



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

<b>Coordinator of the Course 1.1</b> Assist. Prof., İlke AKÇAY	
<b>Coordinator of Multidisciplinary Students' Lab.</b> Assist. Prof., Mümtaz GÜRAN	<b>Coordinator of Clinical Skill Lab.</b> Instructor. Berfu Çerçi ÖNGÜN
<b>Coordinator of Assessment Unite</b> Assist. Prof., Mümtaz GÜRAN, Assist. Prof. Dr. Mevhibe HOCAOĞLU, Assist. Prof., İlke AKÇAY	<b>Coordinator of ICS Res. LAB.</b> Assist. Prof., Mevhibe HOCAOĞLU
<b>Year 1 Coordinators</b> Prof., Mustafa AKKİPRİK; Assoc. Prof., Dilek AKAKIN	
<b>Module Coordinator</b> Assoc. Prof., Özlem SARIKAYA	<b>Introduction to Clinician Skills (ICS) Coordinators</b> Prof., Sibel SAKARYA, Assoc. Prof., Pemra ÜNALAN
<b>Coordinator of Multidisciplinary Students' Lab.</b> Assoc. Prof., Betül KARADEMİR	<b>Coordinator of Assessment Unite</b> Assist. Prof., Cevdet NACAR
<b>Vice-Chief Coordinators</b>	
<b>Assessment</b> Assist. Prof., Cevdet NACAR	<b>Students' Affairs</b> Assist. Prof., Can ERZİK
<b>Chief Coordinator</b> Assoc. Prof., Hasan YANANLI	<b>Coordinator of Medical Education Program Evaluation and Development Commission</b> Prof., Berrak Ç. YEĞEN
<b>Educational Consultant</b> Assoc. Prof., Mehmet Ali GÜLPINAR	
<b>Dean (EMU)</b> Prof., Nahide GÖKÇORA	<b>Dean (MU)</b> Prof., Hakan GÜNDÜZ

<b>LEARNING OUTCOMES / COMPETENCIES</b>	
<p><b>A. Clinical Care: Qualified patient care and community oriented health care</b></p> <ol style="list-style-type: none"> <li>1. Basic clinical skills</li> <li>2. The organization and management of the patient and the patient care</li> <li>3. The organization and the management of health care delivery services / system</li> <li>4. Health promotion and disease prevention</li> </ol> <p><b>B. Medical Knowledge and Evidence-Based Medicine</b></p> <ol style="list-style-type: none"> <li>5. Appropriate information retrieval and management skills</li> <li>6. The integration of knowledge, critical thinking and evidence-based decision making</li> <li>7. Scientific methods and basic research skills</li> </ol> <p><b>C. Professional Attitudes and Values</b></p> <ol style="list-style-type: none"> <li>8. Communication skills and effective communication with patients / patient relatives</li> <li>9. Interpersonal relationships and team working</li> <li>10. Ethical and professional values, responsibilities</li> <li>11. Individual, social and cultural values and responsibilities</li> <li>12. Reflective practice and continuing development</li> <li>13. Healthcare delivery systems, management and community oriented health care</li> <li>14. Education and counseling</li> </ol>	
<b>PHASE-1 LEARNING OBJECTIVES</b>	
