



INTRODUCTION TO CELL AND CELLULAR REPLICATION  
YEAR 1 COURSE 1  
September 25<sup>th</sup>, 2017 – November 24<sup>th</sup>, 2017

**Coordinator of the Course 1.1**

Assist. Prof., Ergül MUTLU ALTUNDAĞ

**Coordinator of Multidisciplinary Students' Lab.**

Assist. Prof., Mümtaz GÜRAN

**Coordinator of Clinical Skill Lab.**

Instructor. Berfu Çerçi ÖNGÜN

**Coordinator of Assessment Unite**

Assist. Prof., Mümtaz GÜRAN, Assist. Prof. Dr.  
Mevhibe HOCAOĞLU, Assist. Prof., H. Eren SAKALLI

**Coordinator of ICS Res. LAB.**

Assist. Prof., Mevhibe HOCAOĞLU

**Year 1 Coordinators**

Prof., Mustafa AKKİPRİK; Assoc. Prof., Dilek AKAKIN

**Module Coordinator**

Assoc. Prof., Özlem SARIKAYA

**Introduction to Clinician Skills (ICS) Coordinators**

Prof., Sibel SAKARYA, Assoc. Prof., Pemra ÜNALAN

**Coordinator of Multidisciplinary Students' Lab.**

Assoc. Prof., Betül KARADEMİR

**Coordinator of Assessment Unite**

Assist. Prof., Cevdet NACAR

**Vice-Chief Coordinators**

**Assessment**

Assist. Prof., Cevdet NACAR

**Students' Affairs**

Assist. Prof., Can ERZİK

**Chief Coordinator**

Assoc. Prof., Hasan YANANLI

**Coordinator of Medical Education Program  
Evaluation and Development Commission**

Prof., Berrak Ç. YEĞEN

**Educational Consultant**

Assoc. Prof., Mehmet Ali GÜLPINAR

**Dean (EMU)**

Prof., Nahide GÖKÇORA

**Dean (MU)**

Prof., Hakan GÜNDÜZ

**LEARNING OUTCOMES / COMPETENCIES**

- A. Clinical Care: Qualified patient care and community oriented health care**
  - 1. Basic clinical skills
  - 2. The organization and management of the patient and the patient care
  - 3. The organization and the management of health care delivery services / system
  - 4. Health promotion and disease prevention
- B. Medical Knowledge and Evidence-Based Medicine**
  - 5. Appropriate information retrieval and management skills
  - 6. The integration of knowledge, critical thinking and evidence-based decision making
  - 7. Scientific methods and basic research skills
- C. Professional Attitudes and Values**
  - 8. Communication skills and effective communication with patients / patient relatives
  - 9. Interpersonal relationships and team working
  - 10. Ethical and professional values, responsibilities
  - 11. Individual, social and cultural values and responsibilities
  - 12. Reflective practice and continuing development
  - 13. Healthcare delivery systems, management and community oriented health care
  - 14. Education and counseling

**PHASE-1 LEARNING OBJECTIVES**

- 1. Understanding the normal structures and functions of human body
- 2. Correlating the basic concepts and principles to each other that define health and disease; applying basic concepts and principles to health and disease conditions
- 3. Developing clinical problem solving, clinical reasoning and evaluation skills by integrating biomedical, clinical, social and humanities knowledge
- 4. Gaining basic clinical skills by applications in simulated settings.
- 5. Awareness of the professional values in health and disease processes (professional, individual, societal) and acquisition necessary related skills
- 6. Evaluating critically and synthesizing all the medical evidence and perform respecting scientific, professional and ethical values
- 7. Acquisition skills in reflective thinking and practicing, being open to continuous individual / professional development.

**INTRODUCTION TO CELL AND CELLULAR REPLICATION**

**AIM and LEARNING OBJECTIVES of COURSE**

**Aim:** At the end of this committee, first year students will gain knowledge about structure, function and mechanisms in human biology at the molecular and cellular levels with a specific emphasis on cellular replication and genetics.

**Learning Objectives:** At the end of this committee, students will,

- Identify and describe the development, structure and function of cell and its subcomponents
- Evaluate the biochemical process of the cell
- Understand cell division process and related mechanisms
- Describe the genetics mechanisms and protein biosynthesis
- Understand genetic variation in individuals
- Describe the molecular mechanisms of genetic inheritance and genetic basis of inherited disease

Acquire skills necessary to perform experimental applications

**ASSESSMENT SYSTEM**

Module examination: Written exam at the end of module (10 % of final score)  
 Practical examination: Practical exams at the end of course  
 Course examination: Written exam at the end of course

**PROGRAM EVALUATION**

Evaluation at the end of the course, is done both orally and by using structured evaluation forms

