</i> Ö	tics,Regulatory mes	Group A Independent Learning	Group B	Group C Independent Learning
12.00- 12.50		Grander Grande	Lecture  Measures of Central Dispersion  E.Çiğdem Kaspar		Lunch		Gr. Inde	Gre	Gro Indep Lea
13.00- 13.50	Lunch Break	Lunch Break	Lunch Break		Behavioral Science / Lecture Psychoanalythic Theory and Defense Mechanism Instructors		Lunch Break		
14.00- 14.50	Common Compulsory Course	Lecture Muscles of The Pelvic Girdle (Gluteal Region) Erdem Söztutar  Mehavioral Science / Lecture Psychoanalythic Theory and Defense Mechanism Instructors		nic Theory and Mechanism	Laboratory / Med. Biology Oxidative Stress and Antioxidant System Turgay İsbir Soner Doğan & Deniz Kıraç		nt System		
15.00- 15.50	Turkish Language & Literature Bedri Selimhocaoğlu	Anatomical Drawing Refik Aziz	<b>Lecture</b> Muscles of The Pelvic Girdle  Erdem Söztutar		Laboratory Muscles of the Erdem Söztutar Group A		Group A Independent Learning	Group B Independent Learning	Group C
16.00- 16.50	<b>Lecture</b> Nerves of the Upper Limb <i>Erdem Söztutar</i>	Common Compulsory Course Ataturk's Principles & History of Modern Turkey Davut Ekşi	Laboratory / Anatomy Brachial Plexus, Nerves, and Vasculature of The Upper Limb Erdem Söztutar & Sinem Gergin Group B Group A Independent Learning		ELECTIVE WEEK VIII		Independent Learning		
17.00-17.50	<b>Lecture</b> Vasculature of the Upper Limb <i>Erdem</i> Söztutar		Group A Independent Learning	Group A Independent Group B					

#### COMMITTEE IV - TISSUE II VI. WEEK / 03 - 07 Apr 2017

	Monday			uesday		esday	Thursday	Friday	
	03-Apr-2017		04-	Apr-2017	05-Ap	r-2017	06-Apr-2017 Lecture	07-Apr-2017 Lecture	
09.00- 09.50		Inc	depen	dent Learning	Independe	nt Learning	Rates and Ratios  E.Çiğdem Kaspar	Standardization of Disease Rates  E.Çiğdem Kaspar	
10.00- 10.50	Independent Learning	Clinical Skills Learning ICP I Patient-Doctor Communication Skills Using SPs Güldal İzbırak & Arzu Akalın			Internation Commission ( of Enzy		<b>Lecture</b> Enzymes of Antioxidant Activity İnci Özden	Lecture Histology of Nerveous Tissue: General Specification Alev Cumbul	
11.00- 11.50		Group A Independent Learning	Group B	Group C Independent Learning Group D Independent Learning		mes	Lecture Enzymes of Antioxidant Activity Inci Özden	Lecture Histology of Nerveous Tissue: Elements Alev Cumbul	
12.00- 12.50		=		트 트	Lunch	Break	Lunch Break	Lunch Break	
13.00- 13.50	Lunch Break		Lun	ch Break	Laboratory / Histology Make Up Sesion		Behavioral Science / Lecture Learning Theory Instructors	Lecture Muscles of the Leg Yüksel Aydar & Erdem Söztutar	
14.00- 14.50	Common Compulsory Course	Common Compulsory Course Turkish Language & Literature Bedri Selimhocaoğlu  Common Compulsory Course Anatomical Drawing Refik Aziz  Group A Independent Learning  Group B Independent Learning		Independent	Behavioral Science / Lecture Perception Instructors	Lecture Muscles of the Leg Yüksel Aydar & Erdem Söztutar			
15.00- 15.50				Independent	Group B				
16.00- 16.50	Lecture Muscles of the Thigh Yüksel Aydar	jh			Muscles o Yüksel Aydar &	f Anatomy f the Thigh Erdem Söztutar Group B	Independent Learning	Indonesia (	
	,			ompulsory Course s Principles &	Group A	Independent Learning	independent Learning	Independent Learning	
47.00.47.55	Lecture	History of Modern Turkey <i>Davut Ekşi</i>			Muscles o	I / Anatomy f the Thigh Erdem Söztutar			
17.00-17.50	Muscles of the Thigh <i>Yüksel Aydar</i>				Group A Independent Learning	Group B			