<ol style="list-style-type: none"> <li>1. Understanding the normal structures and functions of human body</li> <li>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</li> <li>3. Developing clinical problem solving, clinical reasoning and evaluation skills by integrating biomedical, clinical, social and humanities knowledge</li> <li>4. Gaining basic clinical skills by applications in simulated settings.</li> <li>5. Awareness of the professional values in health and disease processes (professional, individual, societal) and acquisition necessary related skills</li> <li>6. Evaluating critically and synthesizing all the medical evidence and perform respecting scientific, professional and ethical values</li> <li>7. Acquisition skills in reflective thinking and practicing, being open to continuous individual / professional development.</li> </ol>	
<b>INTRODUCTION TO CELL AND CELLULAR REPLICATION</b>	
<b>AIM and LEARNING OBJECTIVES of COURSE</b>	
<p><b>Aim:</b> 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.</p> <p><b>Learning Objectives:</b> At the end of this committee, students will,</p> <ul style="list-style-type: none"> <li>• Identify and describe the development, structure and function of cell and its subcomponents</li> <li>• Evaluate the biochemical process of the cell</li> <li>• Understand cell division process and related mechanisms</li> <li>• Describe the genetics mechanisms and protein biosynthesis</li> <li>• Understand genetic variation in individuals</li> <li>• Describe the molecular mechanisms of genetic inheritance and genetic basis of inherited disease</li> </ul> <p>Acquire skills necessary to perform experimental applications</p>	
<b>ASSESSMENT SYSTEM</b>	<b>PROGRAM EVALUATION</b>
<p>Module examination: Written exam at the end of module (10 % of final score)</p> <p>Practical examination: Practical exams at the end of course</p> <p>Course examination: Written exam at the end of course</p>	<p>Evaluation at the end of the course, is done both orally and by using structured evaluation forms</p>

<b>DEPARTMENTS PARTICIPATING IN COURSE-1 &amp; MODULE-1</b>	
<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  Berfu Çerçi ÖNGÜN, Instructor, Anatomy  Betül KARADEMİR, Assoc. Professor, Biochemistry  Bülent SEZGIN, Instructor, Internal Medicine  Cevdet NACAR, Assist. Professor, Biophysics  Goncagül HAKLAR, Professor, Medical Biochemistry  Huriye İCİL, Professor, Chemistry  İlke AKÇAY, Assist. Professor, Biostatistics  İlter GÜNEY Assist. Professor, Medical Genetics  Masoud AFSHANI, Instructor, Histology and Embryology  Mevhibe HOCAOĞLU, Assist. Professor, Public Health  Mümtaz GÜRAN, Assist. Professor, Microbiology</p>	<p>Mustafa AKKIPRIK, Professor, Medical Biology  Önder ŞIRIKÇI, Professor, Medical Biochemistry  Pemra ÜNALAN, Professor, Family Medicine  Pınar Mega TİBER, Assist. Professor, Biophysics  Saime BATIREL, Assist. Professor, Medical Biochemistry  Şefik GÖRKEY, Professor, History of Medicine and Ethics  Serap ŞİRVANCI, Assoc. Professor, Histology and Embryology  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>	

SUMMARY OF THE COURSE 1.1			
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
Medical English	14		14
Atatürk's Principles and the History of Turkish Renovation (for Turkish students)	14		14
Turkish as a Second Language (for foreign students)	32		32
Turkish Communication Course (as elective for foreign students)			
Elective Courses (for students who meet Turkish requirement)	16		16
