

GAZİ UNIVERSITY MEDICAL FACULTY**PHASE I – CELL BIOLOGY COMMITTEE****(8 DECEMBER 2025 – 15 JANUARY 2026)**

COURSES	THEORETICAL	LABORATORY	PRACTICAL	TOTAL
Medical Microbiology	36	1x8	-	44
Medical Biochemistry	10	2x3	-	16
Histology and Embryology	8	2x4	-	16
Immunology	5	-	-	5
Medical Genetics	16	2x2	-	20
Professionalism and Human Sciences in Medicine	6	-	-	6
TOTAL	79	26		107
ELECTIVE COURSE	10	-	-	10
INTRODUCTION TO CLINICAL PRACTICE				
CLINICAL SKILLS EDUCATION (CSE)		2x3		6
TOTAL	89	32		123
FREE STUDY TIME	73			

Total 28 workdays.

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

OBLIGATORY COURSES

Turkish Language	9
Atatürk's Principles and History of His Revolutions	9
English	9

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. Dr. Alper CEYLAN
Vice Dean	Doç. Dr. Nazmi Mutlu KARAKAŞ
Vice Dean	Doç. Dr. Asiye UĞRAŞ DİKMEN
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	Doç. Dr. Volkan MEDENİ
Assistant Phase I Coordinator	Dr. Öğr. Üyesi Duygu Deniz USTA SALIMI
Assistant Phase I Coordinator	Dr. Öğr. Üyesi Samet YILMAZ
Assistant Phase I Coordinator	Öğr. Gör. Dr. Burak KAYABAŞI
Assistant Phase I Coordinator	Öğr. Gör. Dr. Sidre ERGANİŞ
Assistant Phase I Coordinator	Öğr. Gör. Dr. Aynur ÇOBAN

MEMBERS OF COMMITTEE

MEDICAL MICROBIOLOGY	MEDICAL BIOCHEMISTRY	HISTOLOGY AND EMBRYOLOGY
Dr. Ayşe KALKANCI	Dr. Aylin SEPİCİ DİNÇEL	Dr. Duygu DAYANIR
Dr. Meltem YALINAY	Dr. N. Samet YILMAZ	Dr. S. Esra ÖZKOÇER
Dr. Kayhan ÇAĞLAR	Dr. Cengiz KARAKAYA	Dr. Zeynep YIĞMAN
Dr. Elif Ayça ŞAHİN		
Dr. Sidre ERGANİŞ		
IMMUNOLOGY	MEDICAL GENETICS	PROFESSIONALIS M IN MEDICINE AND HUMAN SCIENCES IN MEDICINE
Dr. Vedat BULUT	Dr. Meral YİRMİBEŞ KARAOĞUZ	Dr. F. Sedef TUNAOĞLU
Dr. Resul KARAKUŞ	Dr. Mehmet Ali ERGÜN	Dr. Vedat BULUT
Dr. Nihan ÖRÜKLÜ	Dr. Yusuf BAHAP	Dr. Burcu KÜÇÜK BİÇER

CLINICAL SKILLS EDUCATION (CSE) COORDINATOR	Dr. Nurten İNAN
ELECTIVE COURSE COORDINATOR	Dr. Ergin DİLEKÖZ

LEARNING OBJECTIVES AND GOALS

Information

1. To be able to interpret the digestion and metabolism of nucleoproteins and evaluate their relationship with diseases
2. To be able to interpret Hem synthesis steps, defects and clinical findings
3. To understand the metabolism of inorganic compounds in the body and their importance in clinical situations.
4. To be able to define the structural features and life cycles of microorganisms (virus, bacteria, fungus, parasite)
5. To be able to explain the terms and methods of sterilization and disinfection
6. To be able to define antimicrobial drugs and resistance mechanisms, explain antibiotic susceptibility testing methods
7. To be able to define the basic concepts of immunology and the host's general defense methods
8. To be able to describe the types of cell divisions
9. To be able to describe the formation processes of necrosis and apoptosis, histological changes observed in the cell and the elimination process of residues.
10. To be able to count the histological structure of cell membrane, organelles, nucleus and inclusions
11. Ability to classify chromosomes and recognize numerical and structural chromosome anomalies
12. Ability to list the indications for prenatal diagnosis by understanding the differences between invasive and noninvasive prenatal diagnosis/screening