#### COMMITTEE IV - TISSUE II VII. WEEK / 10 – 14 Apr 2017

	Mon 10-Apı		Tuesday 11-Apr-2017			Wedn	esday r-2017	Thursday 13-Apr-2017		Friday 14-Apr-2017	,	
09.00- 09.50	Independer	nt Learning	Independe	ent Learr	ning	Independe	nt Learning	Discussion (Large Group) Overview Erdem Söztutar	Inde	Independent Learning		
10.00- 10.50	Laboratory Muscles of Yüksel Aydar & Group A Independent Learning		Patient-Doctor	CP I Commu Jsing SP:	nication s	ATP Production, Phosphorylat Phosph	ture Substrate Level ion, Oxidative orylation Özden	Lecture Oxidative Decarboxylation İnci Özden	SI	Laboratory / Biochemistry Spectrophotometry Jale Çoban & Müge Kopuz		
11.00- 11.50	Group A	Group B Independent Learning	Group A Independent Learning Group B	Learning Group C	Group D Independent Learning	ATP Production, Phosphorylat Phosph	ture Substrate Level ion, Oxidative orylation Özden	Lecture Oxidative Decarboxylation Inci Özden	Group A	Group B Independen t Learning	Group C Independen t Learning	
12.00- 12.50	Independer	nt Learning	= =		=	Lunch	Break	Lunch Break		Lunch Break		
13.00- 13.50			Lunci	n Break		Laboratory / Anatomy Muscles of the Foot Yüksel Aydar & Erdem Söztutar Group B Group A Independent Learning		Behavioral Science / Lecture Perception Instructors	SI	Laboratory / Biochemistry Spectrophotometry Jale Çoban & Müge Kopuz		
14.00- 14.50	Turkish Langua	Common Compulsory Course Turkish Language & Literature Bedri Selimhocaoğlu		Common Compulsory Course Anatomical Drawing Refik Aziz		How to Read and	entific Project I d Write an Article ukkaya Demirel	Behavioral Science / Lecture Emotion Instructors	Group A Independent Learning	Group B	Group C Independent Learning	
15.00- 15.50				RBIIK AZIZ		Lecture / Scientific Project I How to Read and Write an Article Gülderen Yanıkkaya Demirel		Discussion (Large Group) Overview Erdem Söztutar	Group A Independent Learning	Group B Independent Learning	Group C	
16.00- 16.50	<b>Lec</b> t Muscles o <i>Yüksel</i>	of the Foot	Ataturk's	Common Compulsory Course Ataturk's Principles &		Muscles	/ / Anatomy of the Foot Erdem Söztutar	ELECTIVE	Grot Indepe Lear	Grot Indepe Lear	Groc	
17.00-17.50	Lect Muscles o Yüksel	of the Foot	History of Modern Turkey <i>Davut Ekşi</i>		Group A Independent Learning	Group B	WEEK IX	Independent Learning				

#### COMMITTEE IV - TISSUE II VIII. WEEK / 17 – 21 Apr 2017

	Monday	Tuesday	VIII. WEEK / 17 – 21 Apr 2017 Wednesday	Thursday	Friday	
	17-Apr-2017	18-Apr-2017	19-Apr-2017	20-Apr-2017	21-Apr-2017	
09.00- 09.50		Independent Learning	Assessment Session Medical Biology		Independent Learning	
10.00- 10.50	Assessment Session Anatomy (Practical Exam)	Clinical Skills Learning ICP I Patient-Doctor Communication Skills Using SPs Güldal İzbırak & Arzu Akalın	(Practical Exam)	Independent Learning		
11.00- 11.50	, , , , , , , , , , , , , , , , , , ,	o A Learning p B Learning Learning			Assessment Session Committee IV (MCQ-EMQ)	
12.00- 12.50		Group A Independent Learning Group B Independent Learning Group C Independent Learning	Independent Learning			
13.00- 13.50	Lunch Break	Lunch Break	Lunch Break	Lunch Break	Lunch Break	
14.00- 14.50	Common Compulsory Course	Common Compulsory Course			Program Evaluation Session Review of the Exam Questions, Evaluation of the Committee IV Program Head of Committee	
15.00- 15.50	Turkish Language & Literature Bedri Selimhocaoğlu	Anatomical Drawing Refik Aziz	Independent Learning	Independent Learning		
16.00- 16.50	Assessment Session	Common Compulsory Course				
17.00-17.50	Biostatistics (Writing Exam-MEQ)	Ataturk's Principles & Hıstory of Modern Turkey <i>Davut Ekşi</i>			Independent Learning	

# COMMITTEE V - ENERGY AND METABOLISM DISTRIBUTION of LECTURE HOURS

## April 24, 2017 - June 02, 2017

### **COMMITTEE DURATION: 6 WEEKS**

MED 104	BASIC MEDICAL SCIENCES I	THEO.	PRAC.	PBL	TOTAL
	DISCIPLINE	82	14	7	103
	ANATOMY	18	2Grx7H		23
	BEHAVIORAL SCIENCES	10	0		10
	BIOCHEMISTRY	26	3Grx2H		28
	BIOSTATISTICS	12	3Grx2H		14
	HISTOLOGY and EMBRYOLOGY	9	2Grx3H		12
	MEDICAL BIOLOGY	7	0		7
		•			

MED 103	ANATOMICAL DRAWING	0	8	8
HTR 301-302	ATATURK'S PRINCIPLES & HISTORY OF MODERN TURKEY	8	0	8
	TURKISH LANGUAGE & LITERATURE	8	0	8
	ELECTIVE COURSE	8	0	8

TOTAL	106	22	7	135

Coordination Committee	Head	İnci ÖZDEN, Prof.
	Secretary	Bilge GÜVENÇ TUNA, Assist. Prof.,
	Member	Alev CUMBUL, Assist. Prof.
	Member	E. Çiğdem KASPAR, Assist. Prof.

PBL Coordinators	Coordinator	Sabri KAMAHLI, Prof. Dr.
	Coordinator	İbrahim Çağatay ACUNER, Assoc. Prof. Dr.
	Co-Coordinator	Serdar ÖZDEMİR, Assist. Prof. Dr.