<b>TOTAL</b>	<b>189</b>	<b>41</b>	<b>230</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>	Medical Education in Dr Fazıl Küçük Faculty of Medicine	Dr. İlke Akçay
<b>11:40-12:30</b>	Opening Lecture	Dr. Ayşegül Karahasan
	Welcoming Cocktail	
<b>13:40-14:30</b>	Elective Course – I	TBA
	Turkish as a Second Language (for foreign students)	TBA
<b>14:40-15:30</b>	Elective Course – I	TBA
	Turkish as a Second Language (for foreign students)	TBA
<b>15:40-16:30</b>	Turkish as a Second Language (for foreign students)	TBA
<b>16:40-17:30</b>	Turkish as a Second Language (for foreign students)	TBA
<b>Tuesday</b>	<b>26 September</b>	
<b>08:40-09:30</b>		
<b>09:40-10:30</b>		

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		
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>	
<b>08:40-09:30</b>		
<b>09:40-10:30</b>		
<b>10:40-11:30</b>	Medical English	TBA
<b>11:40-12:30</b>	Medical English	TBA
<b>13:40-14:30</b>	Elective Course – I	TBA
	Turkish as a Second Language (for foreign students)	TBA
<b>14:40-15:30</b>	Elective Course – I	TBA
	Turkish as a Second Language (for foreign students)	TBA
<b>15:40-16:30</b>	Turkish as a Second Language (for foreign students)	TBA
<b>16:40-17:30</b>	Turkish as a Second Language (for foreign students)	TBA
<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>	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>	Introduction to ICS	Dr. Pemra Ünalın, Dr. Bülent Sezgin, Dr. Berfu Çerçi Öngün, Dr. Aydın Karakuzu, Dr. Sercan Gökçeli
<b>14:40-15:30</b>	PBL Orientation	
<b>15:40-16:30</b>	PBL Orientation	
<b>16:40-17:30</b>	PBL Orientation	
<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>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 Şirvancı

09:40-10:30	Microscope	Dr. Serap Şirvancı
10:40-11:30	Cellular organelles and inclusions at LM and EM level	Dr. Serap Şirvancı
11:40-12:30	Cellular organelles and inclusions at LM and EM level	Dr. Serap Şirvancı
13:40-14:30	<b>Histology LAB: Cell Types - Group A</b>	Dr. Serap Şirvancı, Dr. Masoud Afshani
14:40-15:30	<b>Histology LAB: Cell Types - Group A</b>	Dr. Serap Şirvancı, Dr. Masoud Afshani
15:40-16:30	<b>Histology LAB: Cell Types - Group B</b>	Dr. Serap Şirvancı, Dr. Masoud Afshani
16:40-17:30	<b>Histology LAB: Cell Types - Group B</b>	Dr. Serap Şirvancı, Dr. Masoud Afshani
<b>Friday</b>	<b>06 October</b>	
08:40-09:30		
09:40-10:30	Histotechniques	Dr. Serap Şirvancı
10:40-11:30	Nucleus and cell division	Dr. Serap Şirvancı
11:40-12:30	Nucleus and cell division	Dr. Serap Şirvancı
13:40-14:30	<b>Histology LAB: Cell division - Group A</b>	Dr. Serap Şirvancı, Dr. Masoud Afshani
14:40-15:30	<b>Histology LAB: Cell division - Group A</b>	Dr. Serap Şirvancı, Dr. Masoud Afshani
15:40-16:30	<b>Histology LAB: Cell division - Group B</b>	Dr. Serap Şirvancı, Dr. Masoud Afshani
16:40-17:30	<b>Histology LAB: Cell division - Group B</b>	Dr. Serap Şirvancı, Dr. Masoud Afshani
<b>3rd Week (09-13 October 2017)</b>		
<b>Monday</b>	<b>09 October</b>	
08:40-09:30		
09:40-10:30		
10:40-11:30	Medical English	TBA
11:40-12:30	Medical English	TBA
