## KYRENIA UNIVERSITY FACULTY OF MEDICINE PHASEI 2022-2023 FROM MOLECULE TO CELL COMMITTEE (JANUARY 02–FEBRUARY 14, 2023)

COURSES	THEORETICAL	PRACTICAL	TOTAL
Medical Biology	26	2X2	30
	20		50
Medical Biochemistry	22	3X2	28
Medical History and Ethics	18	-	18
Bioistatistics	12	4x2	20
Biophysics	8		8
Medical Genetics	1	-	1
TOTAL	87	18	105

Dean	Prof. Dr. Rüveyde BUNDAK
Vice Dean	Prof. Dr. Candan ÖZOĞUL
Coordinator	Prof. Dr. Güven Erbil

MEDICAL BIOLOGY		MEDICAL BIOCHEMISTRY		
Prof. Dr. Mahmut Çerkez Ergören	Prof. Dr. Pınar Tulay	Prof. Dr. Levent Kayrın	Prof. Dr. Aylin Sepici Dinçel	
Prof. Dr. Oğuz Altungöz	Prof. Dr. Oğuz Altungöz Dr.İdil Aslan		Dr. Kezban Kartlaşmış	
MEDICAL GENETIC	MEDICAL HISTORY AND ETHICS	BIOPHYSICS	BIOSTATISTIC	
Prof. Dr. Mehmet Ali Ergün	Prof. Dr. Melikşah Ertem	Dr. Ferit Pehlivan	Dr. Öğr. Üy. Çağla Şafak	

## Learning Objectives and Goals & Achievements

NR of LEARNING OBJECTIVE	
	INFORMATION
LO-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
LO-2-2	To be able to define PH concept and buffer systems in the body
LO-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
LO-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.
LO-2-5	To be able to explain the molecular effects and properties of genes involved in early embryo development
LO-2-6	Explain the causes of DNA mutation and the properties of molecules involved in DNA repair mechanisms
LO-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
LO-2-8	To be able to explain the application areas of recombinant DNA technology and biotechnology in medicine
LO-2-9	Explaining the definition of epidemiology and its usage areas, counting the types and types of research planning, explaining biostatistics concepts
LO-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
LO-2-11	To be able to say electromagnetic (EM) field concept and its sources
LO-2-12	To be able to explain the permeability of tissues to electric and magnetic fields
LO-2-13	To be able to explain the biological effects of low frequency (ELF) E and B areas with examples
LO-2-14	To be able to list the main sources and biological effects of radio wave (RF) / microwave (MW) radiation
LO-2-15	To explain mobile phone frequencies and SAR concept, To evaluate the effect of mobile phone on medical devices
LO-2-16	Evaluate national and international standards for protection against EM radiation and apply practical suggestions to protect it in daily life
LO-2-17	To be able to define the difference between general public exposure and occupational exposure standards
LO-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
	SKILLS
LO-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
LO-2-20	DNA isolation and conduction of DNA in agarose gel
LO-2-21	To be able to perform quantitative test result with spectrophotometer