Skill

13. To be able to distinguish cell shapes and microorganisms by using the light microscope.
14. To be able to apply staining methods used in the examination of microorganisms, cultivation methods for their production and antibiotic sensitivity tests.
15. To be able to apply uric acid, bilirubin, urobilinogen, inorganic phosphate measurement method
16. To be able to measure pulse and respiratory rate and blood pressure, wash hands, put on and take off sterile gloves, wrap elastic bandages, and apply intramuscular injection skills.
17. To be able to distinguish the diagnostic limits and their use in clinical genetics by defining the differences between conventional and molecular cytogenetic techniques

Attitude

18. Being aware of the importance of group work and cooperation
19. Ability to interactively discuss algorithms in the diagnosis of chromosomal rearrangements and genomic variants

Week 1	08.12.2025 MONDAY	09.12.2025 TUESDAY	10.12.2025 WEDNESDAY	11.12.2025 THURSDAY	12.12.2025 FRIDAY
08:30 – 09:20	Exam assessment and coordinator's office meeting	Free Study Time	Morphology and staining of bacteria Dr. A. E. Şahin	CSE- Group B	M. Mic. Lab. Equipment and media used in microbiology laboratory Group A
09:30 – 10:20	Chromosome structure, nomenclature and tenninology Dr. M. Yirmibeş Karaoğuz	Growth and metabolism of bacteria Dr. K. Çağlar	Synthesis and catabolism of porphyrins Dr. N. S. Yılmaz	His. Emb. Lab. Microscope, Spherical cell, Polyhedral cell, Pyriform cell Group A	M. Bioch. Lab. Determination of uric acid Group B
10:30 – 11:20	Chromosome structure, nomenclature and tenninology Dr. M. Yirmibeş Karaoğuz	Cell structure, cytoplasm and components Dr. D. Dayanır	Synthesis and catabolism of porphyrins Dr. N. S. Yılmaz	CSE-Group A	M. Mic. Lab. Equipment and media used in microbiology laboratory Group B
11:30 – 12:20	History and nomenclature of microbiology Dr. A. Kalkancı	Cell structure, cytoplasm and components Dr. D. Dayanır	Porphyria Dr. N. S. Yılmaz	His. Emb. Lab. Microscope, Spherical cell, Polyhedral cell, Pyriform cell Group B	M. Bioch. Lab. Determination of uric acid Group A
13:30 – 14:20	ENGLISH	Microscopy types and use of area Dr. Z. Yıgman	Numerical chromosome aberrations: overview of common examples Dr. M. Yirmibeş Karaoğuz	Definiation of inclusion and nucleus structure Dr. S. E. Özkoçer	Structural chromosomal rearrangements and clinical examples Dr. M. Yirmibeş Karaoğuz
14:30 – 15:20		Bacterial cell structure Dr. A.E.Şahin	Numerical chromosome aberrations: overview of common examples Dr. M. Yirmibeş Karaoğuz	Definiation of inclusion and nucleus structure Dr. S. E. Özkoçer	Structural chromosomal rearrangements and clinical examples Dr. M. Yirmibeş Karaoğuz
15:30 – 16:20	ELECTIVE COURSES	Bacterial cell structure Dr. A.E.Şahin	Free Study Time	Free Study Time	Free Study Time
16:30 – 17:20		Free Study Time	Turkish Language	Free Study Time	Free Study Time
18:00 - 18:50				Ataturk's Principles and History of His Revolutions	

