



INTRODUCTION TO CELL AND CELLULAR REPLICATION  
YEAR 1 COURSE 1  
September 26<sup>th</sup>, 2016 – November 25<sup>th</sup>, 2016

**Coordinator of the Course 1.1**

Assist. Prof., İlke Çetin Akçay

**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.  
Mehvibe HOCAOĞLU, Assist. Prof., İlke Çetin Akçay

**Coordinator of ICS Res. LAB.**

Assist. Prof. Dr. Mevhibe HOCAOĞLU

**Year 1 Coordinators**

Assoc. Prof., Serap ŞİRVANCI & Assoc. Prof., Mustafa AKKİPRİK

**Module Coordinator**

Assoc. Prof., Özlem SARIKAYA

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

Prof., Sibel KALAÇA, Assoc. Prof., Pemra ÜNALAN

**Coordinator of Multidiciplinary Students' Lab.**

Assoc. Prof., Betül KARADEMİR

**Cooordinator 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

<b>Dean (EMU)</b> <b>Prof., Nahide GÖKÇORA</b>	<b>Acting Dean (MU)</b> <b>Prof., Ömer GÜNAL</b>
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<b>LEARNING OUTCOMES / COMPETENCIES</b>	
<b>A.</b> Clinical Care: Qualified patient care and community oriented health care <ul style="list-style-type: none"> <li><b>1.</b> Basic clinical skills</li> <li><b>2.</b> The organization and management of the patient and the patient care</li> <li><b>3.</b> The organization and the management of health care delivery services / system</li> <li><b>4.</b> Health promotion and disease prevention</li> </ul> <b>B.</b> Medical Knowledge and Evidence-Based Medicine <ul style="list-style-type: none"> <li><b>5.</b> Appropriate information retrieval and management skills</li> <li><b>6.</b> The integration of knowledge, critical thinking and evidence-based decision making</li> <li><b>7.</b> Scientific methods and basic research skills</li> </ul> <b>C.</b> Professional Attitudes and Values <ul style="list-style-type: none"> <li><b>8.</b> Communication skills and effective communication with patients / patient relatives</li> <li><b>9.</b> Interpersonal relationships and team working</li> <li><b>10.</b> Ethical and professional values, responsibilities</li> <li><b>11.</b> Individual, social and cultural values and responsibilities</li> <li><b>12.</b> Reflective practice and continuing development</li> <li><b>13.</b> Healthcare delivery systems, management and community oriented health care</li> <li><b>14.</b> Education and counseling</li> </ul>	

<b>PHASE-1 LEARNING OBJECTIVES</b>	
<ol style="list-style-type: none"> <li><b>1.</b> Understanding the normal structures and functions of human body</li> <li><b>2.</b> 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><b>3.</b> Developing clinical problem solving, clinical reasoning and evaluation skills by integrating biomedical, clinical, social and humanities knowledge</li> <li><b>4.</b> Gaining basic clinical skills by applications in simulated settings.</li> <li><b>5.</b> Awareness of the professional values in health and disease processes (professional, individual, societal) and acquisition necessary related skills</li> <li><b>6.</b> Evaluating critically and synthesizing all the medical evidence and perform respecting scientific, professional and ethical values</li> <li><b>7.</b> Acquisition skills in reflective thinking and practicing, being open to continuous individual / professional development.</li> </ol>	

<b>INTRODUCTION TO CELL AND CELLULAR REPLICATION</b>	
<p><b>AIM and LEARNING OBJECTIVES of COURSE</b></p> <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>	<p><b>PROGRAM EVALUATION</b></p> <p>Evaluation at the end of the course, is done both orally and by using structured evaluation forms</p>
<b>ASSESSMENT SYSTEM</b>	<b>PROGRAM EVALUATION</b>