1st	02.01.2023	03.01.2023	04.01.2023	05.01.2023	06.01.2023
week	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY
08:30- 09:15	FREE STUDY TIME	FREE STUDY TIME	FREE STUDY TIME	FREE STUDY TIME	FREE STUDY TIME
09:30- 10:15	Digestion of Carbohydrates Dr. Kosova (Online)	FREE STUDY TIME	Glycogen Synthesis and Breakdown Dr. Kosova (Online)	Universe, Sample and Sampling Methods Dr. Şafak	FREE STUDY TIME
10:30- 11:15	Glycolysis and Its Control Dr. Kosova (Online)	FREE STUDY TIME	Glycogen Synthesis and Breakdown Dr. Kosova (Online)	Data Collection, Survey Preparation Dr. Şafak	Radiation Biophysics. Ionizing and Non-Ionizing Rays Dr. Pehlivan
11:30- 12:15	Glycolysis and Its Control Dr. Kosova (Online)	FREE STUDY TIME	FREE STUDY TIME	Displaying Data, Making Tables and Graphs Dr. Şafak	Electromagnetic Waves: Radio Waves, Microwave Dr. Pehlivan
13:30- 14:15	FREE STUDY TIME	FREE STUDY TIME	RNA Synthesis and RNA Processing Dr. Ergören	developmental molecular biology Dr. Tulay	FREE STUDY TIME
14:30- 15:15	Epidemiology and Usage Areas Dr. Şafak	FREE STUDY TIME	RNA Synthesis and RNA Processing Dr. Ergören	Cell differentiation and developmental molecular biology Dr. Tulay	FREE STUDY TIME
15:30- 16:15	Epidemiological Research Planning Dr. Şafak	FREE STUDY TIME	Mutations and Mutagens Dr. Ergören	Cell differentiation and developmental molecular biology Dr. Tulay	FREE STUDY TIME
16:30- 17:15	FREE STUDY TIME	FREE STUDY TIME	Mutations and Mutagens Dr. Ergören	FREE STUDY TIME	FREE STUDY TIME

$2^{nd}$	09.01.2023	10.01.2023	11.01.2023	12.01.2023	13.01.2023
week	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY
08:30- 09:15	FREE STUDY TIME	FREE STUDY TIME	Cell Death and Its Types Dr. Ergören	FREE STUDY TIME	FREE STUDY TIME
09:30- 10:15	Gluconeogenesis and Its Control Dr. Dinçel (Online)	Light, Laser Biological Effects and Applications Dr. Pehlivan (Online)	Cell Death and Its Types Dr. Ergören	Physician's identity, Deontology and concepts of medical ethics Dr. Güvercin	Hippocratic Medicine Dr. Güvercin
10:30- 11:15	Gluconeogenesis and Its Control Dr. Dinçel (Online)	Ultrases ışıması, Etkileri ve Uygulamaları Dr. Pehlivan (Online)	Displaced Genetic Elements Dr. Ergören	Physician's identity, Deontology and concepts of medical ethics Dr. Güvercin	Prehippocratic Medicine (Instinctive Medicine, Mystical Medicine, civilizations of Antiquity Dr. Güvercin
11:30- 12:15	FREE STUDY TIME	FREE STUDY TIME	Displaced Genetic Elements Dr. Ergören	Physician-Patient Relationships: Evolution, Ethical Principles and Other Basic Aspects Dr. Güvercin	FREE STUDY TIME
13:30- 14:15	Introduction to Biostatistics-Center and Prevalence Measures Dr. Şafak	FREE STUDY TIME	Molecular Biological Methods Used in Diagnosis Dr. Ergören	Physician-Patient Relationships: Evolution, Ethical Principles and Other Basic Aspects Dr. Güvercin	Medieval Medicine Dr. Güvercin
14:30- 15:15	Introduction to Significance Tests Dr. Şafak	FREE STUDY TIME	Molecular Biological Methods Used in Diagnosis Dr. Ergören	Methods in History ofMedicine and MedicalEvolution Dr. Güvercin	Islamic Medicine Dr. Güvercin
15:30- 16:15	FREE STUDY TIME	FREE STUDY TIME	Technology of Recombinant DNA and gene theraphy Dr. Ergören	Methods in History ofMedicine and MedicalEvolution Dr. Güvercin	FREE STUDY TIME
16:30- 17:15	FREE STUDY TIME	FREE STUDY TIME	Technology of Recombinant DNA and gene theraphy Dr. Ergören	FREE STUDY TIME	FREE STUDY TIME