**DEPARTMENTS PARTICIPATING IN COURSE-1 & MODULE-1**

<ul style="list-style-type: none"> <li>• Biochemistry</li> <li>• Biophysics</li> <li>• Biostatistics</li> <li>• Chemistry</li> <li>• Histology &amp; Embryology</li> </ul>	<ul style="list-style-type: none"> <li>• Medical Biology</li> <li>• Medical Genetics</li> <li>• Medical History and Ethics</li> <li>• Pediatrics</li> </ul>
<b>LECTURERS / TUTORS</b>	
<p>Aydın KARAKUZU, Professor, General Surgery  Ayfer Civisilli, Instructor, Medical English  Ayşe Kozansoy, Instructor, Medical English  Berfu Çerçi ÖNGÜN, Instructor, Anatomy  Betül KARADEMİR, Assoc. Professor, Biochemistry  Bülent SEZGIN, Instructor, Internal Medicine  Cemal GÜRKAN, Instructor, Forensic Sciences  Cevdet NACAR, Assist. Professor, Biophysics  Duygu GENÇALP, Instructor, Biochemistry  Emine ÖZERİNÇ. Instructor, Turkish Language  Ergül MUTLU ALTUNDAĞ, Assist. Professor, Biochemistry  Goncagül HAKLAR, Professor, Medical Biochemistry  Huriye İCIL, Professor, Chemistry  İlke AKÇAY, Assist. Professor, Biostatistics  İlter GÜNEY Assist. Professor, Medical Genetics  Masoud AFSHANI, Instructor, Histology and Embryology</p>	<p>Mevhibe HOCAOĞLU, Assist. Professor, Public Health  Mümtaz GÜRAN, Assist. Professor, Microbiology  Mustafa AKKIPRIK, Professor, Medical Biology  Nurtane KARAGİL, Instructor, Arts and Crafts  Önder ŞIRIKÇI, Professor, Medical Biochemistry  Pemra ÜNALAN, Professor, Family Medicine  Pınar Mega TİBER, Assist. Professor, Biophysics  Saime BATIREL, Assist. Professor, Medical Biochemistry  Serap ŞİRVANCI, Assoc. Professor, Histology and Embryology  Şefik GÖRKEY. Professor, History of Medicine and Ethics  Şerife ÇELEBİ SÖKMEZ, Instructor, Turkish Language  Şükrü TÜZMEN, Assoc. Professor, Medical Biology  Turgay Bülent GÖKTÜRK, Instructor of Atatürk's Principles and History of Modern Turkey</p>
<b>READING / STUDYING MATERIALS</b>	
<ul style="list-style-type: none"> <li>• Basic Histology, Junqueira, Corneiro, 8th Ed., Lange</li> <li>• Başlangıcından Rönesansa Kadar Tıp Tarihi, Emine Atabek, Şefik Görkey</li> <li>• Biochemistry, Stryer, 4th Ed., Freeman</li> <li>• Biochemistry, Zubay, 3rd Ed., WCB</li> <li>• Color Textbook of Histology, Gatrner, Hiatt, WB Saunders</li> <li>• Harper's Biochemistry, Murray, Granner, 23rd Ed., Lange</li> <li>• Histology: A Text and Atlas, Ross, Romwell, 3rd, Lippincott</li> <li>• History of Medicine Ders Notları, Şefik Görkey</li> <li>• Leninger Principles of Biochemistry, Nelson, Cox, 3rd, Worth</li> <li>• Medicine: An Illustrated History, Albert S. Lyons, R. Joseph Petrucelli,</li> <li>• Molecular Biology of the Cell, Alberts, Bray, 6rd Ed., Garland</li> <li>• Physics, Giancoli, 4th Ed., Prentice Hall</li> <li>• The Cell: A Molecular Approach, Cooper, 2nd Ed., ASM Press</li> <li>• Türk Tıp Tarihi, Bedi Şeyhsuvaroğlu, Gönül Cantay.</li> </ul>	

Discipline	Lecture & Group Discussion	Multidisciplinary Lab. & Clinical Skills Lab. Practice	Total
Biochemistry	26	6	32
Biophysics	5		5
Biostatistics	6		6
Chemistry	20		20
Histology and Embryology	7	4	11
Medical Biology	34		34
Medical Genetics	1		1
Medical History and Ethics	12		12
Pediatrics	2		2
<b>Subtotal</b>	<b>113</b>	<b>10</b>	<b>123</b>
PBL Module		8	8
<b>TOTAL</b>	<b>113</b>	<b>18</b>	<b>131</b>
ICP-1: First Aid Course (FA)		20	20
ICP-1: Students' Research Activity (SRA)		3	3
ENGL131 - Medical English	14		14
HIST180 - Atatürk's Principles and the History of Turkish Renovation (for Turkish students)	12		12
TFMS101 - Turkish as a Second Language	32		32
Elective Courses MDCN181, MDCN182, MDCN184	14		14
<b>TOTAL</b>	<b>185</b>	<b>41</b>	<b>226</b>

THEORETICAL AND PRACTICAL SESSIONS		LECTURER/TUTOR
1 <sup>st</sup> Week (25-29 September 2017)		
<b>Monday</b>	<b>25 September</b>	
<b>08:40-09:30</b>		
<b>09:40-10:30</b>	Opening Ceremony	Dr. Nahide Gökçora
<b>10:40-11:30</b>	Opening Lecture	Dr. Ayşegül Karahasan
<b>11:40-12:30</b>	Medical Education in Dr. Fazıl Küçük Faculty of Medicine	Dr. Mümtaz Güran Dr. Mevhibe Hocaoğlu
	Welcoming Cocktail	
<b>13:40-14:30</b>	Turkish as a Second Language	Inst. Emine Özerinç
<b>14:40-15:30</b>	Turkish as a Second Language	Inst. Emine Özerinç
<b>15:40-16:30</b>	Turkish as a Second Language	Inst. Emine Özerinç
<b>16:40-17:30</b>	Turkish as a Second Language	Inst. Emine Özerinç
<b>Tuesday</b>	<b>26 September</b>	
<b>08:40-09:30</b>		
<b>09:40-10:30</b>		
<b>10:40-11:30</b>	Atatürk's Principles and History of Modern Turkey (for Turkish students)	Dr. Turgay Bülent Göktürk
<b>11:40-12:30</b>	Atatürk's Principles and History of Modern Turkey (for Turkish students)	Dr. Turgay Bülent Göktürk