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	
<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>Child and Adolescent Psychiatry</li> <li>Histology &amp;Embryology</li> <li>Pharmacology and Clinical Pharmacology</li> </ul>	<ul style="list-style-type: none"> <li>Medical Biology</li> <li>Medical Genetics</li> <li>Medical History and Ethics</li> <li>Obstetrics and Gynecology</li> <li>Pediatrics</li> <li>Public Health</li> </ul>
<b>LECTURERS / TUTORS</b>	
Ayfer Şen, Instructor of School of Foreign Languages and Preparatory School. Ayşe Kozançoy, Instructor of School of Foreign Languages and Preparatory School. Berfu Çerçi ÖNGÜN, Instructor of Anatomy Betül KARADEMİR, Assoc. Professor of Biochemistry Cevdet Nacar, Assist. Professor of Biophysics Emine ÖZERİNÇ, Instructor of School of Foreign Languages and Preparatory School. Feriha Ercan, Professor of Histology and Embryology. Gonca Güneş Haklar, Professor of Medical Biochemistry Huriye İcil, Professor of Chemistry İlke Çetin Akçay, Assist. Professor of Biostatistics İlter Güney Assist. Professor of Medical Genetics Mehmet Akman, Assoc. Professor of Family Medicine	Mevhibe Hocaoglu, Assist.Prof. of Public Health Mümtaz GÜRAN, Assist. Professor of Microbiology Mustafa Akkiprik, Professor of Medical Biology Naife Sevdalı, Instructor of Psychology Önder Şirikçi, Prof. of Medical Biochemistry Özlem Sarıkaya, Assoc. Prof. of Medical Education Pınar Mega TİBER, Assist. Professor of Biophysics Saime Batırel, Assist. Prof. of Medical Biochemistry Şefik Görkey. Professor of History of medicine and Ethics Serap ŞİRVANCI, Assoc. Professor of Histology and Embryology. Şükrü Tüzmen, Assoc. Professor of Medical Biology Turgay Bülent Instructor Atatürk's Principles
<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, 3rd 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 2.5			
Discipline	Lecture & Group Discussion	Multidisciplinary Lab. & Clinical Skills Lab. Practice	Total
Biochemistry	27	12	39
Biophysics	5		5
Biostatistics	6	4	10
Chemistry	20		20
Histology and Embryology	7	8	15
Medical Biology	31		31

Medical Genetics	1		1
Medical History and Ethics	12		12
Pediatrics			
<b>Subtotal</b>	<b>109</b>	<b>24</b>	<b>133</b>
PBL Module	8		8
<b>TOTAL</b>	<b>117</b>	<b>24</b>	<b>141</b>
ICP-1: First Aid & Communication Skills Courses			
ICP-1: Computer Skills (Students' Research Activity)	4	4	8
Medical English	28		28
Communication in Turkish-I / Atatürk's Principles and History of Modern Turkey	16		16
<b>TOTAL</b>	<b>165</b>	<b>28</b>	<b>193</b>

THEORETICAL AND PRACTICAL SESSIONS		LECTURER/TUTOR
1 <sup>st</sup> Week (26-30 September 2016)		
<b>Monday</b>	<b>26 September</b>	
08:40-09:30		
09:40-10:30	Opening Ceremony	Dr. Nahide Gökçora Buse Ataoğlu
10:40-11:30	Medical Education in Dr Fazıl Küçük Faculty of Medicine	Dr. Mümtaz Güran
11:40-12:30	Opening Lecture	Dr. Mehmet Akman
	Welcoming Cocktail	
13:40-14:30		
14:40-15:30		
15:40-16-30		
16:40-17:30		
<b>Tuesday</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	Cellular organization of life	Dr. Şükrü Tüzmen
11:40-12:30		
13:40-14:30		
14:40-15:30		
15:40-16-30		
16:40-17:30		
<b>Wednesday</b>	<b>28 September</b>	
08:40-09:30	<b>TURKISH LANGUAGE PLACEMENT TEST</b>	
09:40-10:30	<b>TURKISH LANGUAGE PLACEMENT TEST</b>	
10:40-11:30	Atatürk's Principles and History of Modern Turkey	Dr. Turgay Büлent
11:40-12:30	Atatürk's Principles and History of Modern Turkey	Dr. Turgay Büлent