3rd week	16.01.2023	17.01.2023	18.01.2023	19.01.2023	20.01.2023
	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY
08:30-09:15	FREE STUDY TIME	Metabolism of non-glucose sugars Dr. Dinçel (Online)	FREE STUDY TIME	FREE STUDY TIME	FREE STUDY TIME
09:30-10:15	TCA Cycle Dr. Kosova (Online)	Pentose Phosphate Pathway Dr. Dinçel (Online)	FREE STUDY TIME	Synthesis of Fatty Acids Dr. Kosova (Online)	FREE STUDY TIME
10:30-11:15	TCA Cycle Dr. Kosova (Online)	Breakdown of Fatty Acids Dr. Kosova (Online)	Distributions Dr. Şafak	Synthesis of Fatty Acids Dr. Kosova (Online)	FREE STUDY TIME
11:30-12:15	TCA Cycle Dr. Kosova (Online)	Breakdown of Fatty Acids Dr. Kosova (Online)	Distributions Dr. Şafak	FREE STUDY TIME	FREE STUDY TIME
13:30-14:15	FREE STUDY TIME	FREE STUDY TIME	FREE STUDY TIME	FREE STUDY TIME	FREE STUDY TIME
14:30-15:15	FREE STUDY TIME	FREE STUDY TIME	FREE STUDY TIME	FREE STUDY TIME	FREE STUDY TIME
15:30-16:15	FREE STUDY TIME	FREE STUDY TIME	FREE STUDY TIME	FREE STUDY TIME	FREE STUDY TIME
16:30-17:15	FREE STUDY TIME	FREE STUDY TIME	FREE STUDY TIME	FREE STUDY TIME	FREE STUDY TIME

4 <sup>th</sup> week	23.01.2023 MONDAY	24.01.2023 TUESDAY	25.01.2023 WEDNESDAY	26.01.2023 THURSDAY	27.01.2023 FRIDAY
08:30- 09:15	FREE STUDY TIME	FREE STUDY TIME	FREE STUDY TIME	FREE STUDY TIME	Displaced Genetic Elements Dr. Ergören
09:30- 10:15	ETC Dr. Dinçel (Online)	Cholesterol Structure and synthesis Dr. Kosova	FREE STUDY TIME	Contemporary Scientific medicine andFeatures of the 20th Century Medicine Dr. Güvercin	Displaced Genetic Elements Dr. Ergören
10:30- 11:15	ETC Dr. Dinçel (Online)	Cholesterol Structure and synthesis Dr. Kosova	X-ray Generation and Absorption Mechanisms Dr. Pehlivan (Online)	Physician Responsibility and Ethical Malpractice) Dr. Güvercin	Organization of the human genome Dr. Ergören
11:30- 12:15	Digestion of Lipids Dr. Dinçel (Online)	Triglyceride Phospholipid Metabolism Dr. Kosova	Radioactivity. Alpha, Beta, Gamma Rays and Their Effects Dr. Pehlivan (Online)	Ethical Rules and Ethical Committees in Research on Humans Dr. Güvercin	Personal Genome Projects and Personalized Medicine Dr. Ergören
13:30- 14:15	Parametric Tests Dr. Şafak	FREE STUDY TIME	Familial cancer syndromes Dr. Ergun (Online)	Turkish Medical History (Until the Republic Period) Dr. Güvercin	Personal Genome Projects and Personalized Medicine Dr. Ergören
14:30- 15:15	Nonparametric Tests Dr. Şafak	FREE STUDY TIME	FREE STUDY TIME	Turkish Medical History (Republic Period) Dr. Güvercin	Ethical Issues of the Beginning of Life Dr. Güvercin
15:30- 16:15	FREE STUDY TIME	FREE STUDY TIME	FREE STUDY TIME	Ethical Issues Regarding Organ Transplants Dr. Güvercin	Ethics for Vulnerable Patient Groups in Medicine Dr. Güvercin
16:30- 17:15	FREE STUDY TIME	FREE STUDY TIME	FREE STUDY TIME	FREE STUDY TIME	FREE STUDY TIME

