

GAZİ UNIVERSITY FACULTY OF MEDICINE

2022-2023 EDUCATIONAL YEAR

YEAR I

**FROM MOLECULE TO CELL COMMITTEE (NOVEMBER 07 – DECEMBER 22,
2022)**

COURSES	THEORETICAL	PRACTICAL	TOTAL
Medical Biology	35	4x4	39
Medical Biochemistry	23	3x4	26
Medical History and Ethics	18	-	18
Biostatistics	12	2x4	14
Biophysics	7	--	7
Medical Genetics	8	-	8
TOTAL	103	9	112
INTRODUCTION TO CLINICAL PRACTICE			
CRITICAL THINKING AND ART	4	4x4	8
ELECTIVE COURSE	6	-	6
TOTAL	113	13	126

OBLIGATORY COURSES

Turkish Language	14
Ataturk's Principles and History of His Revolutions	14
English	14

Dean	Prof. Dr. Mustafa Necmi İLHAN
Vice Dean	Prof. Dr. İlyas OKUR
Vice Dean	Prof. Dr. Özlem GÜZEL TUNÇCAN
Head Coordinator	Prof. Dr. Çiğdem ÖZER
Assistant Head Coordinator	Prof. Dr. Mehmet Ali ERGÜN
Assistant Head Coordinator	Prof. Dr. Akif Muhtar ÖZTÜRK
Phase I Coordinator	Assoc. Prof. Dr. Atiye Seda YAR SAĞLAM
Assistant Phase I Coordinator	Asst. Prof. Dr. Meltem SEVGİLİ
Assistant Phase I Coordinator	Asst. Prof. Dr. Kerem ATALAR
Assistant Phase I Coordinator	Asst. Prof. Dr. Duygu DAYANIR
Assistant Phase I Coordinator	Asst. Prof. Dr. Melek YAMAN

MEMBERS OF COMMITTEE

MEDICAL GENETICS	MEDICAL HISTORY AND ETHICS	PUBLIC HEALTH	CRITICAL THINKING AND ART
Dr. Meral YİRMİBEŞ KARAOĞUZ	Dr. Nesrin ÇOBANOĞLU	Dr. F. Nur BARAN AKSAKAL	Dr. Meltem YALINAY
Dr. Mehmet Ali ERGÜN	Dr. Namık ÇENÇEN	Dr. Hakan TÜZÜN	Dr. Nevzat YÜKSEL
		Dr. Cansu ÖZBAŞ	Dr. Fikret AKATA
MEDICAL BIOLOGY	MEDICAL BIOCHEMISTRY	BIOPHYSICS	Dr. Serdar KULA
Dr. Ece KONAÇ	Dr. Mustafa KAVUTÇU	Dr. Arın TOMRUK	Dr. Hayrunnisa BOLAY BELEN
Dr. H. İlke ÖNEN	Dr. Neslihan BUKAN		Dr. Elvan İŞERİ
Dr. Atiye Seda YAR SAĞLAM	Dr. Cengiz KARAKAYA		Dr. Özlem COŞKUN
	Dr. Kübranur ÜNAL		Dr. İrem EKMEKÇİ ERTEK
	Dr. Aylin SEPİCİ DİNÇEL		

CRITICAL THINKING AND ART COORDINATOR	Prof. Dr. Meltem YALINAY
ELECTIVE COURSE COORDINATOR	Assoc. Prof. Dr. Ergin DİLEKÖZ

