

GAZİ UNIVERSITY MEDICAL FACULTY

PHASE I – MOLECULE TO CELL COMMITTEE

(27 OCTOBER 2026 – 4 DECEMBER 2026)

COURSES	THEORETICAL	LABORATORY	PRACTICAL	TOTAL
Medical Biology	34	2x4	-	36
Medical Biochemistry	23	3x4	-	26
Biophysics	7	-	-	7
Public Health	12	-	2x4	14
Medical History and Ethics	18	-	-	18
Panel	1	-	-	1
TOTAL	95	5	2	102
ELECTIVE COURSES	12	-	-	12
CRITICAL THINKING AND ART	8		8	16
TOTAL	115	5	10	130
FREE STUDY TIME	48			

Total 29 workdays.

Free study time: Individual studying courses intended for learning in accordance with the present committee.

Turkish Language	4
Atatürk's Principles and History of His Revolutions	4
English	10

English (face-to-face): Every week on Monday between 13.30 – 15.20

Turkish Language: Every week on Wednesday between 16.30 – 17.20

Ataturk's Principles and History of His Revolutions: Every week on Thursday between 18.00 – 18.50

Dean	Prof. Alper CEYLAN
Vice Dean	Prof. Asiye UĞRAŞ DİKMEN
Vice Dean	Prof. Nazmi Mutlu KARAKAŞ
Head Coordinator	Prof. Çiğdem ÖZER
Assistant Head Coordinator	Prof. Mehmet Ali ERGÜN
Assistant Head Coordinator	Prof. Akif Muhtar ÖZTÜRK
Phase I Coordinator	Assoc. Prof. Volkan MEDENİ
Assistant Phase I Coordinator	Asst. Prof. Duygu Deniz USTA SALİMİ
Assistant Phase I Coordinator	Asst. Prof. Niyazi Samet YILMAZ
Assistant Phase I Coordinator	Lect. Burak KAYABAŞI
Assistant Phase I Coordinator	Lect. Sidre ERGANİŞ

MEMBERS OF COMMITTEE

MEDICAL BIOLOGY	MEDICAL BIOCHEMISTRY	PUBLIC HEALTH
Dr. Ece KONAÇ	Dr. Mustafa KAVUTÇU	Dr. Mustafa N. İLHAN
Dr. Atiye Seda YAR	Dr. Aylin SEPİCİ DİNÇEL	Dr. F. Nur AKSAKAL
Dr. Nuray VAROL	Dr. Cengiz KARAKAYA	Dr. Hakan TÜZÜN
Dr. H. İlke ÖNEN	Dr. Kübranur ÜNAL	Dr. Cansu ÖZBAŞ
Dr. Pelin TELKOPARAN AKILLILAR	Dr. Niyazi Samet YILMAZ	
Dr. Duygu Deniz USTA SALİMİ		
Dr. Kübra Gizem ESENTURK YAYLA		
Dr. Elif Gülçiçek ABBASOĞLU TOPA		
BIOPHYSICS	MEDICAL HISTORY AND ETHICS	CRITICAL THINKING AND ART
Dr. Arın TOMRUK	Dr. Namık ÇENÇEN	Dr. Meltem YALINAY
		Dr. Serdar KULA
		Dr. Hayrunnisa BOLAY BELEN
CRITICAL THINKING AND ART COORDINATOR		Prof. Dr. Meltem YALINAY
ELECTIVE COURSE COORDINATOR		Assoc. Prof. Ergin DİLEKÖZ

FROM MOLECULE TO CELL COMMITTEE

LEARNING OBJECTIVES AND GOALS:

Information

1. To be able to classify and explain the structural and biochemical properties of carbohydrates, lipids and vitamins, evaluate their functional properties and clinical importance
2. To be able to define pH concept and buffer systems in the body
3. Be able to explain the general properties of RNA and protein synthesis in prokaryotic and eukaryotes, the molecules involved and the mechanisms by which they are controlled
4. To explain the properties of the genetic code, to define the molecules and their properties in gene expression control, to differentiate in cells, to gain function, to explain the molecules and controls that control aging and death events
5. To be able to explain the molecular effects and properties of genes involved in early embryo development
6. Explain the causes of DNA mutation and the properties of molecules involved in DNA repair mechanisms
7. Molecular formation and development steps of cancer and the classification of the gene groups involved in this process and the ability to count the properties
8. To be able to explain the application areas of recombinant DNA technology and biotechnology in medicine
9. Explaining the definition of epidemiology and its usage areas, counting the types and types of research planning, explaining biostatistics concepts
10. To be able to count the importance tests and to be able to say the properties and usage conditions of parametric and non-parametric materiality tests
11. To be able to say electromagnetic (EM) field concept and its sources
12. To be able to explain the permeability of tissues to electric and magnetic fields
13. To be able to explain the biological effects of low frequency (ELF) E and B areas with examples
14. To be able to list the main sources and biological effects of radio wave (RF) / microwave (MW) radiation
15. To explain mobile phone frequencies and SAR concept, To evaluate the effect of mobile phone on medical devices
16. Evaluate national and international standards for protection against EM radiation and apply practical suggestions to protect it in daily life
17. To be able to define the difference between general public exposure and occupational exposure standards
18. Revolutionary changes in the history of medicine leading to the development of the profession of physicians, physicians who leave a trace, in the light of the fundamental events that create a transformation, to explain the evolution of medicine with an evolutionary approach, to explain the concept of ethics

Skills

1. To be able to choose the materiality test that can be used according to the characteristics of the data and to evaluate the suitability of the frequently used statistical tests in scientific publications
2. DNA isolation and conduction of DNA in agarose gel
3. To be able to perform quantitative test result with spectrophotometer

Week 1	26.10.2026	27.10.2026	28.10.2026	29.10.2026	30.10.2026
08:30 – 09:20	White Coat Ceremony – Event Information	Epidemiology and Its Application Topics Dr. Mustafa N. İlhan	Free Study Time	OCTOBER 29 REPUBLIC DAY OF TURKEY PUBLIC HOLIDAY	Free Study Time
09:30 – 10:20	WHITE COAT WEARING CEREMONY	Classification of Carbohydrate and Monosaccharides Dr. M. Kavutçu	Free Study Time		Polysaccharides and Other Carbohydrates Dr. M. Kavutçu
10:30 – 11:20		Disaccharides Dr. M. Kavutçu	Free Study Time		Critical Reading Dr. H. Bolay Belen
11:30 – 12:20		Free Study Time	Free Study Time		Critical Reading Dr. H. Bolay Belen
					Sınav Değerlendirme ve Koordinatörlük Toplantısı
13:30 – 14:20	ENGLISH	Biochemistry Lab. Analysis of Reducing Properties of Carbohydrates Group A	PUBLIC HOLIDAY	OCTOBER 29 REPUBLIC DAY OF TURKEY PUBLIC HOLIDAY	Physician’s Identity, Deontology and Concepts of Medical Ethics Dr. N. Çençen
14:30 – 15:20					
15:30 – 16:20	ELECTIVE COURSES	Biochemistry Lab. Analysis of Reducing Properties of Carbohydrates Group B			Medical Ethics Dr. N. Çençen
16:30 – 17:20					Free Study Time

Week 2	02.11.2026	03.11.2026	04.11.2026	05.11.2026	06.11.2026
08:30 – 09:20	Glycoproteins and Derivatives Dr. N. S. Yılmaz	The Emergence of the First Cell Dr. P. Telkoparan Akıllılar	Biostatistic Practice1: Research Planning, Data Collection and Data Entry	Social Media and Critical Thinking Dr. S. Kula	Vitamins and Cofactors: Lipid Soluble Dr. C. Karakaya
09:30 – 10:20	Planning an Epidemiological Research Dr. C. Özbaş	Endosymbiosis and Eukaryotic Cell Development Dr. P. Telkoparan Akıllılar		Social Media and Critical Thinking Dr. S. Kula	Vitamins and Cofactors: Lipid Soluble Dr. C. Karakaya
10:30 – 11:20	Critical and Creative Thinking Processes Dr. M. Yalınay	Vitamins and Cofactors: Water Soluble Dr. C. Karakaya		Vitamins and Cofactors: Water Soluble Dr. C. Karakaya	Fundamental Concepts of Genetics Dr. A. S.Yar
11:30 – 12:20	Study Population, Sample and Sampling Methods Dr. C. Özbaş			Vitamins and Cofactors: Lipid Soluble Dr. C. Karakaya	Fundamental Concepts of Genetics Dr. A. S.Yar
13:30 – 14:20	ENGLISH	Data Collection and Questionnaire Preparing Dr. H. Tüzün	Introduction to Biostatistics, Measures of Central Tendency and Dispersion Dr. H. Tüzün	The Evolution of Genes and Genomes Dr. P. Telkoparan Akıllılar	Critical Thinking Small Group Studies 1
14:30 – 15:20		Presentation of data, Preparation of Tables and Graphics Dr. H. Tüzün	Film Criticism Dr. M. Yalınay	Electromagnetic (EM) Pollution: Electromagnetic Spectrum Natural and Man made Sources of EM Pollution Dr. A. Tomruk	
15:30 – 16:20	ELECTIVE COURSES	Medical Ethics Dr. N. Çençen	Film Criticism Dr. M. Yalınay		Medical Ethics Dr. N. Çençen
16:30 – 17:20		Medical Ethics Dr. N. Çençen	Turkish Language	Glycoproteins and Derivatives Dr. N. S. Yılmaz	Medical Ethics Dr. N. Çençen
				18:00-18:50 Ataturk’s Principles and History of His Revolutions	