5 <sup>th</sup> week	30.01.2023		01.02.2023	02.02.2023	03.02.2023
		31.01.2023	WEDNESDAY		
	MONDAY	TUESDAY		THUKSDAY	FRIDAY
		10202111			
08:30-	APPLIED			FREE STUDY	
09:15	COURSES BIOCHEM 1	APPLIED COURSES	APPLIED COURSES	IIME	APPLIED
	Analysis of reducing	Chromatographic	nH meter		BIOSTATISTIC 1
	propertiesof	determination of	Dr.Kartlaşmış		Research planning, data
	carbohydrates	amino acids in urine			collection, data entry
00.20	Dr.Kartlaşmış	Dr.Kartlaşmış	ADDITED COUDSES	Turnering	DI. Şalak
09:30- 10:15	COURSES	BIOCHEM 2	BIOCHEM 3	Inaging Techniques X-rays	A DDI IED
10:15	BIOCHEM. 1	Chromatographic	pH meter	and Magnetic	COURSES
	Analysis of reducing	determination of amino	Dr.Kartlaşmış	Resonance	BIOSTATISTIC 11
	propertiesof	acids in urine		Imaging Methods	Research planning, data
	carbohydrates	Dr.Kartlaşmış		Online)	Dr. Safak
	APPLIED	APPLIED COURSES	APPLIED COURSES	Ultrasonic and	Dirşunun
10:30-	COURSES	BIOCHEM. 2	BIOCHEM. 3	Nuclear Medicine	APPLIED
11:15	<b>BIOCHEM</b> . 1	Chromatographic	pH meter	Imaging Techniques	COURSES
	Analysis of reducing	determination of amino	Dr.Kartlaşmış	Dr. Pehlivan	BIOSTATISTIC 1
	carbohydrates	Dr Kartlasmis		(Olimic)	collection, data entry
	Dr.Kartlaşmış	Di.Kartiaşınış			Dr. Şafak
11.20	APPLIED	APPLIED COURSES	APPLIED COURSES	FREE STUDY	
11:50-	COURSES	BIOCHEM. 2	BIOCHEM. 3	TIME	APPLIED
12.13	Analysis of reducing	Chromatographic determination of amino	<b>pH meter</b>		COURSES PLOSTATISTIC 1
	properties of	acids in urine	Di.Kartiaşınış		Research planning, data
	carbohydrates	Dr.Kartlaşmış			collection, data entry
	Dr.Kartlaşmış				Dr. Şafak
13:30-	APPLIED	APPLIED COURSES	APPLIED COURSES	FREE STUDY	APPLIED
14:15	COURSES BIOCHEM 1	BIOCHEM. 2 Chromatographic	BIOCHEM. 3	TIME	COURSES BIOSTATISTIC 2
	Analysis of reducing	determination of	Dr.Kartlasmis		Data analysis, reporting
	propertiesof	amino acids in urine	3 3		and presenting data
	carbohydrates	Dr.Kartlaşmış			Dr. Şafak
	Dr.Kartlaşmış	ADDI JED COUDSES	ADDI JED COUDSES	EDEE STUDV	APPLIED COURSES
14.00	COURSES	BIOCHEM, 2	BIOCHEM. 3	TIME	BIOSTATISTIC 2 Data
14:30-	BIOCHEM. 1	Chromatographic	pH meter		analysis, reporting and
15:15	Analysis of reducing	determination of amino	Dr.Kartlaşmış		Dr. Safak
	properties of	acids in urine			3
	Dr.Kartlasmis	Di.Kartiaşiniş			
	APPLIED	APPLIED COURSES	APPLIED COURSES		APPLIED COURSES
15:30-	COURSES	BIOCHEM. 2	BIOCHEM. 3	FREE STUDY	BIOSTATISTIC 2
16:15	BIOCHEM. I	Chromatographic	pH meter	TIME	and presenting data
	properties of	acids in urine	Dr. Nartiaşmiş		Dr. Şafak
	carbohydrates	Dr.Kartlaşmış			
	Dr.Kartlaşmış	3 3			
16:30-	APPLIED	APPLIED COURSES	APPLIED COURSES	FREE STUDY	APPLIED COURSES
17:15	BIOCHEM 1	Chromatographic	nH meter	TIME	Data analysis
	Analysis of reducing	determination of amino	Dr.Kartlasmis		reporting and
	properties of	acids in urine	3		presenting data
	carbohydrates	Dr.Kartlaşmış			Dr. Şafak
	Dr.Kartlaşmış				