13:40-14:30	Elective Course – I	TBA
	Turkish as a Second Language (for foreign students)	TBA
14:40-15:30	Elective Course – I	TBA
	Turkish as a Second Language (for foreign students)	TBA
15:40-16:30	Turkish as a Second Language (for foreign students)	TBA
16:40-17:30	Turkish as a Second Language (for foreign students)	TBA
<b>Tuesday</b>	<b>10 October</b>	
08:40-09:30	DNA replication	Dr. Şükrü Tüzmen
09:40-10:30	DNA replication	Dr. Şükrü Tüzmen
10:40-11:30	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>		
<b>14:40-15:30</b>		
<b>15:40-16:30</b>		
<b>16:40-17:30</b>		
<b>Wednesday</b>	<b>11 October</b>	
<b>08:40-09:30</b>	Cell cycle	Dr. Şükrü Tüzmen
<b>09:40-10:30</b>	Packaging chromosomal DNA	Dr. Şükrü Tüzmen
<b>10:40-11:30</b>	Recombination	Dr. Şükrü Tüzmen
<b>11:40-12:30</b>	Protein structure and function-1	Dr. Saime Batirel
<b>13:40-14:30</b>	Protein structure and function-1	Dr. Saime Batirel
<b>14:40-15:30</b>	Protein structure and function-2	Dr. Saime Batirel
<b>15:40-16:30</b>	Protein structure and function-2	Dr. Saime Batirel
<b>16:40-17:30</b>		
<b>Thursday</b>	<b>12 October</b>	
<b>08:40-09:30</b>	<b>Biochemistry LAB: Spectrophotometer - Group A</b>	Dr. Saime Batirel
<b>09:40-10:30</b>	<b>Biochemistry LAB: Spectrophotometer - Group A</b>	Dr. Saime Batirel
<b>10:40-11:30</b>	<b>Biochemistry LAB: Spectrophotometer - Group B</b>	Dr. Saime Batirel
<b>11:40-12:30</b>	<b>Biochemistry LAB: Spectrophotometer - Group B</b>	Dr. Saime Batirel
<b>13:40-14:30</b>	Enzymes: Introduction	Dr. Betül Karademir
<b>14:40-15:30</b>	Enzymes: Introduction	Dr. Betül Karademir
<b>15:40-16:30</b>	Enzymes: Mechanism of action	Dr. Betül Karademir
<b>16:40-17:30</b>		
<b>Friday</b>	<b>13 October</b>	
<b>08:40-09:30</b>		
<b>09:40-10:30</b>	Enzymes: Mechanism of action	Dr. Betül Karademir
<b>10:40-11:30</b>	Enzymes: Regulation	Dr. Betül Karademir
<b>11:40-12:30</b>	Enzymes: Regulation	Dr. Betül Karademir
<b>13:40-14:30</b>	Chemical bonds: ionic and covalent	Dr. Huriye İcil
<b>14:40-15:30</b>	Chemical reactions and equilibrium	Dr. Huriye İcil
<b>15:40-16:30</b>	Chemical reactions and equilibrium	Dr. Huriye İcil
<b>16:40-17:30</b>		
<b>4th Week (16-20 October 2017)</b>		
<b>Monday</b>	<b>16 October</b>	

08:40-09:30		
09:40-10:30		
10:40-11:30	Medical English	TBA
11:40-12:30	Medical English	TBA
13:40-14:30	Elective Course – I	TBA
	Turkish as a Second Language (for foreign students)	TBA
14:40-15:30	Elective Course – I	TBA
	Turkish as a Second Language (for foreign students)	TBA
15:40-16:30	Turkish as a Second Language (for foreign students)	TBA
16:40-17:30	Turkish as a Second Language (for foreign students)	TBA
<b>Tuesday</b>	<b>17 October</b>	
08:40-09:30	Cell division kinetics	Dr. Şükrü Tüzmen
09:40-10:30	Mitosis	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	Information content of DNA	Dr. Cevdet Nacar
14:40-15:30		
15:40-16:30		
16:40-17:30		
<b>Wednesday</b>	<b>18 October</b>	
08:40-09:30	Meiosis	Dr. Şükrü Tüzmen
09:40-10:30	Introduction to genetics	Dr. Şükrü Tüzmen
10:40-11:30	Fundamentals to Mendelian genetics	Dr. Şükrü Tüzmen