13:40-14:30		
14:40-15:30		
15:40-16:30		
16:40-17:30		
<b>Wednesday</b>	<b>27 September</b>	
08:40-09:30	Origin of life	Dr. Şükrü Tüzmen
09:40-10:30	Molecular recognition process	Dr. Şükrü Tüzmen
10:40-11:30		
11:40-12:30		
13:40-14:30	Biomolecules and water	Dr. Önder Şirikçi
14:40-15:30	Biomolecules and water	Dr. Önder Şirikçi
15:40-16:30	Solubility, pH and buffers	Dr. Önder Şirikçi
16:40-17:30	Solubility, pH and buffers	Dr. Önder Şirikçi
<b>Thursday</b>	<b>28 September</b>	
08:40-09:30		
09:40-10:30		
10:40-11:30		
11:40-12:30		
13:40-14:30		
14:40-15:30		
15:40-16:30		
16:40-17:30		
<b>Friday</b>	<b>29 September</b>	
08:40-09:30		
09:40-10:30		
10:40-11:30		
11:40-12:30		
13:40-14:30	Introduction to organic chemistry	Dr. Huriye İcil
14:40-15:30	Chemical compounds	Dr. Huriye İcil
15:40-16:30	Atoms and atomic theory, atomic properties and periodic table	Dr. Huriye İcil
16:40-17:30		
<b>2nd Week (02-06 October 2017)</b>		
<b>Monday</b>	<b>02 October</b>	
08:40-09:30	STUDY TIME	
09:40-10:30	STUDY TIME	
10:40-11:30	Medical English (Gr 1 & Gr 2)	Inst. Ayfer Civisilli

		Inst. Ayşe Kozansoy
<b>11:40-12:30</b>	Medical English (Gr 1 & Gr 2)	Inst. Ayfer Civasilli Inst. Ayşe Kozansoy
<b>13:40-14:30</b>	Turkish as a Second Language	Inst. Emine Özerinç Inst. Şerife Çelebi Sökmez
<b>14:40-15:30</b>	Turkish as a Second Language	Inst. Emine Özerinç Inst. Şerife Çelebi Sökmez
<b>15:40-16:30</b>	Turkish as a Second Language	Inst. Emine Özerinç Inst. Şerife Çelebi Sökmez
<b>16:40-17:30</b>	Turkish as a Second Language	Inst. Emine Özerinç Inst. Şerife Çelebi Sökmez
<b>Tuesday</b>	<b>03 October</b>	
<b>08:40-09:30</b>	Cellular organisation of life	Dr. Şükrü Tüzmen
<b>09:40-10:30</b>	Cellular organisation of life	Dr. Şükrü Tüzmen
<b>10:40-11:30</b>	<b>STUDY TIME</b>	
<b>11:40-12:30</b>	<b>STUDY TIME</b>	
<b>13:40-14:30</b>	<b>Introduction to ICS</b>	Dr. Pemra Ünalın Dr. Bülent Sezgin Dr. Berfu Çerçi Öngün Dr. Eren Sakallı Dr. Hasan Toper
<b>14:40-15:30</b>	<b>STUDY TIME</b>	
<b>15:40-16:30</b>	<b>STUDY TIME</b>	
<b>16:40-17:30</b>	<b>STUDY TIME</b>	
<b>Wednesday</b>	<b>04 October</b>	
<b>08:40-09:30</b>	Nucleic acids	Dr. Şükrü Tüzmen
<b>09:40-10:30</b>	Nucleus and nuclear genome	Dr. Şükrü Tüzmen
<b>10:40-11:30</b>	Genes and heredity	Dr. Şükrü Tüzmen
<b>11:40-12:30</b>	<b>STUDY TIME</b>	
<b>13:40-14:30</b>	Amino acids	Dr. Önder Şirikçi
<b>14:40-15:30</b>	Amino acids	Dr. Önder Şirikçi
<b>15:40-16:30</b>	Structure of carbohydrates	Dr. Önder Şirikçi
<b>16:40-17:30</b>	Structure of carbohydrates	Dr. Önder Şirikçi
<b>Thursday</b>	<b>05 October</b>	
<b>08:40-09:30</b>	Microscope	Dr. Serap Şırvancı
<b>09:40-10:30</b>	Microscope	Dr. Serap Şırvancı
<b>10:40-11:30</b>	Cellular organel and inclusions at LM and EM level	Dr. Serap Şırvancı
<b>11:40-12:30</b>	Cellular organel and inclusions at LM and EM level	Dr. Serap Şırvancı
<b>13:40-14:30</b>	<b>Histology LAB: Cell Types - Group A</b>	Dr. Serap Şırvancı, Dr. Masoud Afshani

<b>14:40-15:30</b>	<b>Histology LAB:</b> Cell Types - Group A	Dr. Serap Şirvancı, Dr. Masoud Afshani
<b>15:40-16:30</b>	<b>Histology LAB:</b> Cell Types - Group B	Dr. Serap Şirvancı, Dr. Masoud Afshani
<b>16:40-17:30</b>	<b>Histology LAB:</b> Cell Types - Group B	Dr. Serap Şirvancı, Dr. Masoud Afshani
<b>Friday</b>	<b>06 October</b>	
<b>08:40-09:30</b>	<b>STUDY TIME</b>	
<b>09:40-10:30</b>	Histotechniques	Dr. Serap Şirvancı
<b>10:40-11:30</b>	Nucleus and cell division	Dr. Serap Şirvancı
<b>11:40-12:30</b>	Nucleus and cell division	Dr. Serap Şirvancı
<b>13:40-14:30</b>	<b>Histology LAB:</b> Cell division - Group B	Dr. Serap Şirvancı, Dr. Masoud Afshani
<b>14:40-15:30</b>	<b>Histology LAB:</b> Cell division - Group B	Dr. Serap Şirvancı, Dr. Masoud Afshani
<b>15:40-16:30</b>	<b>Histology LAB:</b> Cell division - Group A	Dr. Serap Şirvancı, Dr. Masoud Afshani
<b>16:40-17:30</b>	<b>Histology LAB:</b> Cell division - Group A	Dr. Serap Şirvancı, Dr. Masoud Afshani
<b>3rd Week (09-13 October 2017)</b>		
<b>Monday</b>	<b>09 October</b>	
<b>08:40-09:30</b>	<b>STUDY TIME</b>	
<b>09:40-10:30</b>	<b>STUDY TIME</b>	
<b>10:40-11:30</b>	Medical English (Gr 1 & Gr 2)	Inst. Ayfer Civişilli Inst. Ayşe Kozansoy
<b>11:40-12:30</b>	Medical English (Gr 1 & Gr 2)	Inst. Ayfer Civişilli Inst. Ayşe Kozansoy
<b>13:40-14:30</b>	Elective Course – I MDCN181 – Theoretical and Applied Forensic Sciences MDCN182 – Arts and Crafts for Medical Students MDCN184 – Laboratory Techniques in Medicine	Dr. Cemal Gürkan Inst. Nurtane Karagil Inst. Duygu Gençalp
	Turkish as a Second Language	Inst. Emine Özerinç Inst. Şerife Çelebi Sökmez
<b>14:40-15:30</b>	Elective Course – I MDCN181 – Theoretical and Applied Forensic Sciences MDCN182 – Arts and Crafts for Medical Students MDCN184 – Laboratory Techniques in Medicine	Dr. Cemal Gürkan Inst. Nurtane Karagil Inst. Duygu Gençalp
	Turkish as a Second Language	Inst. Emine Özerinç Inst. Şerife Çelebi Sökmez
<b>15:40-16:30</b>	Turkish as a Second Language	Inst. Emine Özerinç Inst. Şerife Çelebi Sökmez
<b>16:40-17:30</b>	Turkish as a Second Language	Inst. Emine Özerinç Inst. Şerife Çelebi Sökmez
<b>Tuesday</b>	<b>10 October</b>	
<b>08:40-09:30</b>	DNA replication	Dr. Şükrü Tüzmen
<b>09:40-10:30</b>	DNA replication	Dr. Şükrü Tüzmen