<b>13:40-14:30</b>	Introduction to organic chemistry	Dr. Huriye İcil
<b>14:40-15:30</b>	Chemical compounds	Dr. Huriye İcil
<b>15:40-16:30</b>	Atoms and atomic theory, atomic properties and periodic table	Dr. Huriye İcil
<b>16:40-17:30</b>		
<b>Thursday</b>	<b>29 September</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>	Biomolecules and water	Dr. Önder Şirikçi
<b>13:40-14:30</b>	Biomolecules and water	Dr. Önder Şirikçi
<b>14:40-15:30</b>	Solubility, pH and buffers	Dr. Önder Şirikçi
<b>15:40-16:30</b>	Solubility, pH and buffers	Dr. Önder Şirikçi
<b>16:40-17:30</b>		
<b>Friday</b>	<b>30 September</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>2nd Week (03-07 October 2016)</b>		
<b>Monday</b>	<b>03 October</b>	
<b>08:40-09:30</b>	Microscope	Dr. Serap Şirvancı
<b>09:40-10:30</b>	Microscope	Dr. Serap Şirvancı
<b>10:40-11:30</b>	Cellular organelles and inclusions at LM and EM level	Dr. Serap Şirvancı
<b>11:40-12:30</b>	Cellular organelles and inclusions at LM and EM level	Dr. Serap Şirvancı
<b>13:40-14:30</b>	<b>Histology LAB:</b> Cell types - Group A	Dr. Serap Şirvancı
<b>14:40-15:30</b>	<b>Histology LAB:</b> Cell types - Group A	Dr. Serap Şirvancı
<b>15:40-16:30</b>	<b>Histology LAB:</b> Cell types - Group B	Dr. Serap Şirvancı
<b>16:40-17:30</b>	<b>Histology LAB:</b> Cell types - Group B	Dr. Serap Şirvancı
<b>Tuesday</b>	<b>04 October</b>	
<b>08:40-09:30</b>	Nucleus and cell division	Dr. Serap Şirvancı
<b>09:40-10:30</b>	Nucleus and cell division	Dr. Serap Şirvancı
<b>10:40-11:30</b>	<b>Histology LAB:</b> Cell types - Group A	Dr. Serap Şirvancı