Learning Objectives and Goals& Achievements

NR of LEARNING OBJECTIVE	
	INFORMATION
ÖH-100-2-1	To be able to classify and explain the structural and biochemical properties of carbohydrates, lipids and vitamins, evaluate their functional properties and clinical importance
ÖH-100-2-2	To be able to define PH concept and buffer systems in the body
ÖH-100-2-3	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
ÖH-100-2-4	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.
ÖH-100-2-5	To be able to explain the molecular effects and properties of genes involved in early embryo development
ÖH-100-2-6	Explain the causes of DNA mutation and the properties of molecules involved in DNA repair mechanisms
ÖH-100-2-7	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
ÖH-100-2-8	To be able to explain the application areas of recombinant DNA technology and biotechnology in medicine
ÖH-100-2-9	Explaining the definition of epidemiology and its usage areas, counting the types and types of research planning, explaining biostatistics concepts
ÖH-100-2-10	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
ÖH-100-2-11	To be able to say electromagnetic (EM) field concept and its sources
ÖH-100-2-12	To be able to explain the permeability of tissues to electric and magnetic fields
ÖH-100-2-13	To be able to explain the biological effects of low frequency (ELF) E and B areas with examples
ÖH-100-2-14	To be able to list the main sources and biological effects of radio wave (RF) / microwave (MW) radiation
ÖH-100-2-15	To explain mobile phone frequencies and SAR concept, To evaluate the effect of mobile phone on medical devices
ÖH-100-2-16	Evaluate national and international standards for protection against EM radiation and apply practical suggestions to protect it in daily life
ÖH-100-2-17	To be able to define the difference between general public exposure and occupational exposure standards
ÖH-100-2-18	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
	<u>SKILLS</u>
ÖH-100-2-19	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
ÖH-100-2-20	DNA isolation and conduction of DNA in agarose gel

ÖH-100-2-21

To be able to perform quantitative test result with spectrophotometer

	07.11.2022 MONDAY	08.11.2022 TUESDAY	09.11.2022 WEDNESDAY	10.11.2022 THURSDAY	11.11.2022 FRIDAY Dönem III Theoretical Exam
08:30-09:20	FREE STUDY TIME	Electromagnetic (EM) Pollution: Electromagnetic Spectrum , natural and man made sources of EM Pollution Dr. A. Tomruk	Study population, sample and sampling methods Dr. C. Özbaş	FREE STUDY TIME	Biostatistics Planning a research, data collection and entry
09:30-10:20	Epidemiology and its application topics Dr. C. Özbaş	Electromagnetic (EM) Pollution: Electromagnetic Spectrum , natural and man made sources of EM Pollution Dr. A. Tomruk	Distributions Dr. C. Özbaş	Control Mechanisms of Gene Expression Dr. A.S. Yar Sağlam	Biostatistics Planning a research, data collection and entry
10:30-11:20	FREE STUDY TIME	Planning an epidemiological research Dr. C. Özbaş	Physician's identity, Deontology and concepts of medical ethics Dr. N. Çobanoğlu	Control Mechanisms of Gene Expression Dr. A.S. Yar Sağlam	Biostatistics Planning a research, data collection and entry
11:30-12:20	Questions Analysis of 1st Committee Exam and Feedback Meeting	The emergence of the first cell Dr. H.İ. Önen	Physician's identity, Deontology and concepts of medical ethics Dr. N. Çobanoğlu	Control Mechanisms of Gene Expression Dr. A.S. Yar Sağlam	Biostatistics Planning a research, data collection and entry
13:30-14:20	ENGLISH	Endosymbiosis and eukaryotic cell development Dr. A.S. Yar Sağlam	Classification of carbohydrate and monosaccharides Dr.M. Kavutçu	Polysaccharides and other carbohydrates Dr. M. Kavutçu	Introduction to biostatistics, measures of central tendency and dispersion Dr. H. Tüzün
14:30-15:20	ENGLISH	The evolution of genes and genomes Dr. A.S. Yar Sağlam	Disaccharides Dr.M. Kavutçu	Glycoproteins and derivatives Dr. K. Ünal	Data collection, Questionnaire preparing Dr. H. Tüzün
15:30-16:20	ELECTIVE COURSE	FREE STUDY TIME	FREE STUDY	Glycoproteins and derivatives	Presentation of data, preparation of tables and graphics

			TIME	Dr. K. Ünal	Dr. H. Tüzün
16:30-17:20	ELECTIVE COURSE	<u>5i Course</u> ATATURK'S PRINCIPLES AND HISTORY OF TURKISH REVOLUTION (Online)	FREE STUDY TIME	FREE STUDY TIME	FREE STUDY TIME
17:30-18:10	FREE STUDY TIME	<u>5i Course</u> TURKISH LANGUAGE (Online)	FREE STUDY TIME	FREE STUDY TIME	FREE STUDY TIME