# COMMITTEE V - ENERGY AND METABOLISM LECTURERS

BASIC MEDICAL SCIENCES I							
DISCIPLINE	FACULTY						
ANATOMY	Yüksel AYDAR, PhD, Prof.						
ANATOWIT	Erdem SÖZTUTAR, MD, Lecturer						
BEHAVIORAL SCIENCES							
BIOCHEMISTRY	İnci ÖZDEN, PhD, Prof.						
BIOSTATISTICS	E. Çiğdem KASPAR, PhD, Assist. Prof.						
	Ünal USLU, MD, Assoc. Prof.						
HISTOLOGY & EMBRYOLOGY	Alev CUMBUL, PhD, Assist. Prof.						
	Aylin Yaba UÇAR, PhD, Assist. Prof.						
	Turgay İSBİR, PhD, Prof.						
MEDICAL BIOLOGY	Deniz KIRAÇ, PhD, Assist. Prof.						
	Soner DOĞAN, PhD, Assoc. Prof.						

INTRODUCTION TO CLINICAL	Güldal İZBIRAK, MD, Assoc.Prof.		
PRACTICE I	Hülya AKAN, MD, Assoc.Prof.		
(ICP-I)	Özlem TANRIÖVER, MD, Assoc.Prof.		
	Arzu AKALIN, MD, Assist. Prof.		
ANATOMICAL DRAWING	Refik AZİZ, PhD, Assist.Prof.		
ATATURK'S PRINCIPLES & HISTORY OF MODERN TURKEY	Davut EKŞİ, PhD, Instructor		
HUMANITIES			
TURKISH LANGUAGE & LITERATURE	Bedri SELİMHOCAOĞLU, Instructor		

# COMMITTEE V - ENERGY AND METABOLISM AIMS AND LEARNING OBJECTIVES

#### AIM

- 1.0 *to convey* basic terms and concepts of medical biology, biostatistics, embryology, histology, biochemistry, behavioral sciences, and medical biology.
- 2.0 to convey knowledge on basic energy mechanisms of the body.
- 3.0 to convey knowledge on process from zygote to formation of organs.
- 4.0 **to convey** knowledge on system-specific (lower extremities, muscles, vascular and nervous innervations) anatomy and its clinical applications.

#### **LEARNING OBJECTIVES**

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

- 1.0. describe the anatomical features, vessels, nervous innervations of lower extremities.
- 2.0. describe the clinical implications of the anatomical features of the lower limb.
- 3.0. explain psychodynamic and humanistic approaches to personality development.
- 4.0. define abnormality; compare and contrast psychological disorders on the five-axes DSM system.
- 5.0. explain ATP synthesis in human organism and enzymatic system that this synthesis occurs by.
- 6.0. list enzymes involved in blood clotting and their functions.
- 7.0. explain glycogen and glucose metabolisms.
- 8.0. for transport mechanisms in biological membranes;
  - 8.1. the permeability of biological membranes
  - 8.2. explain its correlation with ATP usage.
- 9.0. explain basic terms and concepts of epidemiology.
- 10.0. list methods of research planning and collecting data.
- 11.0. list probability distributions.
- 12.0. list developmental events respectively from somitogenesis to nerulation
- 13.0. list developmental events respectively from organogenesis to parturition
- 14.0. explain developmental link between embryonic layers and tissues that form organs.
- 15.0. describe contraception and assisted reproductive techniques.
- 16.0. associate the relation with congenital abnormalities and developmental processes.
- 17.0. define the features of mitochondrial genome and mutated mitochondrial genes.
- 18.0. explain case scenario related basic medical science topics in a clinical context.

# COMMITTEE V - ENERGY AND METABOLISM COMMITTEE ASSESSMENT MATRIX

LEARNING	LECTURER / INSTRI	UCTOR	DISTRUBITION of MCQ					
OBJECTIVES			CE	FE	IE	TOTAL		
4000	Dr. E. Söztutar		00	_	_	0.4		
1.0, 2.0	Dr. Y.Aydar		20	7	7	34		
3.0, 4.0	Behavioral Science		11	4	4	19		
5.0 - 8.0	Dr. İ. Özden		28	12	12	52		
9.0, 11.0	Dr. Ç. Kaspar		-	6	6	12		
12.0 - 16.0	Dr. Ü. Uslu		9	4	4	17		
12.0 - 16.0	Dr. A. Cumbul		9	4	4	17		
17.0	Dr. T. İsbir		8	3	3	14		
		TOTAL	76	36/200#	36/200#	148		
LEARNING OBJECTIVES	DISCIPLINE	-	DISTRU		Q POINTS			
OBJECTIVES			CE EMQ			MEQ		
1.0 - 2.0	ANATOMY			3		MEQ		
5.0 – 8.0, 18.0	BIOCHEMISTRY			5				
9.0 - 11.0	BIOSTATISTICS			-		14		
12.0 - 16.0	HISTOLOGY & EMBRYOLOGY			1				
17.0, 18.0	MEDICAL BIOLOGY			1				
		TOTAL		10		14		
LEARNING OBJECTIVES	DISCIPLINE		DI	STRUBITION	of LAB PO	DINTS		
			DOPS			LPE		
1.0 - 2.0	ANATOMY			-		60		
5.0 - 8.0	BIOCHEMISTRY		<u>-</u>			20		
12.0 - 16.0	HISTOLOGY & EMBRYOLOGY			20				
		TOTAL		10	00			

Total number of MCQs are 90 (each question has equal value)

Total number of EMQs are 10 (each question has equal value)

Total value of DOPS and LPE are equal to 100 points

Learning objectives related to PBL sessions are assesed by EMQs of related disiplines.