<b>11:40-12:30</b>	<b>Histology LAB:</b> Cell types - Group A	Dr. Serap Şirvancı
<b>13:40-14:30</b>	<b>Histology LAB:</b> Cell types - Group B	Dr. Serap Şirvancı
<b>14:40-15:30</b>	<b>Histology LAB:</b> Cell types - Group B	Dr. Serap Şirvancı
<b>15:40-16-30</b>	<b>Elective course</b>	
<b>16:40-17:30</b>	<b>Elective course</b>	
<b>Wednesday</b>	<b>05 October</b>	
<b>08:40-09:30</b>	Cellular organization of life	Dr. Şükrü Tüzmen
<b>09:40-10:30</b>	Nucleic acids	Dr. Şükrü Tüzmen
<b>10:40-11:30</b>	Atatürk's Principles and History of Modern Turkey	Dr. Turgay Büulent
<b>11:40-12:30</b>	Atatürk's Principles and History of Modern Turkey	Dr. Turgay Büulent
<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>	Cytogenetics	Dr. İlter Güney
<b>16:40-17:30</b>		
<b>Thursday</b>	<b>06 October</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>	Introduction to biophysics – I	Dr. Pınar Mega Tiber
<b>14:40-15:30</b>	Introduction to biophysics – I	Dr. Pınar Mega Tiber
<b>15:40-16-30</b>	Introduction to biophysics – II	Dr. Pınar Mega Tiber
<b>16:40-17:30</b>	Introduction to biophysics – II	Dr. Pınar Mega Tiber
<b>Friday</b>	<b>07 October</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>ICS-1 General Introduction to ICS</b>	Dr Mehmet Akman, Dr. İlke Çetin Akçay
<b>3rd Week (10-14 October 2016)</b>		
<b>Monday</b>	<b>10 October</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>PBL Orientation</b>	
<b>16:40-17:30</b>	<b>PBL Orientation</b>	
<b>Tuesday</b>	<b>11 October</b>	
<b>08:40-09:30</b>	Genes and heredity	Dr. Şükrü Tüzmen
<b>09:40-10:30</b>	Cell cycle	Dr. Şükrü Tüzmen
<b>10:40-11:30</b>	Amino acids	Dr. Önder Şirikçi
<b>11:40-12:30</b>	Amino acids	Dr. Önder Şirikçi
<b>13:40-14:30</b>	Structure of carbohydrates	Dr. Önder Şirikçi
<b>14:40-15:30</b>	Structure of carbohydrates	Dr. Önder Şirikçi
<b>15:40-16-30</b>	<b>Elective course</b>	
<b>16:40-17:30</b>	<b>Elective course</b>	
<b>Wednesday</b>	<b>12 October</b>	
<b>08:40-09:30</b>	Recombination	Dr. Şükrü Tüzmen
<b>09:40-10:30</b>	Packaging chromosomal DNA	Dr. Şükrü Tüzmen
<b>10:40-11:30</b>	Atatürk's Principles and History of Modern Turkey	Dr. Turgay Bülent
<b>11:40-12:30</b>	Atatürk's Principles and History of Modern Turkey	Dr. Turgay Bülent
<b>13:40-14:30</b>	Chemical reactions and equilibrium	Dr. Huriye İcil
<b>14:40-15:30</b>	Acids and bases	Dr. Huriye İcil
<b>15:40-16-30</b>	<b>PBL Module -1</b>	
<b>16:40-17:30</b>	<b>PBL Module -1</b>	
<b>Thursday</b>	<b>13 October</b>	
<b>08:40-09:30</b>		
<b>09:40-10:30</b>		
<b>10:40-11:30</b>	Protein structure and function-1	Dr. Saime Batirel
<b>11:40-12:30</b>	Protein structure and function-1	Dr. Saime Batirel
<b>13:40-14:30</b>	Protein structure and function-2	Dr. Saime Batirel
<b>14:40-15:30</b>	Protein structure and function-2	Dr. Saime Batirel
<b>15:40-16-30</b>		
<b>16:40-17:30</b>		

<b>Friday</b>	<b>14 October</b>	
<b>08:40-09:30</b>		
<b>09:40-10:30</b>		
<b>10:40-11:30</b>	What is statistics and biostatistics?	Dr. İlke Çetin Akçay
<b>11:40-12:30</b>	Statistics in medical research	Dr. İlke Çetin Akçay
<b>13:40-14:30</b>	<b>PBL Module -2</b>	
<b>14:40-15:30</b>	<b>PBL Module -2</b>	
<b>15:40-16-30</b>		
<b>16:40-17:30</b>		

**4th Week (17-21 October 2016)**

<b>Monday</b>	<b>17 October</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>Tuesday</b>	<b>18 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>	<b>Biochemistry LAB:</b> Spectrophotometer - Group B	Dr. Saime Batirel
<b>11:40-12:30</b>	<b>Biochemistry LAB:</b> Spectrophotometer - Group B	Dr. Saime Batirel
<b>13:40-14:30</b>	<b>Biochemistry LAB:</b> Spectrophotometer - Group B	Dr. Saime Batirel
<b>14:40-15:30</b>	<b>Biochemistry LAB:</b> Spectrophotometer - Group B	Dr. Saime Batirel
<b>15:40-16-30</b>		
<b>16:40-17:30</b>		
<b>Wednesday</b>	<b>19 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>	Atatürk's Principles and History of Modern Turkey	Dr. Turgay Bülent
<b>11:40-12:30</b>	Atatürk's Principles and History of Modern Turkey	Dr. Turgay Bülent
<b>13:40-14:30</b>	Acids and bases	Dr. Huriye İcil
<b>14:40-15:30</b>	Chemical kinetics and reaction mechanisms	Dr. Huriye İcil
<b>15:40-16-30</b>	<b>PBL Module -3</b>	