10:40-11:30	Atatürk's Principles and History of Modern Turkey (for Turkish students)	Dr. Turgay Bülent Göktürk
11:40-12:30	Atatürk's Principles and History of Modern Turkey (for Turkish students)	Dr. Turgay Bülent Göktürk
13:40-14:30	STUDY TIME	
14:40-15:30	STUDY TIME	
15:40-16:30	STUDY TIME	
16:40-17:30	STUDY TIME	
<b>Wednesday</b>	<b>11 October</b>	
08:40-09:30	Cell cycle	Dr. Şükrü Tüzmen
09:40-10:30	Packaging chromosomal DNA	Dr. Şükrü Tüzmen
10:40-11:30	Recombination	Dr. Şükrü Tüzmen
11:40-12:30	Protein structure and function-1	Dr. Saime Batirel
13:40-14:30	Protein structure and function-1	Dr. Saime Batirel
14:40-15:30	Protein structure and function-2	Dr. Saime Batirel
15:40-16:30	Protein structure and function-2	Dr. Saime Batirel
16:40-17:30	STUDY TIME	
<b>Thursday</b>	<b>12 October</b>	
08:40-09:30	<b>Biochemistry LAB: Spectrophotometer - Group A</b>	Dr. Saime Batirel
09:40-10:30	<b>Biochemistry LAB: Spectrophotometer - Group A</b>	Dr. Saime Batirel
10:40-11:30	<b>Biochemistry LAB: Spectrophotometer - Group B</b>	Dr. Saime Batirel
11:40-12:30	<b>Biochemistry LAB: Spectrophotometer - Group B</b>	Dr. Saime Batirel
13:40-14:30	Enzymes: Introduction	Dr. Betül Karademir
14:40-15:30	Enzymes: Introduction	Dr. Betül Karademir
15:40-16:30	Enzymes: Mechanism of action	Dr. Betül Karademir
16:40-17:30	STUDY TIME	
<b>Friday</b>	<b>13 October</b>	
08:40-09:30	STUDY TIME	
09:40-10:30	Enzymes: Mechanism of action	Dr. Betül Karademir
10:40-11:30	Enzymes: Regulation	Dr. Betül Karademir
11:40-12:30	Enzymes: Regulation	Dr. Betül Karademir
13:40-14:30	Chemical bonds: ionic and covalent	Dr. Huriye İcil
14:40-15:30	Chemical reactions and equilibrium	Dr. Huriye İcil
15:40-16:30	Chemical reactions and equilibrium	Dr. Huriye İcil
16:40-17:30	STUDY TIME	



<b>4th Week (16-20 October 2017)</b>		
<b>Monday</b>	<b>16 October</b>	
<b>08:40-09:30</b>	<b>STUDY TIME</b>	
<b>09:40-10:30</b>	<b>STUDY TIME</b>	
<b>10:40-11:30</b>	Medical English (Gr 1 & Gr 2)	Inst. Ayfer Civisilli Inst. Ayşe Kozansoy
<b>11:40-12:30</b>	Medical English (Gr 1 & Gr 2)	Inst. Ayfer Civisilli Inst. Ayşe Kozansoy
<b>13:40-14:30</b>	Elective Course – I MDCN181 – Theoretical and Applied Forensic Sciences MDCN182 – Arts and Crafts for Medical Students MDCN184 – Laboratory Techniques in Medicine	Dr. Cemal Gürkan Inst. Nurtane Karagil Inst. Duygu Gençalp
	Turkish as a Second Language (for foreign students)	Inst. Emine Özerinç Inst. Şerife Çelebi Sökmez
<b>14:40-15:30</b>	Elective Course – I MDCN181 – Theoretical and Applied Forensic Sciences MDCN182 – Arts and Crafts for Medical Students MDCN184 – Laboratory Techniques in Medicine	Dr. Cemal Gürkan Inst. Nurtane Karagil Inst. Duygu Gençalp
	Turkish as a Second Language (for foreign students)	Inst. Emine Özerinç Inst. Şerife Çelebi Sökmez
<b>15:40-16:30</b>	Turkish as a Second Language (for foreign students)	Inst. Emine Özerinç Inst. Şerife Çelebi Sökmez
<b>16:40-17:30</b>	Turkish as a Second Language (for foreign students)	Inst. Emine Özerinç Inst. Şerife Çelebi Sökmez
<b>Tuesday</b>	<b>17 October</b>	
<b>08:40-09:30</b>	Cell division kinetics	Dr. Şükrü Tüzmen
<b>09:40-10:30</b>	Mitosis	Dr. Şükrü Tüzmen
<b>10:40-11:30</b>	Atatürk's Principles and History of Modern Turkey (for Turkish students)	Dr. Turgay Bülent Göktürk
<b>11:40-12:30</b>	Atatürk's Principles and History of Modern Turkey (for Turkish students)	Dr. Turgay Bülent Göktürk
<b>13:40-14:30</b>	Information content of DNA	Dr. Cevdet Nacar
<b>14:40-15:30</b>	<b>STUDY TIME</b>	
<b>15:40-16:30</b>	<b>STUDY TIME</b>	
<b>16:40-17:30</b>	<b>STUDY TIME</b>	
<b>Wednesday</b>	<b>18 October</b>	
<b>08:40-09:30</b>	Meiosis	Dr. Şükrü Tüzmen
<b>09:40-10:30</b>	Introduction to genetics	Dr. Şükrü Tüzmen
<b>10:40-11:30</b>	Fundamentals to Mendelian genetics	Dr. Şükrü Tüzmen
<b>11:40-12:30</b>	Committee orientation for late registered students	Dr. İlke Akçay, Dr. Ergül Mutlu Altundağ, Inst. Hüseyin Bıyıkoğlu
<b>13:40-14:30</b>	<b>STUDY TIME</b>	
<b>14:40-15:30</b>	<b>STUDY TIME</b>	