CS = 95% of [ 90% CE (MCQ+EMQ+MEQ) + 10% (DOPS+LPE)] + 5% of PBL-P

\*In FE and ICE, 36 out of 200 MCQs will be from this Committee (Each question has equal value).

#### Abbreviations:

MCQ: Multiple Choice Question
EMQ: Extending Matching Question

MEQ: Modified Essay Questions \* Biostatistics exam will be given separately before the committee exam date.

**DOPS:** Direct Observation of Procedural Skills

LPE: Practical Lecture Evaluation

CE: Committee Exam
CS: Committee Score
FE: Final Exam
ICE: Incomplete Exam

**PBL-P:** Evaluation of PBL Student's Performance

## COMMITTEE V-ENERGY AND METABOLISM I. WEEK / 24 – 28 Apr 2017

	Monday 24-Apr-2017	Tuesday 25-Apr-2017	Wednesday 26-Apr-2017	Thursday 27-Apr-2017	Friday 28-Apr-2017
09.00- 09.50		Introductory Session Introduction to Committee V Secretary of Committee V		Independent Learning	PBL Session
10.00- 10.50	PBL Session	Lecture Genome of Mithocondria Turgay İsbir	Independent Learning	<b>Lecture</b> Transport Through Biological Membranes <i>İnci Özden</i>	T DE Gession
11.00- 11.50		<b>Lecture</b> Transport Through Biological Membranes <i>İnci Özden</i>		<b>Lecture</b> Transport Through Biological Membranes <i>İnci Özden</i>	Independent Learning
12.00- 12.50	Independent Learning	<b>Lecture</b> Transport Through Biological Membranes <i>İnci Özden</i>	Lunch Break	Lunch Break	Lunch Break
13.00- 13.50	Lunch Break	Lunch Break	<b>Lecture</b> Probability <i>E.Çiğdem Kaspar</i>	Behavioral Science / Lecture Culture and Illness Instructors	Independent Learning
14.00- 14.50	Common Compulsory Course Turkish Language & Literature	Common Compulsory Course Anatomical Drawing	<b>Lecture</b> Probability E.Çiğdem Kaspar	Behavioral Science / Lecture Culture and Illness Instructors	<b>Lecture</b> Theoretical Distributions <i>E.Çiğdem Kaspar</i>
15.00- 15.50	Bedri Selimhocaoğlu	Refik Aziz	Independent Learning	Independent Learning	<b>Lecture</b> Theoretical Distributions <i>E.Çiğdem Kaspar</i>
16.00- 16.50	<b>Lecture</b> Lumbal and Sacral Plexus <i>Yüksel Aydar</i>	Common Compulsory Course Ataturk's Principles &	Laboratory / Biostatistics Basic Statistical Calculations on Excel E.Çiğdem Kaspar	ELECTIVE	Laboratory / Biostatistics Basic Statistical Calculations on Excel E.Çiğdem Kaspar
17.00-17.50	<b>Lecture</b> Lumbal and Sacral Plexus <i>Yüksel Aydar</i>	History of Modern Turkey  Davut Ekşi	Group A Group B Independent Learning Group C Independent Learning	WEEK X	Group A Independent Learning Group B Group C Independent Learning

## COMMITTEE V - ENERGY AND METABOLISM II. WEEK / 01 – 05 May 2016

	Monday 01-May-2017	Tuesday 02-May-2017	Wedn	esday y-2017	Thur 04-Ma		Friday 05-May-2017		
09.00- 09.50		Independent Learning	Independent Learning PBL Session		PBL Session		Lecture Nerves of the Lower Limb Erdem Söztutar		Lecture Glycogenesis Inci Özden
10.00- 10.50					Lec Vasculature of Erdem 3	the Lower Limb	<b>Lecture</b> Glycogenesis <i>İnci Özden</i>		
11.00- 11.50		Lecture Somitogenesis; Mesoderm Organization Alev Cumbul	Lecture Digestion and Absorption of Carbohydrates İnci Özden  Lecture Digestion and Absorption of Carbohydrates İnci Özden  Lunch Break		Lecture Digestion and Absorption of Carbohydrates  Cervical Mu Yüksel Ayda				Lecture Genome of Mithocondria Turgay İsbir
12.00- 12.50		Lecture Neurulation; Neuroectoderm Organization Alev Cumbul			Group A Independent Group B Learning		Lecture Genome of Mithocondria Turgay İsbir		
13.00- 13.50	LABOR'S DAY	Lunch Break			Lunch Break		Lunch Break		
14.00- 14.50		Common Compulsory Course Anatomical Drawing Refik Aziz	Lumbal and Sacr and Vasculature C		Behavioral Science / Lecture Human Sexuality Instructors		Lecture Folding and Angiogenesis Alev Cumbul		
15.00- 15.50			Group A	Group B Independent Learning	Behavioral Science / Lecture Violence and Abuse Instructors		Lecture Organogenesis & Fetal Periods Alev Cumbul		
16.00- 16.50		Common Compulsory Course Ataturk's Principles &	Cervical	<b>Lecture</b> Cervical Muscles <i>Erdem Söztutar</i>		TIVE	Independent Learning		
17.00-17.50	History of		Lecture Cervical Muscles and Triangles Erdem Söztutar		WEEK XI		muependent Learning		