	14.11.2022 MONDAY	15.11.2022 TUESDAY	16.11.2022 WEDNESDAY	17.11.2022 THURSDAY	18.11.2022 FRIDAY
08:30-09:20	Medical Ethics Dr. N. Çençen	FREE STUDY TIME	FREE STUDY TIME	APPLIED COURSES BIOCHEM. Analysis of reducing properties of carbohydrates	FREE STUDY TIME
09:30-10:20	Medical Ethics Dr. N. Çençen	Introduction to significance tests Dr. F.N.Aksakal	Mendelian - Non-Mendelian Inheritance Dr. A.S. Yar Sağlam	APPLIED COURSES BIOCHEM. Analysis of reducing properties of carbohydrates	FREE STUDY TIME
10:30-11:20	Fundamental Concepts of Genetics Dr. E. Konaç	Fundamental Concepts of Genetics Dr. E. Konaç	Mendelian - Non-Mendelian Inheritance Dr. A.S. Yar Sağlam	APPLIED COURSES BIOCHEM. Analysis of reducing properties of carbohydrates	İngilizce dersi ara sınavı
11:30-12:20	Fundamental Concepts of Genetics Dr. E. Konaç	Fundamental Concepts of Genetics Dr. E. Konaç	Mendelian - Non-Mendelian Inheritance Dr. A.S. Yar Sağlam	APPLIED COURSES BIOCHEM. Analysis of reducing properties of carbohydrates	İngilizce dersi ara sınavı
13:30-14:20	ENGLISH	Medical Ethics Dr. N. Çençen	Türk dili dersi ara sınavı	Atatürk İlkeleri ve İnkılap Tarihi dersi ara sınavı	APPLIED COURSES MEDICAL BIOLOGY Cell Culture of Peripheric Blood, Chromosome Staining and Banding Techniques
14:30-15:20	ENGLISH	Medical Ethics Dr. N. Çençen	Türk dili dersi ara sınavı	Atatürk İlkeleri ve İnkılap Tarihi dersi ara sınavı	APPLIED COURSES MEDICAL BIOLOGY Cell Culture of Peripheric Blood, Chromosome Staining and Banding Techniques
15:30-16:20	ELECTIVE COURSE	FREE STUDY TIME	FREE STUDY TIME	FREE STUDY TIME	APPLIED COURSES MEDICAL BIOLOGY Cell Culture of Peripheric Blood, Chromosome

					Staining and Banding Techniques
16:30-17:20	ELECTIVE COURSE	<u>5i Course</u> ATATURK'S PRINCIPLES AND HISTORY OF TURKISH REVOLUTION (Online)	FREE STUDY TIME	FREE STUDY TIME	APPLIED COURSES MEDICAL BIOLOGY Cell Culture of Peripheric Blood, Chromosome Staining and Banding Techniques
17:30-18:10	FREE STUDY TIME	<u>5i Course</u> TURKISH LANGUAGE (Online)	FREE STUDY TIME	FREE STUDY TIME	FREE STUDY TIME