15:40-16:30	STUDY TIME	
16:40-17:30	STUDY TIME	
<b>Thursday</b>	<b>19 October</b>	
08:40-09:30	STUDY TIME	
09:40-10:30	STUDY TIME	
10:40-11:30	STUDY TIME	
11:40-12:30	<b>PBL Orientation</b>	Inst. Hüseyin Bıyıkoğlu
13:40-14:30	What is statistics and biostatistics?	Dr. İlke Akçay
14:40-15:30	Statistics in medical research	Dr. İlke Akçay
15:40-16:30	Acids and bases	Dr. Huriye İcil
16:40-17:30	Acids and bases	Dr. Huriye İcil
<b>Friday</b>	<b>20 October</b>	
08:40-09:30	Introduction to biophysics – I	Dr. Pınar Mega Tiber
09:40-10:30	Introduction to biophysics – I	Dr. Pınar Mega Tiber
10:40-11:30	Introduction to biophysics – I	Dr. Pınar Mega Tiber
11:40-12:30	Introduction to biophysics – I	Dr. Pınar Mega Tiber
13:40-14:30	<b>PBL Module -1</b>	Dr. Mümtaz Güran, Dr. İlke Akçay, Dr. Ergül Mutlu Altundağ,
14:40-15:30	<b>PBL Module -1</b>	Inst. Duygu Gençalp, Inst. Hüseyin Bıyıkoğlu, Inst. Yönter Meray
15:40-16:30	Chemical kinetics and reaction mechanisms	Dr. Huriye İcil
16:40-17:30	Chemical kinetics and reaction mechanisms	Dr. Huriye İcil

<b>5th Week (23-27 October 2017)</b>		
<b>Monday</b>	<b>23 October</b>	
08:40-09:30	STUDY TIME	
09:40-10:30	STUDY TIME	
10:40-11:30	Medical English (Gr 1 & Gr 2)	Inst. Ayfer Cavisilli Inst. Ayşe Kozansoy
11:40-12:30	Medical English (Gr 1 & Gr 2)	Inst. Ayfer Cavisilli Inst. Ayşe Kozansoy
13:40-14:30	Turkish as a Second Language (for foreign students)	Inst. Emine Özerinç Inst. Şerife Çelebi Sökmez
14:40-15:30	Turkish as a Second Language (for foreign students)	Inst. Emine Özerinç Inst. Şerife Çelebi Sökmez
15:40-16:30	Turkish as a Second Language (for foreign students)	Inst. Emine Özerinç Inst. Şerife Çelebi Sökmez
16:40-17:30	Turkish as a Second Language (for foreign students)	Inst. Emine Özerinç Inst. Şerife Çelebi Sökmez
<b>Tuesday</b>	<b>24 October</b>	
08:40-09:30	RNA synthesis and processing	Dr. Şükrü Tüzmen
09:40-10:30	RNA synthesis and processing	Dr. Şükrü Tüzmen
10:40-11:30	Atatürk's Principles and History of Modern Turkey (for Turkish students)	Dr. Turgay Bülent Göktürk

11:40-12:30	Atatürk's Principles and History of Modern Turkey (for Turkish students)	Dr. Turgay Bülent Göktürk
13:40-14:30	Structure of nucleic acids	Dr. Ergül Altundağ
14:40-15:30	STUDY TIME	
15:40-16:30	STUDY TIME	
16:40-17:30	STUDY TIME	
<b>Wednesday</b>	<b>25 October</b>	
08:40-09:30	Protein synthesis	Dr. Şükrü Tüzmen
09:40-10:30	Protein synthesis	Dr. Şükrü Tüzmen
10:40-11:30	Posttranscriptional and posttranslational modifications	Dr. Saime Batirel
11:40-12:30	Posttranscriptional and posttranslational modifications	Dr. Saime Batirel
13:40-14:30	Mechanism of signal transduction	Dr. Saime Batirel
14:40-15:30	Mechanism of signal transduction	Dr. Saime Batirel
15:40-16:30		
16:40-17:30		
<b>Thursday</b>	<b>26 October</b>	
08:40-09:30	<b>Y2C1 THEORETICAL EXAM</b>	
09:40-10:30		
10:40-11:30		
11:40-12:30		
13:40-14:30	<b>ICS-1 Research:</b> Introduction to ICS-research	Dr. Mevhibe Hocaoğlu, Dr. İlke Akçay
14:40-15:30	<b>ICS-1 Research:</b> Scientific approach, literature review, scientific materials	Dr. Mevhibe Hocaoğlu, Dr. İlke Akçay
15:40-16:30	<b>ICS-1 Research:</b> Global look to different research designs	Dr. Mevhibe Hocaoğlu, Dr. İlke Akçay
16:40-17:30	STUDY TIME	
<b>Friday</b>	<b>27 October</b>	
08:40-09:30	<b>Y3C1 THEORETICAL EXAM</b>	
09:40-10:30		
10:40-11:30		
11:40-12:30		
13:40-14:30	<b>PBL Module -2</b>	Dr. Mümtaz Güran, Dr. İlke Akçay, Dr. Ergül Mutlu Altundağ,
14:40-15:30	<b>PBL Module -2</b>	Inst. Duygu Gençalp, Inst. Hüseyin Bıyıkoğlu, Inst. Yönter Meray
15:40-16:30	Thermochemistry (chemical energetics)	Dr. Huriye İcil
16:40-17:30	Solubility and complex ion equilibrium	Dr. Huriye İcil
<b>6th Week (30 October - 03 November 2017)</b>		
<b>Monday</b>	<b>30 October</b>	
08:40-09:30	STUDY TIME	
09:40-10:30	STUDY TIME	
10:40-11:30	Medical English (Gr 1 & Gr 2)	Inst. Ayfer Civişilli Inst. Ayşe Kozansoy