11:40-12:30		
13:40-14:30	ICS-1: Introduction to ICS-research	Dr. Mevhibe Hocaoğlu, Dr. İlke Akçay
14:40-15:30	ICS-1: Scientific approach, literature review, scientific materials	Dr. Mevhibe Hocaoğlu, Dr. İlke Akçay
15:40-16:30	ICS-1: Global look to different research designs	Dr. Mevhibe Hocaoğlu, Dr. İlke Akçay
16:40-17:30		
<b>Thursday</b>	<b>19 October</b>	
08:40-09:30		
09:40-10:30		
10:40-11:30		
11:40-12:30		
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. Pinar Mega Tiber
09:40-10:30	Introduction to biophysics – I	Dr. Pinar Mega Tiber
10:40-11:30	Introduction to biophysics – I	Dr. Pinar Mega Tiber
11:40-12:30	Introduction to biophysics – I	Dr. Pinar Mega Tiber
13:40-14:30	<b>PBL Module -1</b>	
14:40-15:30	<b>PBL Module -1</b>	
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		
09:40-10:30		
10:40-11:30	Medical English	TBA
11:40-12:30	Medical English	TBA
13:40-14:30	Elective Course – I	TBA
	Turkish as a Second Language (for foreign students)	TBA
14:40-15:30	Elective Course – I	TBA
	Turkish as a Second Language (for foreign students)	TBA
15:40-16:30	Turkish as a Second Language (for foreign students)	TBA
16:40-17:30	Turkish as a Second Language (for foreign students)	TBA
<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	Molecular transmission of genetic information	Dr. Ergül Altundağ
15:40-16:30	Molecular transmission of genetic information	Dr. Ergül Altundağ
16:40-17:30	Thermochemistry (chemical energetics)	Dr. Huriye İcil
<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	Thermochemistry (chemical energetics)	Dr. Huriye İcil
16:40-17:30	Solubility and complex ion equilibrium	Dr. Huriye İcil
<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	Designing research	Dr. İlke Akçay
14:40-15:30	Types of data	Dr. İlke Akçay
15:40-16:30		
16:40-17:30		
<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>	
14:40-15:30	<b>PBL Module -2</b>	
15:40-16:30		
16:40-17:30		
<b>6th Week (30 October - 03 November 2017)</b>		
<b>Monday</b>	<b>30 October</b>	
08:40-09:30		
09:40-10:30		
10:40-11:30	Medical English	TBA
11:40-12:30	Medical English	TBA
13:40-14:30	Elective Course – I	TBA
	Turkish as a Second Language (for foreign students)	TBA
14:40-15:30	Elective Course – I	TBA
	Turkish as a Second Language (for foreign students)	TBA
15:40-16:30	Turkish as a Second Language (for foreign students)	TBA
16:40-17:30	Turkish as a Second Language (for foreign students)	TBA
<b>Tuesday</b>	<b>31 October</b>	
08:40-09:30	Mutations and polymorphisms	Dr. Şükrü Tüzmen
09:40-10:30	DNA Repair	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 lipids	Dr. Goncağül Haklar
14:40-15:30	Structure of lipids	Dr. Goncağül Haklar
15:40-16:30		
16:40-17:30	Solubility and complex ion equilibrium	Dr. Huriye İcil

<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>	Describing the data with graphics	Dr. İlke Akçay
<b>11:40-12:30</b>	Describing the data with numbers	Dr. İlke Akçay
<b>13:40-14:30</b>	<b>ICS-1: First-Aid Course</b>	Dr. Bülent Sezgin, Dr. Berfu Çerçi Öngün, Dr. Aydın Karakuzu, Dr. Sercan Gökçeli