	21.11.2022 MONDAY	22.11.2022 TUESDAY	23.11.2022 WEDNESDAY	24.11.2022 THURSDAY	25.11.2022 FRIDAY
08:30-09:20	FREE STUDY TIME	Critical Thinking-1 Critical and Creative Thinking Dr. M. Yalınay	FREE STUDY TIME	Cell differentiation and developmental molecular biology Dr. E. Konaç	APPLIED COURSES MEDICAL BIOLOGY Karyotype; Pedigree method
09:30-10:20	FREE STUDY TIME	Critical Thinking-1 Critical and Creative Thinking Dr. M. Yalınay	FREE STUDY TIME	Cell differentiation and developmental molecular biology Dr. E. Konaç	APPLIED COURSES MEDICAL BIOLOGY Karyotype; Pedigree method
10:30-11:20	General structure of chromosomes and classification of human chromosomes Dr. H.İ. Önen	Population Genetics Dr. A.S. Yar Sağlam	Physician-Patient Relationships: Evolution, Ethical Principles and Other Basic Aspects Dr. N. Çençen	Cell differentiation and developmental molecular biology Dr. E. Konaç	APPLIED COURSES MEDICAL BIOLOGY Karyotype; Pedigree method
11:30-12:20	General structure of chromosomes and classification of human chromosomes Dr. H.İ. Önen	Population Genetics Dr. A.S. Yar Sağlam	Methods in History of Medicine and Medical Evolution Dr. N. Çençen	Phospholipids and glycolipids Dr. K. Ünal	APPLIED COURSES MEDICAL BIOLOGY Karyotype; Pedigree method
13:30-14:20	ENGLISH	Medical Ethics Dr. N. Çençen	Fatty acids and triglycerides Dr. C. Karakaya	Methods in History of Medicine and Medical Evolution Dr. N. Çençen	CRITICAL THINKING Applied course-1
14:30-15:20	ENGLISH	Physician-Patient Relationships: Evolution, Ethical Principles and Other Basic Aspects Dr. N. Çençen	Fatty acids and triglycerides Dr. C. Karakaya	Prehippocratic Medicine (Instinctive Medicine, Mystical Medicine, civilizations of Antiquity Dr. N. Çençen	CRITICAL THINKING Applied course-1
15:30-16:20	ELECTIVE COURSE		FREE STUDY TIME	FREE STUDY TIME	FREE STUDY TIME
16:30-17:20	ELECTIVE COURSE	5i Course ATATURK'S PRINCIPLES AND HISTORY OF TURKISH REVOLUTION	FREE STUDY TIME	FREE STUDY TIME	FREE STUDY TIME

		(Online)			
17:30-18:10	FREE STUDY TIME	<u>5i Course</u> TURKISH LANGUAGE (Online)	FREE STUDY TIME	FREE STUDY TIME	FREE STUDY TIME

	28.11.2022 MONDAY	29.11.2022 TUESDAY	30.11.2022 WEDNESDAY	01.12.2022 THURSDAY	02.12.2022 FRIDAY
08:30-09:20	FREE STUDY TIME	Biological Effects of extremely low frequency (ELF) E and B Fields: Epidemiologic and experimental studies Dr. A. Tomruk	APPLIED COURSES BIOCHEM. Chromatographic determination of amino acids in urine	Medieval Medicine Dr. N. Çençen	Vitamins and cofactors: water soluble Dr. C. Karakaya
09:30-10:20	Hippocratic Medicine Dr. N. Çençen	Biological Effects of extremely low frequency (ELF) E and B Fields: Epidemiologic and experimental studies Dr. A. Tomruk	APPLIED COURSES BIOCHEM. Chromatographic determination of amino acids in urine	Islamic Medicine Dr. N. Çençen	Vitamins and cofactors: lipid soluble Dr. C. Karakaya
10:30-11:20	Critical Thinking-2 Social Media and Critical Thinking Dr. S. Kula	Critical Thinking-3 Critical and Creative Thinking Processes Dr. H. Bolay Belen	APPLIED COURSES BIOCHEM. Chromatographic determination of amino acids in urine	Parametric tests Dr.F. N.Aksakal	Classification of cell death Dr. H. İ. Önen
11:30-12:20	Critical Thinking-2 Social Media and Critical Thinking Dr. S. Kula	Critical Thinking-3 Critical and Creative Thinking Processes Dr. H. Bolay Belen	APPLIED COURSES BIOCHEM. Chromatographic determination of amino acids in urine	Parametric tests Dr.F.N.Aksakal	Classification of cell death Dr. H. İ. Önen
13:30-14:20	ENGLISH	Steroids Dr. N. Bukan)	Lipoproteins Dr. N. Bukan	Vitamins and cofactors: water soluble Dr. C. Karakaya	CRITICAL THINKING Applied course-2
14:30-15:20	ENGLISH	Steroids Dr. N. Bukan	Lipoproteins Dr. N. Bukan	Vitamins and cofactors: water soluble Dr. C. Karakaya	CRITICAL THINKING Applied course-2
15:30-16:20	ELECTIVE COURSE	FREE STUDY TIME	FREE STUDY TIME	FREE STUDY TIME	FREE STUDY TIME
16:30-		5i Course	FREE STUDY TIME	FREE STUDY TIME	FREE STUDY TIME