## COMMITTEE V - ENERGY AND METABOLISM III. WEEK / 08 – 12 May 2016

		nday y-2017	Tuesday 09-May-2017	Wedne 10-May	esday		rsday ay-2017	Frid 12-May			
09.00- 09.50	09.00- 09.50 Independent Learning		Lecture Theoretical Distributions E.Çiğdem Kaspar		Diagonto Charian Amaian		y / Anatomy of the Head a Erdem Söztutar	Laboratory / Anatomy Muscles of the Head Yüksel Aydar & Erdem Söztutar Group A			
			E.Çigüem Kaspar	Alev C	Alev Cumbul		Group B Group A Independent Learning		Group B		
10.00- 10.50	Laboratory / Histology Developing Human		<b>Lecture</b> Theoretical Distributions <i>E.Çiğdem Kaspar</i>	<b>Lecture</b> Glycogenolysis <i>İnci Özden</i>		Glycogenolysis		Regulation of and Glyco <i>İnci</i>	cture Glycogenesis ogenolysis Özden	<b>Lect</b> Diognostic <i>E.Çiğdem</i>	Testing
11.00- 11.50	Group B Group A Independent Learning		<b>Lecture</b> Biology of Enery and Energy Balance Turgay İsbir	<b>Lecture</b> Glycogenolysis <i>İnci Özden</i>		Glycogenolysis		Regulation of and Glyco	cture Glycogenesis ogenolysis Özden	<b>Lect</b> Diognostic <i>E.Çiğdem</i>	Testing
12.00- 12.50	Lunch Break		Lunch Break	Lunch Break		Lunch Break		Lunch Break			
13.00- 13.50	Independent Learning		Independent Learning	Laboratory / Anatomy Cervical Plexus, Nerves, and Vasculature of the Neck Yüksel Aydar & Erdem Söztutar Group A Independent Learning Group B		Behavioral Science / Lecture The Physician-Patient Relationship Instructors		<b>Lect</b> Twins and <i>Ünal</i>	Partrution		
14.00- 14.50	Common Compulsory Course Turkish Language & Literature Bedri Selimhocaoğlu		Common Compulsory Course Anatomical Drawing	Group A	Group B Independent Learning	The Physi Relat	cience / Lecture cian-Patient ionship ructors	<b>Lect</b> Infertility and C <i>Ünal</i>	Contraception		
15.00- 15.50			Refik Aziz	Lecture Muscles of the Head Yüksel Aydar & Erdem Söztutar		Lecture Biology of Enery and Energy Balance Turgay İsbir					
16.00- 16.50	Yüksel Aydar  Lecture  Nerves and Vasculature of		Common Compulsory Course Ataturk's Principles &	Lecture Muscles of the Head Yüksel Aydar & Erdem Söztutar Independent Learning		Muscles of the Head			CTIVE	Independen	t Learning
17.00-17.50			History of Modern Turkey <i>Davut Ekşi</i>			WEE	EK XII				

#### COMMITTEE V - ENERGY AND METABOLISM IV. WEEK / 15 – 19 May 2017

	Monday Tuesday Wednesday Thursday									
		y-2017		y-2017	17-May-2017	18-May-2017	Friday 19-May-2017			
09.00- 09.50	Independent Learning		Independent Learning		Lec Glyd	ture colysis Ózden	Lecture Muscles of the Thoracic Wall Erdem Söztutar	Independent Learning		
10.00- 10.50	Laboratory / Histology Developing Human		<b>Lecture</b> Glycolysis <i>İnci Özden</i>		<b>Lecture</b> Pentose Phosphate Pathway <i>İnci Özden</i>	<b>Lecture</b> Gluconeogenesis <i>İnci Özden</i>				
11.00- 11.50	Group A Independent Group B Learning		ndent Group B Yüksel Aydar & Erdem Söztutar Pentose Phosphate Pathway		<b>Lecture</b> Gluconeogenesis <i>İnci Özden</i>					
12.00- 12.50	Lunch Break		Lunch Break		Group A	Group B Independent Learning	Lunch Break	Lunch Break	May 19 Commemoration of	
13.00- 13.50	Lecture Asissted Reproductive Technology; Methods Ünal Uslu		Lunch	Break	Behavioral Science / Lecture Legal and Ethical Issues in Medicine Instructors	Lecture Biology of Life Span Turgay İsbir	Ataturk, Youth and Sports Day			
14.00- 14.50	Turkish Langua	Common Compulsory Course Turkish Language & Literature  Common Compulsory Course Anatomical Drawing		Behavioral Science / Lecture Legal and Ethical Issues in Medicine Instructors  Medicine Instructors  Lecture Biology of Life Spanning Turgay Isbir						
15.00- 15.50	Bedri Selimhocaoğlu Refik Aziz		Lecture The Description of Epidemiology E.Çiğdem Kaspar	Independent Learning						
16.00- 16.50	Nerves o Yükse	cture of the Head of Aydar	Ataturk's P	pulsory Course Principles & odern Turkey	Lecture Sampling in Epidemiology E.Çiğdem Kaspar	ELECTIVE WEEK XIII				
17.00-17.50	Lecture Vasculature of the Head				Independent Learning	WEEK AIII				