Week 3	09.11.2026	10.11.2026	11.11.2026	12.11.2026	13.11.2026
08:30 – 09:20	TURKISH LANGUAGE EXAM	Fatty Acids and Triglycerides Dr. K. Ünal	Distributions Dr. C. Özbas	ENGLISH EXAM	Free Study Time
09:30 – 10:20		Fatty Acids and Triglycerides Dr. K. Ünal	Mendelian – Non-Mendelian Inheritance Dr. A. S. Yar		Steroids Dr. N. Samet Yılmaz
10:30 – 11:20		Fundamental Concepts of Genetics Dr. A. S. Yar	Mendelian – Non-Mendelian Inheritance Dr. A. S. Yar		Steroids Dr. N. Samet Yılmaz
11:30 – 12:20		Fundamental Concepts of Genetics Dr. A. S. Yar	Mendelian – Non-Mendelian Inheritance Dr. A. S. Yar		Phospholipids and Glycolipids Dr. K. Ünal
13:30 – 14:20		Control Mechanisms of Gene Expression Dr. H. İ. Önen	ATATURK'S PRINCIPLES AND HISTORY OF HIS REVOLUTIONS EXAM	ENGLISH EXAM	Critical Thinking Small Group Studies 2
14:30 – 15:20					
15:30 – 16:20	ELECTIVE COURSES MID-TERM EXAM	Control Mechanisms of Gene Expression Dr. H. İ. Önen			Biological Effects of Extremely Low Frequency (ELF) E and B Fields: Epidemiologic and Experimental Studies Dr. A. Tomruk
16:30 – 17:20		Control Mechanisms of Gene Expression Dr. H. İ. Önen			Biological Effects of Extremely Low Frequency (ELF) E and B Fields: Epidemiologic and Experimental Studies Dr. A. Tomruk

Week 4	16.11.2026	17.11.2026	18.11.2026	19.11.2026	20.11.2026
08:30 – 09:20	Cell Differentiation and Developmental Molecular Biology Dr. K. G. Esentürk Yayla	M. Biology Lab. Cell Culture of Peripheral Blood, Chromosome Staining and Banding Techniques Group A	Free Study Time	Epigenetic Mechanisms Dr. E. Konaç	General Structure of Chromosomes and Classification of Human Chromosomes Dr. D. D. Usta Salimi
09:30 – 10:20	Cell Differentiation and Developmental Molecular Biology Dr. K. G. Esentürk Yayla	M. Biochemistry Lab. Chromatographic Determination of Amino Acids in Urine Group B	Biological Effects of RF/MW Radiation, Standards for EM Radiation Protection Dr. A. Tomruk	Epigenetic Mechanisms Dr. E. Konaç	General Structure of Chromosomes and Classification of Human Chromosomes Dr. D. D. Usta Salimi
10:30 – 11:20	Cell Differentiation and Developmental Molecular Biology Dr. K. G. Esentürk Yayla	M. Biology Lab. Cell Culture of Peripheral Blood, Chromosome Staining and Banding Techniques Group B	Classification of Cell Death Dr. H. İ. Önen	Biological Effects of RF/MW Radiation, Standards for EM Radiation Protection Dr. A. Tomruk	Lipoproteins Dr. N. Samet Yılmaz
11:30 – 12:20	Free Study Time	M. Biochemistry Lab. Chromatographic Determination of Amino Acids in Urine Group A	Classification of Cell Death Dr. H. İ. Önen		Lipoproteins Dr. N. Samet Yılmaz
13:30 – 14:20	ENGLISH	Introduction to Significance Tests Dr. F. N. Aksakal	Parametric Tests Dr. F. N. Aksakal	Biostatistic Practice 2: Data Analysis, Reporting and Presenting Data	Critical Thinking Small Group Studies 3
14:30 – 15:20		Parametric Tests Dr. F. N. Aksakal	Non-Parametric Tests Dr. F. N. Aksakal		
15:30 – 16:20	ELECTIVE COURSES	Physician-Patient Relationships: Evolution, Ethical Principles and Other Basic Aspects Dr. N. Çençen	Non-Parametric Tests Dr. F. N. Aksakal		Methods in History of Medicine and Medical Evolution Dr. N. Çençen
16:30 – 17:20			Turkish Language		Methods in History of Medicine and Medical Evolution Dr. N. Çençen
				18:00-18:50 Ataturk's Principles and History of His Revolutions	