17:20	ELECTIVE COURSE	ATATURK'S PRINCIPLES AND HISTORY OF TURKISH REVOLUTION (Online)			
17:30- 18:10		<u>5i Course</u> TURKISH LANGUAGE (Online)	FREE STUDY TIME	FREE STUDY TIME	FREE STUDY TIME

	05.12.2022 MONDAY	06.12.2022 TUESDAY	07.12.2022 WEDNESDAY	08.12.2022 THURSDAY	09.12.2022 FRIDAY
08:30-09:20	Vitamins and cofactors: lipid soluble Dr. C. Karakaya	Contemporary Scientific medicine and Features of the 20th Century Medicine Dr. N. Çençen	APPLIED COURSES MEDICAL BIOLOGY Whole blood genomic DNA isolation	FREE STUDY TIME	Biological Effects of RF/MW Radiation, , international EM field standards for EM radiation protection:General public and occupational exposure standards, Practical Measures for EM Radiation Protection Dr. A. Tomruk
09:30-10:20	Vitamins and cofactors: lipid soluble Dr. C. Karakaya	History of Turkish Medicine (Before the Republic Period) Dr. N. Çençen	APPLIED COURSES MEDICAL BIOLOGY Whole blood genomic DNA isolation	History of Turkish Medicine (Republic Period) Dr. N. Çençen	Biological Effects of RF/MW Radiation, , international EM field standards for EM radiation protection:General public and occupational exposure standards, Practical Measures for EM Radiation Protection Dr. A. Tomruk
10:30-11:20	Epigenetic mechanisms Dr. E. Konaç	Molecular biology of cancer Dr. E. Konaç	APPLIED COURSES MEDICAL BIOLOGY Whole blood genomic DNA isolation	PH and buffer systems Dr. C. Karakaya	Molecular biology of cancer Dr. E. Konaç
11:30-12:20	Epigenetic mechanisms Dr. E. Konaç	Molecular biology of cancer Dr. E. Konaç	APPLIED COURSES MEDICAL BIOLOGY Whole blood genomic DNA isolation	PH and buffer systems Dr. C. Karakaya	Stem Cell Biology Dr. E. Konaç
13:30-14:20	ENGLISH	FREE STUDY TIME	Critical Thinking-4 Critical, Creative Thinking and Visual Arts Dr. M. Yalınay	Intracellular and extracellular fluids and their compositions Dr. C. Karakaya	CRITICAL THINKING Applied course-3
14:30-15:20	ENGLISH	FREE STUDY TIME	Critical Thinking-4 Critical, Creative Thinking and Visual Arts Dr. M. Yalınay	FREE STUDY TIME	CRITICAL THINKING Applied course-3
15:30-16:20	ELECTIVE COURSE	FREE STUDY TIME	FREE STUDY TIME	FREE STUDY TIME	FREE STUDY TIME
16:30-17:20		5i Course ATATURK'S	FREE STUDY TIME	FREE STUDY TIME	FREE STUDY TIME

	ELECTIVE COURSE	PRINCIPLES AND HISTORY OF TURKISH REVOLUTION (Online)			
17:30- 18:20	FREE STUDY TIME	<u>5i Course</u> TURKISH LANGUAGE (Online)	FREE STUDY TIME	FREE STUDY TIME	FREE STUDY TIME