#### COMMITTEE V - ENERGY AND METABOLISM V. WEEK / 22 – 26 May 2017

	Monday 22-May-2017		esday ay-2017	Wedn 24-Ma	esday		rsday ay-2017		Friday 26-May-2017			
09.00- 09.50		Regulation of Gluconed	Lecture Regulation of Glycolysis and Gluconeogenesis Inci Özden		nt Learning	<b>Lecture</b> Congenital Anomalies and Teratology Alev Cumbul		Independent Learning		ning		
10.00- 10.50	Independent Learning	Regulation of Glucone	Lecture Regulation of Glycolysis and Gluconeogenesis Inci Özden		Lecture Secondary Hemostasis, Procoagulation, Anticoagulation Inci Özden		cture Fibrinolytic and lytic Agents Özden	Glucose Det Blood in	atory / Bioche ermination in E Feces, Bleedi oban & Müge	Blood, Occulting Time		
11.00- 11.50		Laboratory / Anatomy Muscles of the Thoracic and Abdominal Wall Yüksel Aydar & Erdem Söztutar Group B Group A Independent Learning		Lecture Secondary Hemostasis, Procoagulation, Anticoagulation İnci Özden		<b>Lecture</b> Fibrinolysis, Fibrinolytic and Antifibrinolytic Agents <i>Inci Özden</i>		Group A	Group B Independent Learning	Group C Independent Learning		
12.00- 12.50	Lunch Break	Group A Independent Learning	Group B	Lunch Break		Lunch Break		Lunch Break Lunch Break			Lunch Break	
13.00- 13.50	Lecture Muscles of the Abdominal Wall Yüksel Aydar	Muscles of the Abdominal Wall Lunch Break		Lecture Congenital Anomalies and Teratology Alev Cumbul		Behavioral Science / Lecture Introduction to Psychopathology Instructors		Glucose Det Blood In	atory / Bioche ermination in E Feces, Bleedi oban & Müge	Blood, Occulting Time		
14.00- 14.50	<b>Lecture</b> Muscles of the Abdominal Wall and Inguinal Canal Yüksel Aydar	Blood Coagu Hemo	cture ulation, Primary ostasis Özden			Introduction to I	cience / Lecture Psychopathology uctors	Group A Independent Learning	Group B	Group C Independent Learning		
15.00- 15.50	Lecture Epidemiological Research Methods E.Çiğdem Kaspar	Blood Coag Hemo	cture gulation, Primary ostasis Özden	Lecture Nerves and Vasculature of The Thoracic Wall Yüksel Aydar & Erdem Söztutar		-	/ / Histology p Sesion Group B Independent Learning	A dent ng	B dent ng	U		
16.00- 16.50	Laboratory / Biostatistics Basic Statistical Calculations in Excel E.Çiğdem Kaspar	Independe	nt Learning	Laboratory / Anatomy Nerves and Vasculature of The Thoracic Wall Yüksel Aydar & Erdem Söztutar Group A Independent Learning		Nerves and Vasculature of The Thoracic Wall Yüksel Aydar & Erdem Söztutar Group A Independent Group B		Group A Independent Learning	Group B	Group A Independent Learning	Group B Independent Learning	Group C
17.00-17.50	Group A Independent Learning Group B Independent Learning				Group B Independent Learning		CTIVE :K XIV	Inde	pendent Lear	ning		

#### COMMITTEE V - ENERGY AND METABOLISM VI. WEEK / 29 May- 02 June 2017

	Monday 29-May-2017	Tuesday 30-May-2017	Wednesday 31-May-2017	Thursday 01-June-2017	Friday 02-June-2017
09.00- 09.50	Independent Learning	Independent Learning	Independent Learning	Independent Learning	Independent Learning
10.00- 10.50	Discussions (Small Groups) Overview Erdem Söztutar		ICP Make-up Exam		
11.00- 11.50	Discussions (Small Groups) Overview Erdem Söztutar	Assessment Session Anatomy (Practical Exam)			Assessment Session Committee V (MCQ-EMQ)
12.00- 12.50	Independent Learning				
13.00- 13.50	Lunch Break	Lunch Break	Lunch Break	Lunch Break	Lunch Break
14.00- 14.50		Assessment Session Biostatistics (Writing Exam-MEQ)	Independent Learning	Independent Learning	Program Evaluation Session Review of the Exam Questions, Evaluation of the Committee V Program Head of Committee
15.00- 15.50	Independent Learning				
16.00- 16.50		Independent Learning			Independent Learning
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
- Contribute to cultivation of professional and intellectual development in a rapidly changing world
- k. Inform the coordinator when there are unsolved problems of the students