<b>11:40-12:30</b>	Medical English (Gr 1 & Gr 2)	Inst. Ayfer Civişilli Inst. Ayşe Kozansoy
<b>13:40-14:30</b>	Elective Course – I MDCN181 – Theoretical and Applied Forensic Sciences MDCN182 – Arts and Crafts for Medical Students MDCN184 – Laboratory Techniques in Medicine	Dr. Cemal Gürkan Inst. Nurtane Karagil Inst. Duygu Gençalp
	Turkish as a Second Language (for foreign students)	Inst. Emine Özerinç Inst. Şerife Çelebi Sökmez
<b>14:40-15:30</b>	Elective Course – I MDCN181 – Theoretical and Applied Forensic Sciences MDCN182 – Arts and Crafts for Medical Students MDCN184 – Laboratory Techniques in Medicine	Dr. Cemal Gürkan Inst. Nurtane Karagil Inst. Duygu Gençalp
	Turkish as a Second Language (for foreign students)	Inst. Emine Özerinç Inst. Şerife Çelebi Sökmez
<b>15:40-16:30</b>	Turkish as a Second Language (for foreign students)	Inst. Emine Özerinç Inst. Şerife Çelebi Sökmez
<b>16:40-17:30</b>	Turkish as a Second Language (for foreign students)	Inst. Emine Özerinç Inst. Şerife Çelebi Sökmez
<b>Tuesday</b>	<b>31 October</b>	
<b>08:40-09:30</b>	Mutations and polymorphisms	Dr. Şükrü Tüzmen
<b>09:40-10:30</b>	DNA Repair	Dr. Şükrü Tüzmen
<b>10:40-11:30</b>	Atatürk's Principles and History of Modern Turkey (for Turkish students)	Dr. Turgay Bülent Göktürk
<b>11:40-12:30</b>	Atatürk's Principles and History of Modern Turkey (for Turkish students)	Dr. Turgay Bülent Göktürk
<b>13:40-14:30</b>	Structure of lipids	Dr. Goncağül Haklar
<b>14:40-15:30</b>	Structure of lipids	Dr. Goncağül Haklar
<b>15:40-16:30</b>	<b>STUDY TIME</b>	
<b>16:40-17:30</b>	Solubility and complex ion equilibrium	Dr. Huriye İcıl
<b>Wednesday</b>	<b>01 November</b>	
<b>08:40-09:30</b>	Multifactorial inheritance	Dr. Şükrü Tüzmen
<b>09:40-10:30</b>	Population genetics	Dr. Şükrü Tüzmen
<b>10:40-11:30</b>	Designing research	Dr. İlke Akçay
<b>11:40-12:30</b>	Types of data	Dr. İlke Akçay
<b>13:40-14:30</b>	<b>ICS-1: First-Aid Course</b>	Dr. Bülent Sezgin, Dr. Berfu Çerçi Öngün, Dr. Umut Altunç
<b>14:40-15:30</b>	<b>ICS-1: First-Aid Course</b>	
<b>15:40-16:30</b>	<b>ICS-1: First-Aid Course</b>	
<b>16:40-17:30</b>	<b>ICS-1: First-Aid Course</b>	
<b>Thursday</b>	<b>02 November</b>	
<b>08:40-09:30</b>	<b>STUDY TIME</b>	
<b>09:40-10:30</b>	<b>STUDY TIME</b>	
<b>10:40-11:30</b>	<b>PBL Module -3</b>	Dr. Mümtaz Güran, Dr. İlke Akçay, Dr. Ergül Mutlu Altundağ, Inst. Duygu Gençalp, Inst. Hüseyin Bıyıkoğlu, Inst. Yönter Meray
<b>11:40-12:30</b>	<b>PBL Module -3</b>	