<b>16:40-17:30</b>	<b>PBL Module -3</b>	
<b>Thursday</b>	<b>20 October</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>	Designing research	Dr. İlke Çetin Akçay
<b>14:40-15:30</b>	Types of data	Dr. İlke Çetin Akçay
<b>15:40-16-30</b>		
<b>16:40-17:30</b>		
<b>Friday</b>	<b>21 October</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>PBL Module -4</b>	
<b>14:40-15:30</b>	<b>PBL Module -4</b>	
<b>15:40-16-30</b>		
<b>16:40-17:30</b>		

#### 5th Week (24-28 October 2016)

<b>Monday</b>	<b>24 October</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>Tuesday</b>	<b>25 October</b>	
<b>08:40-09:30</b>	Fundamentals to Mendelian genetics	Dr. Şükrü Tüzmen
<b>09:40-10:30</b>	RNA synthesis and processing	Dr. Şükrü Tüzmen
<b>10:40-11:30</b>	Describing the data with graphics	Dr. İlke Çetin Akçay
<b>11:40-12:30</b>	Describing the data with numbers	Dr. İlke Çetin Akçay
<b>13:40-14:30</b>	<b>Elective course</b>	
<b>14:40-15:30</b>	<b>Elective course</b>	
<b>15:40-16-30</b>	<b>Elective course</b>	
<b>16:40-17:30</b>	<b>Elective course</b>	
<b>Wednesday</b>	<b>26 October</b>	
<b>08:40-09:30</b>	RNA synthesis and processing	Dr. Şükrü Tüzmen
<b>09:40-10:30</b>	Multifactorial inheritance	Dr. Şükrü Tüzmen
<b>10:40-11:30</b>	Atatürk's Principles and History of Modern Turkey	Dr. Turgay Bülent
<b>11:40-12:30</b>	Atatürk's Principles and History of Modern Turkey	Dr. Turgay Bülent

<b>13:40-14:30</b>	Chemical kinetics and reaction mechanisms	Dr. Huriye İcil
<b>14:40-15:30</b>	Thermochemistry (chemical energetics)	Dr. Huriye İcil
<b>15:40-16:30</b>	Thermochemistry (chemical energetics)	Dr. Huriye İcil
<b>16:40-17:30</b>		
<b>Thursday</b>	<b>27 October</b>	
<b>08:40-09:30</b>		
<b>09:40-10:30</b>		
<b>10:40-11:30</b>	Enzymes: Introduction	Dr. Betül Karademir
<b>11:40-12:30</b>	Enzymes: Introduction	Dr. Betül Karademir
<b>13:40-14:30</b>	Enzymes: Mechanism of action	Dr. Betül Karademir
<b>14:40-15:30</b>	Enzymes: Mechanism of action	Dr. Betül Karademir
<b>15:40-16:30</b>	Enzymes: Regulation	Dr. Betül Karademir
<b>16:40-17:30</b>	Enzymes: Regulation	Dr. Betül Karademir
<b>Friday</b>	<b>28 October</b>	
<b>08:40-09:30</b>	<b>HOLIDAY</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>		