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

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

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

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

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

### LIST OF STUDENT COUNSELING-PHASE I

1         20160800016         BEYZA NUR         AKIN         PROF. DR. İNCİ ÖZDEN           2         20160800024         CEREN         AKINCI         PROF. DR. İNCİ ÖZDEN           3         20160800002         YARA         AKKAD         PROF. DR. İNCİ ÖZDEN           4         20160800012         ZAFER         AKMAN         PROF. DR. İNCİ ÖZDEN           5         20160800095         MAHMOUD         ALHOSARY         PROF. DR. İNCİ ÖZDEN           6         20150800069         FATİH BURAK         ALTINTAŞ         PROF. DR. ECE GENÇ           7         20160800042         DOĞAÇ         ALTIPARMAK         PROF. DR. ECE GENÇ           8         20160800057         EFE         ARAS         DOÇ. DR. MEHTAP KAÇAR           9         20150800024         EBRU         ARIDURU         PROF. DR. ECE GENÇ           10         20160800015         MERVE         ARSLANHAN         PROF. DR. TURGAY İSBİR           11         20160800007         ÖZCAN         ATEŞ         PROF. DR. TURGAY İSBİR	<b>!</b>
3         20160800002         YARA         AKKAD         PROF. DR. İNCİ ÖZDEN           4         20160800012         ZAFER         AKMAN         PROF. DR. İNCİ ÖZDEN           5         20160800095         MAHMOUD         ALHOSARY         PROF. DR. İNCİ ÖZDEN           6         20150800069         FATİH BURAK         ALTINTAŞ         PROF. DR. ECE GENÇ           7         20160800042         DOĞAÇ         ALTIPARMAK         PROF. DR. ECE GENÇ           8         20160800057         EFE         ARAS         DOÇ. DR. MEHTAP KAÇAR           9         20150800024         EBRU         ARIDURU         PROF. DR. ECE GENÇ           10         20160800015         MERVE         ARSLANHAN         PROF. DR. TURGAY İSBİR	<b>!</b>
4         20160800012         ZAFER         AKMAN         PROF. DR. İNCİ ÖZDEN           5         20160800095         MAHMOUD         ALHOSARY         PROF. DR. İNCİ ÖZDEN           6         20150800069         FATİH BURAK         ALTINTAŞ         PROF. DR. ECE GENÇ           7         20160800042         DOĞAÇ         ALTIPARMAK         PROF. DR. ECE GENÇ           8         20160800057         EFE         ARAS         DOÇ. DR. MEHTAP KAÇAR           9         20150800024         EBRU         ARIDURU         PROF. DR. ECE GENÇ           10         20160800015         MERVE         ARSLANHAN         PROF. DR. TURGAY İSBİR	·
5         20160800095         MAHMOUD         ALHOSARY         PROF. DR. İNCİ ÖZDEN           6         20150800069         FATİH BURAK         ALTINTAŞ         PROF. DR. ECE GENÇ           7         20160800042         DOĞAÇ         ALTIPARMAK         PROF. DR. ECE GENÇ           8         20160800057         EFE         ARAS         DOÇ. DR. MEHTAP KAÇAR           9         20150800024         EBRU         ARIDURU         PROF. DR. ECE GENÇ           10         20160800015         MERVE         ARSLANHAN         PROF. DR. TURGAY İSBİR	·
6         20150800069         FATİH BURAK         ALTINTAŞ         PROF. DR. ECE GENÇ           7         20160800042         DOĞAÇ         ALTIPARMAK         PROF. DR. ECE GENÇ           8         20160800057         EFE         ARAS         DOÇ. DR. MEHTAP KAÇAR           9         20150800024         EBRU         ARIDURU         PROF. DR. ECE GENÇ           10         20160800015         MERVE         ARSLANHAN         PROF. DR. TURGAY İSBİR	·
7         20160800042         DOĞAÇ         ALTIPARMAK         PROF. DR. ECE GENÇ           8         20160800057         EFE         ARAS         DOÇ. DR. MEHTAP KAÇAR           9         20150800024         EBRU         ARIDURU         PROF. DR. ECE GENÇ           10         20160800015         MERVE         ARSLANHAN         PROF. DR. TURGAY İSBİR	·
8         20160800057         EFE         ARAS         DOÇ. DR. MEHTAP KAÇAR           9         20150800024         EBRU         ARIDURU         PROF. DR. ECE GENÇ           10         20160800015         MERVE         ARSLANHAN         PROF. DR. TURGAY İSBİR	·
9 20150800024 EBRU ARIDURU PROF. DR. ECE GENÇ 10 20160800015 MERVE ARSLANHAN PROF. DR. TURGAY İSBİR	·
10 20160800015 MERVE ARSLANHAN PROF. DR. TURGAY İSBİR	
11 20160800007 ÖZCAN ATES PROF DR TURGAY İSBİR	
	•
12 20160800076 SELİN AYDIN PROF. DR. TURGAY İSBİR	<b>!</b>
13 20160800020 FEYHAN BALCI PROF. DR. TURGAY İSBİR	1
14 20160800098 BALIM DİLEĞE BALCI DOÇ. DR. MEHTAP KAÇAF	२
15 20160800091 TIMUCIN SELIM BASEL PROF. DR. RECEP EROL S	SEZER
16 20160800026 ÇİĞDEM BAYRAM PROF. DR. RECEP EROL S	SEZER
17 20160800035   IPEK NAZ   BELEVI   YRD. DOÇ. DR. ARZU AKA	ALIN
18 20160800021 BİLLUR EDA BİLGİ DOÇ. DR. ÜNAL USLU	
19 20160800079 AYŞE ZEYNEP CEVHER DOÇ. DR. ÜNAL USLU	
20 20150800019 SERKAN CİVELEK DOÇ. DR. ÜNAL USLU	
21 20160800005 SABRİ ARTUN ÇABUK DOÇ. DR. ÜNAL USLU	
22 20160800018 ÇAĞDAŞ ÇAĞIN PROF. DR. RECEP EROL S	SEZER
23 20160800087 GÜLDEN ÇAĞLAR DOÇ. DR. MEHTAP KAÇAF	२
24 20160800080 CANSU ÇAKIR DOÇ. DR. MEHTAP KAÇAF	
25 20150800093 ÇAĞATAY ÇALIK PROF. DR. ECE GENÇ	
26 20160800088 ECE ÇALIŞAN DOÇ. DR. GÜLDEREN YAN	NIKKAYA DEMİREL
27 20150800057 SERA ÇELİK DOÇ. DR. GÜLDEREN YAN	
28 20150800008 ALİ FETİH ÇETİN DOÇ. DR. GÜLDEREN YAN	NIKKAYA DEMİREL
29 20160800030 ADARA ÇÖLLÜ DOÇ. DR. GÜLDEREN YAN	NIKKAYA DEMİREL
30 20150800053 HAKAN DELİBAŞI DOÇ. DR. GÜLDEREN YAN	NIKKAYA DEMİREL
31 20150800004 BEYZA DOĞRU DOÇ. DR. ÖZLEM TANRIÖ	VER
32 20150800081 ATAKAN DÖNMEZ DOÇ. DR. ÖZLEM TANRIÖ	VER
33 20160800033 EMİN EGECAN DURMUŞ DOÇ. DR. ÖZLEM TANRIÖ	VER
34 20160800019 BURAK TUNAHAN EKİNCİKLİ DOÇ. DR. ÖZLEM TANRIÖ	VER
35 20160800029 BELİZ ÖYKÜ ERDEM DOÇ. DR. ÖZLEM TANRIÖ	VER
36 20160800045 OZAN EREK DOÇ. DR. ÇAĞATAY ACUN	NER
37 20150800045 CANSEL ERTÜRK DOÇ. DR. ÇAĞATAY ACUN	NER
38 20160800107 ALİ ISMAEL GAIBOUNA DOÇ. DR. ÇAĞATAY ACUN	NER
39 20150800085 KARDELEN GELEŞ DOÇ. DR. ÇAĞATAY ACUN	NER
40 20150800072 MAHBUP GÖKGÖZ DOÇ. DR. ÇAĞATAY ACUN	NER
41 20160800023 MICAN GÖVERCİN DOÇ. DR. SONER DOĞAN	
42 20150800005 GİZEM GÜNER DOÇ. DR. SONER DOĞAN	
43 20150800036 ŞAHESTE ÖZEN GÜNEŞ DOÇ. DR. SONER DOĞAN	
44 20140800059 AYDAN GÜR DOÇ. DR. SONER DOĞAN	
45 20160800013 YAĞMUR GÜVEN DOÇ. DR. SONER DOĞAN	
46 20160800111 AFAF HADDAD DOÇ. DR. SONER DOĞAN	
47 20160800090 REFAL HYEDER HAMANDI YRD. DOÇ. DR. HALE ARIF	
48 20160800011   IREM   HASDEMIR   YRD. DOÇ. DR. ARZU AKA	
49 20160800027 SİNAN HİÇDÖNMEZ PROF. DR. RECEP EROL S	
50 20160800069 CEYHUN IRMAK YRD. DOÇ. DR. AYLIN YAE	BA UÇAR
51 20150800010 ALKIM MELİKE KARABÜK YRD. DOÇ. DR. ÇİĞDEM K	
52 20160800006 BERAN KARAKOCA YRD. DOÇ. DR. ÇİĞDEM K	
53 20150800035 ŞEYMA KIRGIL YRD. DOÇ. DR. HALE ARIK	