Week 5	23.11.2026	24.11.2026	25.11.2026	26.11.2026	27.11.2026
08:30 – 09:20	Mobile Genetic Elements Dr. D. D. Usta Salimi	Free Study Time	Free Study Time	Molecular Biology of Cancer Dr. N. Varol	Recombinant DNA Technology and Gene Therapy Dr. D.D. Usta Salimi
09:30 – 10:20	Organization of the Human Genome Dr. D. D. Usta Salimi	Stem Cell Biology Dr. N. Varol	Medieval Medicine Dr. N. Çençen	Molecular Biology of Cancer Dr. N. Varol	Recombinant DNA Technology and Gene Therapy Dr. D. D. Usta Salimi
10:30 – 11:20	Population Genetics Dr. P. Telkoparan Akıllılar	Membrane and Transport Dr. A. Sepici Dinçel	Islamic Medicine Dr. N. Çençen	Molecular Biology of Cancer Dr. N. Varol	Personal Genome Project and Personalized Medicine Dr. H. İ. Önen
11:30 – 12:20	Population Genetics Dr. P. Telkoparan Akıllılar	Membrane and Transport Dr. A. Sepici Dinçel	Contemporary Scientific Medicine and 20th Century Medicine Dr. N. Çençen	Intracellular and Extracellular Fluids and Their Compositions Dr. C. Karakaya	Personal Genome Project and Personalized Medicine Dr. H. İ. Önen
13:30 – 14:20	ENGLISH	Free Study Time	pH and Buffer Systems Dr. C. Karakaya	M. Biology Lab. Karyotype; Pedigree Method Group A	Critical Thinking Small Group Studies 4
14:30 – 15:20		Free Study Time	pH and Buffer Systems Dr. C. Karakaya	M. Biochemistry Lab. pHmeter Group B	
15:30 – 16:20	ELECTIVE COURSES	Prehippocratic Medicine Dr. N. Çençen	Free Study Time	M. Biology Lab. Karyotype; Pedigree Method Group B	History of Turkish Medicine (Before the Republic Period) Dr. N. Çençen
16:30 – 17:20		Hippocratic Medicine Dr. N. Çençen	Turkish Language	M. Biochemistry Lab. pHmeter Group A	History of Turkish Medicine (Republic Period) Dr. N. Çençen
				18:00-18:50 Ataturk's Principles and History of His Revolutions	

Week 6	30.11.2026	01.12.2026	02.12.2026	03.12.2026	04.12.2026
08:30 – 09:20	Free Study Time	Free Study Time	Free Study Time	Free Study Time	FROM MOLECULE TO CELL COMMITTEE EXAM
09:30 – 10:20	Free Study Time	Free Study Time	Free Study Time	Free Study Time	
10:30 – 11:20	Free Study Time	Free Study Time	Free Study Time	Free Study Time	
11:30 – 12:20	Free Study Time	PANEL: Molecular Epidemiology	Free Study Time	Free Study Time	
13:30 – 14:20	ENGLISH	Free Study Time	Free Study Time	Free Study Time	
14:30 – 15:20		Free Study Time	Free Study Time	Free Study Time	
15:30 – 16:20	ELECTIVE COURSES	Free Study Time	Free Study Time	Free Study Time	
16:30 – 17:20		Free Study Time	Turkish Language	Free Study Time	
				18:00-18:50 Ataturk's Principles and History of His Revolutions	