#### 6th Week (31 October - 04 November 2016)

<b>Monday</b>	<b>31 October</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>Tuesday</b>	<b>01 November</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>	Population genetics	Dr. Şükrü Tüzmen
<b>11:40-12:30</b>		
<b>13:40-14:30</b>	<b>Elective course</b>	
<b>14:40-15:30</b>	<b>Elective course</b>	
<b>15:40-16:30</b>	<b>Elective course</b>	
<b>16:40-17:30</b>	<b>Elective course</b>	
<b>Wednesday</b>	<b>02 November</b>	
<b>08:40-09:30</b>	Protein synthesis	Dr. Şükrü Tüzmen
<b>09:40-10:30</b>	Protein synthesis	Dr. Şükrü Tüzmen
<b>10:40-11:30</b>	Atatürk's Principles and History of Modern Turkey	Dr. Turgay Bülent
<b>11:40-12:30</b>	Atatürk's Principles and History of Modern Turkey	Dr. Turgay Bülent

<b>13:40-14:30</b>	Solubility and complex ion equilibrium	Dr. Huriye İcil
<b>14:40-15:30</b>	Solubility and complex ion equilibrium	Dr. Huriye İcil
<b>15:40-16-30</b>	Electrochemistry: oxidation and reduction	Dr. Huriye İcil
<b>16:40-17:30</b>		
<b>Thursday</b>	<b>03 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>ICS-1 Introduction to ICS-research</b>	Dr. Özlem Sarıkaya, Dr. İlke Çetin Akçay
<b>14:40-15:30</b>	<b>ICS-1 Scientific approach, literature review, scientific materials</b>	Dr. Özlem Sarıkaya, Dr. İlke Çetin Akçay
<b>15:40-16-30</b>	<b>ICS-1 Global look to different research designs</b>	Dr. Özlem Sarıkaya, Dr. İlke Çetin Akçay
<b>16:40-17:30</b>		
<b>Friday</b>	<b>04 November</b>	
<b>08:40-09:30</b>		
<b>09:40-10:30</b>	Structure of nucleic acids	Dr. Saime Batırel
<b>10:40-11:30</b>	Molecular transmission of genetic information	Dr. Saime Batırel
<b>11:40-12:30</b>	Molecular transmission of genetic information	Dr. Saime Batırel
<b>13:40-14:30</b>	Posttranscriptional and posttranslational modifications	Dr. Saime Batırel
<b>14:40-15:30</b>	Posttranscriptional and posttranslational modifications	Dr. Saime Batırel
<b>15:40-16-30</b>	Mechanism of signal transduction	Dr. Saime Batırel
<b>16:40-17:30</b>	Mechanism of signal transduction	Dr. Saime Batırel
<b>7th Week (07-11 November 2016)</b>		
<b>Monday</b>	<b>07 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>Tuesday</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>	Structure of lipids	Dr. Goncagül Haklar
<b>11:40-12:30</b>	Structure of lipids	Dr. Goncagül Haklar
<b>13:40-14:30</b>	<b>Elective course</b>	
<b>14:40-15:30</b>	<b>Elective course</b>	
<b>15:40-16-30</b>	<b>Elective course</b>	
<b>16:40-17:30</b>	<b>Elective course</b>	
<b>Wednesday</b>	<b>09 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>	Atatürk's Principles and History of Modern Turkey	Dr. Turgay Bülent
<b>11:40-12:30</b>	Atatürk's Principles and History of Modern Turkey	Dr. Turgay Bülent
<b>13:40-14:30</b>	Electrochemistry: oxidation and reduction	Dr. Huriye İcil
<b>14:40-15:30</b>	Structure of proteins	Dr. Huriye İcil
<b>15:40-16-30</b>	High energy compounds	Dr. Huriye İcil
<b>16:40-17:30</b>		
<b>Thursday</b>	<b>10 November</b>	
<b>08:40-09:30</b>		
<b>09:40-10:30</b>	Histotechniques	Dr. Feriha Ercan
<b>10:40-11:30</b>	STUDY TIME	
<b>11:40-12:30</b>	STUDY TIME	