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55	2016080110	MERAL AYBÜKE	KOÇ	YRD. DOÇ. DR. ALEV CUMBUL
56	20160800017	DOĞUKAN	KOÇAK	YRD. DOÇ. DR. ALEV CUMBUL
57	20160800010	ECEM SENA	KOÇASLAN	YRD. DOÇ. DR. ALEV CUMBUL
58	20160800034	ALİ EGEMEN	KÖROĞLU	YRD. DOÇ. DR. ALEV CUMBUL
59	20150800064	BÜŞRA	KÜÇÜKYILDIZ	YRD. DOÇ. DR. DR. DENİZ KIRAÇ
60	20160800059	ENGÍN BATUHAN	MENKÜER	YRD. DOÇ. DR. DR. DENİZ KIRAÇ
61	20150800009	BÜŞRA	MOĞUL	YRD. DOÇ. DR. DR. DENİZ KIRAÇ
62	20160800040	AZMİ CAN	OFLUOĞLU	YRD. DOÇ. DR. DR. DENİZ KIRAÇ
63	20150800007	UMUT	OĞUZ	YRD. DOÇ. DR. AYLİN YABA UÇAR
64	20150800037	NECLA SİMAY	OKAY	YRD. DOÇ. DR. AYLİN YABA UÇAR
65	20150800068	EFE	ONAÇ	YRD. DOÇ. DR. AYLİN YABA UÇAR
66	20150800050	BUĞRA	ONDUR	YRD. DOÇ. DR. AYLİN YABA UÇAR
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68	20160800102	TALHA	ÖNER	YRD. DOÇ. DR. BİLGE GÜVENÇ TUNA
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70	20160800044	ZEYNEP	ÖZEL	YRD. DOÇ. DR. BİLGE GÜVENÇ TUNA
71	20150800062	NADİRE ÖZGE	ÖZEN	YRD. DOÇ. DR. SERDAR ÖZDEMİR
72	20150800001	BURAK BERKSU	ÖZKARA	YRD. DOÇ. DR. SERDAR ÖZDEMİR
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