<b>13:40-14:30</b>	<b>ICS-1: First-Aid Course</b>	Dr. Bülent Sezgin, Dr. Halil Eren Sakallı, Dr. Hasan Topper
<b>14:40-15:30</b>	<b>ICS-1: First-Aid Course</b>	
<b>15:40-16:30</b>	<b>ICS-1: First-Aid Course</b>	
<b>16:40-17:30</b>	<b>ICS-1: First-Aid Course</b>	
<b>Friday</b>	<b>03 November</b>	
<b>08:40-09:30</b>	<b>Biochemistry LAB: Urease - Group A</b>	Dr. Betül Karademir, Dr. Ergül Mutlu Altundağ Inst.Duygu Gençalp
<b>09:40-10:30</b>	<b>Biochemistry LAB: Urease - Group A</b>	Dr. Betül Karademir, Dr. Ergül Mutlu Altundağ Inst.Duygu Gençalp
<b>10:40-11:30</b>	<b>Biochemistry LAB: Urease - Group A</b>	Dr. Betül Karademir, Dr. Ergül Mutlu Altundağ Inst.Duygu Gençalp
<b>11:40-12:30</b>	<b>Biochemistry LAB: Urease - Group A</b>	Dr. Betül Karademir, Dr. Ergül Mutlu Altundağ Inst.Duygu Gençalp
<b>13:40-14:30</b>	<b>Biochemistry LAB: Urease - Group B</b>	Dr. Betül Karademir, Dr. Ergül Mutlu Altundağ Inst.Duygu Gençalp
<b>14:40-15:30</b>	<b>Biochemistry LAB: Urease - Group B</b>	Dr. Betül Karademir, Dr. Ergül Mutlu Altundağ Inst.Duygu Gençalp
<b>15:40-16:30</b>	<b>Biochemistry LAB: Urease - Group B</b>	Dr. Betül Karademir, Dr. Ergül Mutlu Altundağ Inst.Duygu Gençalp
<b>16:40-17:30</b>	<b>Biochemistry LAB: Urease - Group B</b>	Dr. Betül Karademir, Dr. Ergül Mutlu Altundağ Inst.Duygu Gençalp
<b>7th Week (06-10 November 2017)</b>		
<b>Monday</b>	<b>06 November</b>	
<b>08:40-09:30</b>	<b>STUDY TIME</b>	
<b>09:40-10:30</b>	<b>STUDY TIME</b>	
<b>10:40-11:30</b>	Medical English (Gr 1 & Gr 2)	Inst. Ayfer Cavisilli Inst. Ayşe Kozansoy
<b>11:40-12:30</b>	Medical English (Gr 1 & Gr 2)	Inst. Ayfer Cavisilli Inst. Ayşe Kozansoy
<b>13:40-14:30</b>	Elective Course – I MDCN181 – Theoretical and Applied Forensic Sciences MDCN182 – Arts and Crafts for Medical Students MDCN184 – Laboratory Techniques in Medicine	Dr. Cemal Gürkan Inst. Nurtane Karagil Inst. Duygu Gençalp
	Turkish as a Second Language (for foreign students)	Inst. Emine Özerinç Inst. Şerife Çelebi Sökmez
<b>14:40-15:30</b>	Elective Course – I MDCN181 – Theoretical and Applied Forensic Sciences MDCN182 – Arts and Crafts for Medical Students MDCN184 – Laboratory Techniques in Medicine	Dr. Cemal Gürkan Inst. Nurtane Karagil Inst. Duygu Gençalp
	Turkish as a Second Language (for foreign students)	Inst. Emine Özerinç Inst. Şerife Çelebi Sökmez
<b>15:40-16:30</b>	Turkish as a Second Language (for foreign students)	Inst. Emine Özerinç Inst. Şerife Çelebi Sökmez

16:40-17:30	Turkish as a Second Language (for foreign students)	Inst. Emine Özerinç Inst. Şerife Çelebi Sökmez
<b>Tuesday</b>	<b>07 November</b>	
08:40-09:30	Chromosome structure, function and anomalies	Dr. Şükrü Tüzmen
09:40-10:30	Chromosome structure, function and anomalies	Dr. Şükrü Tüzmen
10:40-11:30	Viruses, plasmids, transposable genetic elements	Dr. Şükrü Tüzmen
11:40-12:30	Cytogenetics	Dr. Ahmet İlder Güney
13:40-14:30	ICS-1: First-Aid Course	Dr. Bülent Sezgin, Dr. Umut Altunç, Inst. Yönter Meray
14:40-15:30	ICS-1: First-Aid Course	
15:40-16:30	ICS-1: First-Aid Course	
16:40-17:30	ICS-1: First-Aid Course	
<b>Wednesday</b>	<b>08 November</b>	
08:40-09:30	Detection of nucleic acids	Dr. Şükrü Tüzmen
09:40-10:30	Tools of cell biology	Dr. Şükrü Tüzmen
10:40-11:30	Molecular transmission of genetic information	Dr. Ergül Altundağ
11:40-12:30	Molecular transmission of genetic information	Dr. Ergül Altundağ
13:40-14:30	ICS-1: First-Aid Course	Dr. Bülent Sezgin, Dr. Umut Altunç
14:40-15:30	ICS-1: First-Aid Course	
15:40-16:30	ICS-1: First-Aid Course	
16:40-17:30	ICS-1: First-Aid Course	
<b>Thursday</b>	<b>09 November</b>	
08:40-09:30	ICS-1: Research and Computer Skills	Dr. Mevhibe Hocoğlu Dr. İlke Akçay
09:40-10:30	ICS-1: Research and Computer Skills	Dr. Mevhibe Hocoğlu Dr. İlke Akçay
10:40-11:30	Describing the data with graphics	Dr. İlke Akçay
11:40-12:30	Describing the data with numbers	Dr. İlke Akçay
13:40-14:30	ICS-1: First-Aid Course	Dr. Bülent Sezgin, Dr. Berfu Çerçi Öngün, Dr. Umut Altunç, Dr. Halil Eren Sakallı Dr. Hasan Toper
14:40-15:30	ICS-1: First-Aid Course	
15:40-16:30	ICS-1: First-Aid Course	
16:40-17:30	ICS-1: First-Aid Course	
<b>Friday</b>	<b>10 November</b>	
08:40-09:30	10 KASIM ATATÜRK'Ü ANMA TÖRENİ	
09:40-10:30		
10:40-11:30	PBL Module -4	Dr. Mümtaz Güran, Dr. İlke Akçay, Dr. Ergül Mutlu Altundağ, Inst. Duygu Gençalp, Inst. Hüseyin Bıyıkoğlu, Inst. Yönter Meray
11:40-12:30	PBL Module -4	
13:40-14:30	Cell death and molecular mechanisms	Dr. Mustafa Akkiprik
14:40-15:30	Molecular basis of disease	Dr. Mustafa Akkiprik
15:40-16:30	Electrochemistry: oxidation and reduction	Dr. Huriye İcil
16:40-17:30	Electrochemistry: oxidation and reduction	Dr. Huriye İcil