<b>13:40-14:30</b>	Cell death and molecular mechanisms	Dr. Mustafa Akkiprik
<b>14:40-15:30</b>	Molecular basis of disease	Dr. Mustafa Akkiprik
<b>15:40-16-30</b>	Information content of DNA	Dr. Cevdet Nacar
<b>16:40-17:30</b>		
<b>Friday</b>	<b>11 November</b>	
<b>08:40-09:30</b>	<b>Biochemistry LAB:</b> Urease - Group A	Dr. Betül Karademir
<b>09:40-10:30</b>	<b>Biochemistry LAB:</b> Urease - Group A	Dr. Betül Karademir
<b>10:40-11:30</b>	<b>Biochemistry LAB:</b> Urease - Group A	Dr. Betül Karademir
<b>11:40-12:30</b>	<b>Biochemistry LAB:</b> Urease - Group A	Dr. Betül Karademir
<b>13:40-14:30</b>	<b>Biochemistry LAB:</b> Urease - Group B	Dr. Betül Karademir
<b>14:40-15:30</b>	<b>Biochemistry LAB:</b> Urease - Group B	Dr. Betül Karademir
<b>15:40-16-30</b>	<b>Biochemistry LAB:</b> Urease - Group B	Dr. Betül Karademir
<b>16:40-17:30</b>	<b>Biochemistry LAB:</b> Urease - Group B	Dr. Betül Karademir
<b>8th Week (14-18 November 2016)</b>		
<b>Monday</b>	<b>14 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>Tuesday</b>	<b>15 November</b>	
<b>08:40-09:30</b>	<b>HOLIDAY</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>Wednesday</b>	<b>16 November</b>	
<b>08:40-09:30</b>	Viruses, plasmids, transposable genetic elements	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	Dr. Turgay Bülent
<b>11:40-12:30</b>	Atatürk's Principles and History of Modern Turkey	Dr. Turgay Bülent
<b>13:40-14:30</b>	Structure of lipids	Dr. Huriye İcil
<b>14:40-15:30</b>	Structure of carbohydrates	Dr. Huriye İcil
<b>15:40-16-30</b>		
<b>16:40-17:30</b>		
<b>Thursday</b>	<b>17 November</b>	
<b>08:40-09:30</b>	Regulation of gene expression	Dr. Şükrü Tüzmen
<b>09:40-10:30</b>	Turning points in History of Medicine	Dr. Şefik Görkey
<b>10:40-11:30</b>	Turning points in History of Medicine	Dr. Şefik Görkey
<b>11:40-12:30</b>	History of Anatomy	Dr. Şefik Görkey
<b>13:40-14:30</b>	History of Anatomy	Dr. Şefik Görkey
<b>14:40-15:30</b>	History of Physiology	Dr. Şefik Görkey
<b>15:40-16-30</b>	Evolution of the concept of infection	Dr. Şefik Görkey
<b>16:40-17:30</b>		
<b>Friday</b>	<b>18 November</b>	
<b>08:40-09:30</b>		
<b>09:40-10:30</b>	History of surgery	Dr. Şefik Görkey
<b>10:40-11:30</b>	History of human experimentation	Dr. Şefik Görkey
<b>11:40-12:30</b>	History of human experimentation	Dr. Şefik Görkey
<b>13:40-14:30</b>	History of medical professionalism	Dr. Şefik Görkey
<b>14:40-15:30</b>	History of Medicine in Seljukid and Ottoman Ages	Dr. Şefik Görkey
<b>15:40-16-30</b>	History of Medicine in Turkish Republic	Dr. Şefik Görkey
<b>16:40-17:30</b>		

**9th Week (21-25 November 2016)**

<b>Monday</b>	<b>21 November</b>	
<b>08:40-09:30</b>		
<b>09:40-10:30</b>	PRACTICAL EXAM	
<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>Tuesday</b>	<b>22 November</b>	
<b>08:40-09:30</b>		
<b>09:40-10:30</b>	PRACTICAL EXAM	
<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>Wednesday</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>Thursday</b>	<b>24 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>25 November</b>	
<b>08:40-09:30</b>		
<b>09:40-10:30</b>	<b>Y1C1 THEORETICAL EXAM</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>		