	12.12.2022 MONDAY	13.12.2022 TUESDAY	14.12.2022 WEDNESDAY	15.12.2022 THURSDAY	16.12.2022 FRIDAY Dönem III Theoretical Exam
08:30-09:20	Human diseases and inheritance pattern Dr.M.Yirmibeş Karaoğuz	Biostatistics Data analysis, reporting and presenting data	FREE STUDY TIME	Molecular genetics of human diseases Dr.M.A. Ergün	APPLIED COURSES MEDICAL BIOLOGY PCR
09:30-10:20	Human diseases and inheritance pattern Dr.M.Yirmibeş Karaoğuz	Biostatistics Data analysis, reporting and presenting data	Biological Effects of RF/MW Radiation, , international EM field standards for EM radiation protection:General public and occupational exposure standards, Practical Measures for EM Radiation Protection Dr. A. Tomruk	Molecular genetics of human diseases Dr.M.A. Ergün	APPLIED COURSES MEDICAL BIOLOGY PCR
10:30-11:20	Critical Thinking Practice Critical and Creative Thinking Processes Dr. H. Bolay Belen	Biostatistics Data analysis, reporting and presenting data	Personal genome Project and What is personalized medicine? Dr. A.S. Yar Sağlam	Recombinant DNA technology and gene therapy Dr. H. İ. Önen	APPLIED COURSES MEDICAL BIOLOGY PCR
11:30-12:20	Critical Thinking Practice 5N1K Critical Thinking Dr. S. Tunaoglu	Biostatistics Data analysis, reporting and presenting data	Personal genome Project and What is personalized medicine? Dr. A.S. Yar Sağlam	Recombinant DNA technology and gene therapy Dr. H. İ. Önen	APPLIED COURSES MEDICAL BIOLOGY PCR
13:30-14:20	ENGLISH	Mobile Genetic elements Dr. H. İ. Önen	Chromosomes, aberrations and diseases Dr.M.Yirmibeş Karaoğuz	APPLIED COURSES BIOCHEM. pH meter	CRITICAL THINKING Applied course-4

14:30-15:20	ENGLISH	Organization of the human genome Dr. H. İ. Önen	Chromosomes, aberrations and diseases Dr.M.Yirmibeş Karaoğuz	APPLIED COURSES BIOCHEM. pH meter	CRITICAL THINKING Applied course-4
15:30-16:20	ELECTIVE COURSE	FREE STUDY TIME	Nonparametric tests Dr.F.N.Aksakal	APPLIED COURSES BIOCHEM. pH meter	FREE STUDY TIME
16:30-17:20	ELECTIVE COURSE	<u>5i Course</u> ATATURK'S PRINCIPLES AND HISTORY OF TURKISH REVOLUTION (Online)	Nonparametric tests Dr.F.N.Aksakal	APPLIED COURSES BIOCHEM. pH meter	Membrane and transport Dr. A. Sepici Dinçel
17:30-18:20	FREE STUDY TIME	<u>5i Course</u> TURKISH LANGUAGE (Online)	FREE STUDY TIME	FREE STUDY TIME	FREE STUDY TIME

	19.12.2022	20.12.2022	21.12.2022	22.12.2022	23.12.2022
	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY
08:30-09:20	FREE STUDY TIME	FREE STUDY TIME	FREE STUDY TIME	PHASE I COMMITTEE 2nd THEORETICAL EXAM Time:09:30	FREE STUDY TIME
09:30-10:20	FREE STUDY TIME	Molecular biological methods in diagnosis Dr. H. İ. Önen	FREE STUDY TIME		FREE STUDY TIME
10:30-11:20	FREE STUDY TIME	Molecular biological methods in diagnosis Dr. H. İ. Önen	FREE STUDY TIME		FREE STUDY TIME
11:30-12:20	FREE STUDY TIME	Genotype-phenotype correlations Dr.M.A. Ergün	FREE STUDY TIME		FREE STUDY TIME
13:30-14:20	ENGLISH	Familial cancer syndromes Dr. M. A. Ergün	FREE STUDY TIME		FREE STUDY TIME
14:30-15:20	ENGLISH	FREE STUDY TIME	FREE STUDY TIME	FREE STUDY TIME	FREE STUDY TIME
15:30-16:20	ELECTIVE COURSE	FREE STUDY TIME	FREE STUDY TIME	FREE STUDY TIME	FREE STUDY TIME
16:30-17:20	ELECTIVE COURSE	<u>5i Course</u> ATATURK'S PRINCIPLES AND HISTORY OF TURKISH REVOLUTION (Online)	FREE STUDY TIME	FREE STUDY TIME	FREE STUDY TIME

17:30- 18:20		<u>5i Course</u> TURKISH LANGUAGE (Online)	FREE STUDY TIME	FREE STUDY TIME	FREE STUDY TIME
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