<b>8th Week (13-17 November 2017)</b>		
<b>Monday</b>	<b>13 November</b>	
<b>08:40-09:30</b>	<b>STUDY TIME</b>	
<b>09:40-10:30</b>	<b>STUDY TIME</b>	
<b>10:40-11:30</b>	Medical English (Gr 1 & Gr 2)	Inst. Ayfer Civişilli Inst. Ayşe Kozansoy
<b>11:40-12:30</b>	Medical English (Gr 1 & Gr 2)	Inst. Ayfer Civişilli Inst. Ayşe Kozansoy
<b>13:40-14:30</b>	Elective Course – I MDCN181 – Theoretical and Applied Forensic Sciences MDCN182 – Arts and Crafts for Medical Students MDCN184 – Laboratory Techniques in Medicine	Dr. Cemal Gürkan Inst. Nurtane Karagil Inst. Duygu Gençalp
	Turkish as a Second Language (for foreign students)	Inst. Emine Özerinç Inst. Şerife Çelebi Sökmez
<b>14:40-15:30</b>	Elective Course – I MDCN181 – Theoretical and Applied Forensic Sciences MDCN182 – Arts and Crafts for Medical Students MDCN184 – Laboratory Techniques in Medicine	Dr. Cemal Gürkan Inst. Nurtane Karagil Inst. Duygu Gençalp
	Turkish as a Second Language (for foreign students)	Inst. Emine Özerinç Inst. Şerife Çelebi Sökmez
<b>15:40-16:30</b>	Turkish as a Second Language (for foreign students)	Inst. Emine Özerinç Inst. Şerife Çelebi Sökmez
<b>16:40-17:30</b>	Turkish as a Second Language (for foreign students)	Inst. Emine Özerinç Inst. Şerife Çelebi Sökmez
<b>Tuesday</b>	<b>14 November</b>	
<b>08:40-09:30</b>	Regulation of gene expression	Dr. Şükrü Tüzmen
<b>09:40-10:30</b>	Regulation of gene expression	Dr. Şükrü Tüzmen
<b>10:40-11:30</b>	Atatürk's Principles and History of Modern Turkey (for Turkish students)	Dr. Turgay Bülent Göktürk
<b>11:40-12:30</b>	Atatürk's Principles and History of Modern Turkey (for Turkish students)	Dr. Turgay Bülent Göktürk
<b>13:40-14:30</b>	Turning points in History of Medicine	Dr. Şefik Görkey
<b>14:40-15:30</b>	Turning points in History of Medicine	Dr. Şefik Görkey
<b>15:40-16:30</b>	History of Anatomy	Dr. Şefik Görkey
<b>16:40-17:30</b>	History of Anatomy	Dr. Şefik Görkey
<b>Wednesday</b>	<b>15 November</b>	
<b>08:40-09:30</b>	<b>TRNC REPUBLIC DAY</b>	
<b>09:40-10:30</b>		
<b>10:40-11:30</b>		
<b>11:40-12:30</b>		
<b>13:40-14:30</b>		
<b>14:40-15:30</b>		
<b>15:40-16:30</b>		
<b>16:40-17:30</b>		
<b>Thursday</b>	<b>16 November</b>	
<b>08:40-09:30</b>	Cellular effects of tobacco use	Dr. Berfu Çerçi Öngün
<b>09:40-10:30</b>	Cellular effects of tobacco use	Dr. Berfu Çerçi Öngün
<b>10:40-11:30</b>	History of Physiology	Dr. Şefik Görkey

11:40-12:30	Evolution of the concept of infection	Dr. Şefik Görkey
13:40-14:30	History of surgery	Dr. Şefik Görkey
14:40-15:30	History of human experimentation	Dr. Şefik Görkey
15:40-16:30	Structure of proteins	Dr. Huriye İcil
16:40-17:30	High energy compounds	Dr. Huriye İcil
<b>Friday</b>	<b>17 November</b>	
08:40-09:30	STUDY TIME	
09:40-10:30	Thermochemistry (chemical energetics)	Dr. Huriye İcil
10:40-11:30	History of human experimentation	Dr. Şefik Görkey
11:40-12:30	History of medical professionalism	Dr. Şefik Görkey
13:40-14:30	History of Medicine in Seljukid and Ottoman Ages	Dr. Şefik Görkey
14:40-15:30	History of Medicine in Turkish Republic	Dr. Şefik Görkey
15:40-16:30	Structure of lipids	Dr. Huriye İcil
16:40-17:30	Structure of carbohydrates	Dr. Huriye İcil
<b>9th Week (20-24 November 2017)</b>		
<b>Monday</b>	<b>20 November</b>	
08:40-09:30	<b>PRACTICAL EXAM</b>	
09:40-10:30		
10:40-11:30		
11:40-12:30		
13:40-14:30		
14:40-15:30		
15:40-16:30		
16:40-17:30		
<b>Tuesday</b>		<b>21 November</b>
08:40-09:30	<b>PRACTICAL EXAM</b>	
09:40-10:30		
10:40-11:30		
11:40-12:30		
13:40-14:30		
14:40-15:30		
15:40-16:30		
16:40-17:30		
<b>Wednesday</b>		<b>22 November</b>
08:40-09:30		
09:40-10:30		
10:40-11:30		
11:40-12:30		
13:40-14:30		
14:40-15:30		
15:40-16:30		
16:40-17:30		
<b>Thursday</b>	<b>23 November</b>	
08:40-09:30		
09:40-10:30		



10:40-11:30		
11:40-12:30		
13:40-14:30		
14:40-15:30		
15:40-16:30		
16:40-17:30		
<b>Friday</b>	<b>24 November</b>	
08:40-09:30	<b>Y1C1 THEORETICAL EXAM (starts at 9:30)</b>	
09:40-10:30		
10:40-11:30		
11:40-12:30		
13:40-14:30		
14:40-15:30		
15:40-16:30		
16:40-17:30		