6 <sup>th</sup>	06.02.2023	07.02.2023	08.02.2023	09.02.2023	10.02.2023
week	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY
08:30- 09:15	Genetic Code and Protein Synthesis Dr. Altungöz	Molecular Control Mechanisms of Gene Expression Dr. Altungöz	APPLIEDCOURSES MEDICALBIOLOGY Whole blood genomic DNA isolation Dr. Aslan	APPLIEDCOURSES MEDICAL BIOLOGY 2 PCR Dr. Aslan	FREE STUDY TIME
09:30- 10:15	Genetic Code and Protein Synthesis Dr. Altungöz	Molecular Control Mechanisms of Gene Expression Dr. Altungöz	APPLIEDCOURSES MEDICALBIOLOGY Whole blood genomic DNA isolation Dr. Aslan	APPLIEDCOURSES MEDICAL BIOLOGY 2 PCR Dr. Aslan	FREE STUDY TIME
10:30- 11:15	Cancer Molecular Biology Dr. Altungöz	epigenetic mechanisms Dr. Altungöz	APPLIEDCOURSES MEDICALBIOLOGY Whole blood genomic DNA isolation Dr. Aslan	APPLIEDCOURSES MEDICAL BIOLOGY 2 PCR Dr. Aslan	FREE STUDY TIME
11:30- 12:15	Cancer Molecular Biology Dr. Altungöz	epigenetic mechanisms Dr. Altungöz	APPLIEDCOURSES MEDICALBIOLOGY I Whole blood genomic DNA isolation Dr. Aslan	APPLIEDCOURSES MEDICAL BIOLOGY 2 PCR Dr. Aslan	FREE STUDY TIME
13:30- 14:15	Cancer Molecular Biology Dr. Altungöz	FREE STUDY TIME	APPLIEDCOURSES MEDICALBIOLOGY Whole blood genomic DNA isolation Dr. Aslan	APPLIEDCOURSES MEDICAL BIOLOGY 2 PCR Dr. Aslan	FREE STUDY TIME
14:30- 15:15	Cancer Molecular Biology Dr. Altungöz	FREE STUDY TIME	APPLIEDCOURSES MEDICALBIOLOGY Whole blood genomic DNA isolation Dr. Aslan	APPLIEDCOURSES MEDICAL BIOLOGY 2 PCR Dr. Aslan	FREE STUDY TIME
15:30- 16:15	FREE STUDY TIME	FREE STUDY TIME	APPLIEDCOURSES MEDICALBIOLOGY Whole blood genomic DNA isolation Dr. Aslan	APPLIEDCOURSES MEDICAL BIOLOGY 2 PCR Dr. Aslan	FREE STUDY TIME
16:30- 17:15	FREE STUDY TIME	FREE STUDY TIME	APPLIEDCOURSES MEDICALBIOLOGY Whole blood genomic DNA isolation Dr. Aslan	APPLIEDCOURSES MEDICAL BIOLOGY 2 PCR Dr. Aslan	FREE STUDY TIME

7 <sup>th</sup> week	13.02.2023 MONDAY	14.02.2023 TUESDAY	15.02.2023 WEDNESDAY	16.02.2023 THURSDAY	17.02.2023 FRIDAY
08:30- 09:15 09:30- 10:15 10:30- 11:15 11:30- 12:15	FREE STUDY TIME FREE STUDY TIME FREE STUDY TIME FREE STUDY TIME FREE STUDY TIME FREE STUDY TIME	PHASE I COMMITTEE 2nd THEORICAL EXAM Time:09:30			
13:30- 14:15	FREE STUDY TIME	FREE STUDY TIME			
14:30- 15:15	FREE STUDY TIME	FREE STUDY TIME			
15:30- 16:15	FREE STUDY TIME	FREE STUDY TIME			
16:30- 17.20	FREE STUDY TIME	FREE STUDY TIME			