<b>14:40-15:30</b>	<b>ICS-1: First-Aid Course</b>	Dr. Bülent Sezgin, Dr. Berfu Çerçi Öngün, Dr. Aydın Karakuzu, Dr. Sercan Gökçeli
<b>15:40-16:30</b>	<b>ICS-1: First-Aid Course</b>	Dr. Bülent Sezgin, Dr. Berfu Çerçi Öngün, Dr. Aydın Karakuzu, Dr. Sercan Gökçeli
<b>16:40-17:30</b>	<b>ICS-1: First-Aid Course</b>	Dr. Bülent Sezgin, Dr. Berfu Çerçi Öngün, Dr. Aydın Karakuzu, Dr. Sercan Gökçeli
<b>Thursday</b>	<b>02 November</b>	
<b>08:40-09:30</b>		
<b>09:40-10:30</b>		
<b>10:40-11:30</b>	<b>PBL Module -3</b>	
<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. Berfu Çerçi Öngün, Dr. Aydın Karakuzu, Dr. Sercan Gökçeli
<b>14:40-15:30</b>	<b>ICS-1: First-Aid Course</b>	Dr. Bülent Sezgin, Dr. Berfu Çerçi Öngün, Dr. Aydın Karakuzu, Dr. Sercan Gökçeli
<b>15:40-16:30</b>	<b>ICS-1: First-Aid Course</b>	Dr. Bülent Sezgin, Dr. Berfu Çerçi Öngün, Dr. Aydın Karakuzu, Dr. Sercan Gökçeli
<b>16:40-17:30</b>	<b>ICS-1: First-Aid Course</b>	Dr. Bülent Sezgin, Dr. Berfu Çerçi Öngün, Dr. Aydın Karakuzu, Dr. Sercan Gökçeli
<b>Friday</b>	<b>03 November</b>	
<b>08:40-09:30</b>	<b>Biochemistry LAB: Urease - Group A</b>	Dr. Betül Karademir
<b>09:40-10:30</b>	<b>Biochemistry LAB: Urease - Group A</b>	Dr. Betül Karademir
<b>10:40-11:30</b>	<b>Biochemistry LAB: Urease - Group A</b>	Dr. Betül Karademir
<b>11:40-12:30</b>	<b>Biochemistry LAB: Urease - Group A</b>	Dr. Betül Karademir
<b>13:40-14:30</b>	<b>Biochemistry LAB: Urease - Group B</b>	Dr. Betül Karademir
<b>14:40-15:30</b>	<b>Biochemistry LAB: Urease - Group B</b>	Dr. Betül Karademir
<b>15:40-16:30</b>	<b>Biochemistry LAB: Urease - Group B</b>	Dr. Betül Karademir
<b>16:40-17:30</b>	<b>Biochemistry LAB: Urease - Group B</b>	Dr. Betül Karademir
<b>7th Week (06-10 November 2017)</b>		
<b>Monday</b>	<b>06 November</b>	
<b>08:40-09:30</b>		
<b>09:40-10:30</b>		
<b>10:40-11:30</b>	Medical English	TBA
<b>11:40-12:30</b>	Medical English	TBA

<b>13:40-14:30</b>	Elective Course – I	TBA
	Turkish as a Second Language (for foreign students)	TBA
<b>14:40-15:30</b>	Elective Course – I	TBA
	Turkish as a Second Language (for foreign students)	TBA
<b>15:40-16:30</b>	Turkish as a Second Language (for foreign students)	TBA
<b>16:40-17:30</b>	Turkish as a Second Language (for foreign students)	TBA
<b>Tuesday</b>	<b>07 November</b>	
<b>08:40-09:30</b>	Chromosome structure, function and anomalies	Dr. Şükrü Tüzmen
<b>09:40-10:30</b>	Chromosome structure, function and anomalies	Dr. Şükrü Tüzmen
<b>10:40-11:30</b>	Viruses, plasmids, transposable genetic elements	Dr. Şükrü Tüzmen
<b>11:40-12:30</b>	Cytogenetics	Dr. Ahmet İlter Güney
<b>13:40-14:30</b>	<b>ICS-1: First-Aid Course</b>	Dr. Bülent Sezgin, Dr. Berfu Çerçi Öngün, Dr. Aydın Karakuzu, Dr. Sercan Gökçeli
<b>14:40-15:30</b>	<b>ICS-1: First-Aid Course</b>	Dr. Bülent Sezgin, Dr. Berfu Çerçi Öngün, Dr. Aydın Karakuzu, Dr. Sercan Gökçeli
<b>15:40-16:30</b>	<b>ICS-1: First-Aid Course</b>	Dr. Bülent Sezgin, Dr. Berfu Çerçi Öngün, Dr. Aydın Karakuzu, Dr. Sercan Gökçeli
<b>16:40-17:30</b>	<b>ICS-1: First-Aid Course</b>	Dr. Bülent Sezgin, Dr. Berfu Çerçi Öngün, Dr. Aydın Karakuzu, Dr. Sercan Gökçeli
<b>Wednesday</b>	<b>08 November</b>	
<b>08:40-09:30</b>	Detection of nucleic acids	Dr. Şükrü Tüzmen
<b>09:40-10:30</b>	Tools of cell biology	Dr. Şükrü Tüzmen
<b>10:40-11:30</b>		
<b>11:40-12:30</b>		
<b>13:40-14:30</b>	<b>ICS-1: First-Aid Course</b>	Dr. Bülent Sezgin, Dr. Berfu Çerçi Öngün, Dr. Aydın Karakuzu, Dr. Sercan Gökçeli
<b>14:40-15:30</b>	<b>ICS-1: First-Aid Course</b>	Dr. Bülent Sezgin, Dr. Berfu Çerçi Öngün, Dr. Aydın Karakuzu, Dr. Sercan Gökçeli
<b>15:40-16:30</b>	<b>ICS-1: First-Aid Course</b>	Dr. Bülent Sezgin, Dr. Berfu Çerçi Öngün, Dr. Aydın Karakuzu, Dr. Sercan Gökçeli
<b>16:40-17:30</b>	<b>ICS-1: First-Aid Course</b>	Dr. Bülent Sezgin, Dr. Berfu Çerçi Öngün, Dr. Aydın Karakuzu, Dr. Sercan Gökçeli
<b>Thursday</b>	<b>09 November</b>	
<b>08:40-09:30</b>		
<b>09:40-10:30</b>		
<b>10:40-11:30</b>		
<b>11:40-12:30</b>		

13:40-14:30	ICS-1: First-Aid Course	Dr. Bülent Sezgin, Dr. Berfu Çerçi Öngün, Dr. Aydın Karakuzu, Dr. Sercan Gökçeli
14:40-15:30	ICS-1: First-Aid Course	Dr. Bülent Sezgin, Dr. Berfu Çerçi Öngün, Dr. Aydın Karakuzu, Dr. Sercan Gökçeli
15:40-16:30	ICS-1: First-Aid Course	Dr. Bülent Sezgin, Dr. Berfu Çerçi Öngün, Dr. Aydın Karakuzu, Dr. Sercan Gökçeli
16:40-17:30	ICS-1: First-Aid Course	Dr. Bülent Sezgin, Dr. Berfu Çerçi Öngün, Dr. Aydın Karakuzu, Dr. Sercan Gökçeli
<b>Friday</b>	<b>10 November</b>	
08:40-09:30	<b>10 KASIM ATATÜRK'Ü ANMA TÖRENİ</b>	
09:40-10:30		
10:40-11:30	PBL Module -4	
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>	
08:40-09:30		
09:40-10:30		
10:40-11:30	Medical English	TBA
11:40-12:30	Medical English	TBA
13:40-14:30	Elective Course – I	TBA
	Turkish as a Second Language (for foreign students)	TBA
14:40-15:30	Elective Course – I	TBA
	Turkish as a Second Language (for foreign students)	TBA
15:40-16:30	Turkish as a Second Language (for foreign students)	TBA
16:40-17:30	Turkish as a Second Language (for foreign students)	TBA
<b>Tuesday</b>	<b>14 November</b>	
08:40-09:30	Regulation of gene expression	Dr. Şükrü Tüzmen
09:40-10:30	Regulation of gene expression	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	Turning points in History of Medicine	Dr. Şefik Görkey
14:40-15:30	Turning points in History of Medicine	Dr. Şefik Görkey
15:40-16:30	History of Anatomy	Dr. Şefik Görkey
16:40-17:30	History of Anatomy	Dr. Şefik Görkey
<b>Wednesday</b>	<b>15 November</b>	
08:40-09:30	<b>TRNC REPUBLIC DAY</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>Thursday</b>	<b>16 November</b>	
08:40-09:30	Cellular effects of tobacco use	Dr. Berfu Çerçi Öngün
09:40-10:30	Cellular effects of tobacco use	Dr. Berfu Çerçi Öngün
10:40-11:30	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		
09:40-10:30		
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		

<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>23 November</b>	
<b>08:40-09:30</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>Friday</b>	<b>24 November</b>	
<b>08:40-09:30</b>	<b>Y1C1 THEORETICAL EXAM</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>		