Week 2	15.12.2025 MONDAY	16.12.2025 TUESDAY	17.12.2025 WEDNESDAY	18.12.2025 THURSDAY	19.12.2025 FRIDAY
08:30 – 09:20	Free Study Time	Prenatal diagnosis of chromosomal diseases Dr. M. Yirmibeş Karaoğuz	Medicine and Philosophy Dr. V. Bulut	Free Study Time	Histochemical techniques Dr. Z. Yiğman
09:30 – 10:20	Free Study Time	Identification of chromosomal alterations by molecular cytogenetic techniques Dr. M. Yirmibeş Karaoğuz	Medicine and Philosophy Dr. V. Bulut	Cell division, differentiation and aging Dr. D. Dayanır	Histochemical techniques Dr. Z. Yiğman
10:30 – 11:20	Free Study Time	Bacterial genetics Dr. M. Yalınay	M. Mic. Lab. Bacteria and colony Morphologies; staining methods Group A M. Gen. Lab. Prenatal and postnatal cell culture Group B	Mechanism of action of antimicrobial drugs and resistance mechanisms Dr. M. Yalınay	Genomic variants and clinical classification Dr. Y. Bahap
11:30 – 12:20	Free Study Time	Bacterial genetics Dr. M. Yalınay		Mechanism of action of antimicrobial drugs and resistance mechanisms Dr. M. Yalınay	Genomic variants and clinical classification Dr. Y. Bahap
13:30 – 14:20	ENGLISH	Bacteriophages Dr. M. Yalınay	M. Mic. Lab. Bacteria and colony Morphologies; staining methods Group B	Bacteria-host relationships Dr. K. Çağlar	His. Emb. Lab. Squamous cell, Cuboidal cell, Columnar cell, Fusiform cell Group B
14:30 – 15:20		Digestion of nucleic acids Dr. A. Sepici Dinçel	M. Gen. Lab. Prenatal and postnatal cell culture Group A	Bacteria-host relationships Dr. K. Çağlar	
15:30 – 16:20	ELECTIVE COURSES	De nova synthesis of purine nucleodites Dr. A. Sepici Dinçel	Free Study Time	Genetic counseling in prenatal and postnatal period regarding chromosomal diseases Dr. M. Yirmibeş Karaoğuz	His. Emb. Lab. Squamous cell, Cuboidal cell, Columnar cell, Fusiform cell Group A
16:30 – 17:20		Purine catabolism Dr. A. Sepici Dinçel	Turkish Language	Free Study Time	
18:00 - 18:50				Ataturk's Principles and History of His Revolutions	

Week 3	22.12.2025 MONDAY	23.12.2025 TUESDAY	24.12.2025 WEDNESDAY	25.12.2025 THURSDAY	26.12.2025 FRIDAY
08:30 – 09:20	Free Study Time	Mendelian and non-Mendelian disorders and pedigree charts Dr. M. A. Ergün	Free Study Time	M. Mic. Lab. Antibiotic susceptibility tests Group A	M. Bioch. Lab. Determinations of urine bilirubine and urobilinogen Group B
09:30 – 10:20	Free Study Time	Mendelian and non-Mendelian disorders and pedigree charts Dr. M. A. Ergün	Genotype- phenotype correlations Dr. M. A. Ergün		
10:30 – 11:20	Taxonomy and evaluation of fungi Dr. A. Kalkancı	Pyrimidine biosynthesis and catabolism Dr. A. Sepici Dinçel	Multifactorial genetic disorders Dr. M. A. Ergün	M. Mic. Lab. Antibiotic susceptibility tests Group B	M. Bioch. Lab. Determinations of urine bilirubine and urobilinogen Group A
11:30 – 12:20	Laboratory methods in antibiotic selection Dr. M. Yalınay	Regulation of purine and pyrimidine synthesis Dr. A. Sepici Dinçel	Familial Cancer Syndromes Dr. M. A. Ergün		
13:30 – 14:20	ENGLISH	His. Emb. Lab. Special stains Group A M. Gen. Lab. Harvesting and banding procedure of human chromosomes-images of abnormal karyotypes Group B	Defense mechanisms of the host against bacteria Dr. K. Çağlar	Fungi-host relationship Dr. A. Kalkancı	Antigen Dr. R. Karakuş
14:30 – 15:20			Sterilization and disinfection Dr. K. Çağlar	Virulence factors of fungi and mycotoxins Dr. A. Kalkancı	Antibody Dr. R. Karakuş
15:30 – 16:20	ELECTIVE COURSES	His. Emb. Lab. Special stains Group B M. Gen. Lab. Harvesting and banding procedure of human chromosomes-images of abnormal karyotypes Group A	Sterilization and disinfection Dr. K. Çağlar	General properties of molds Dr. A. Kalkancı	General properties and structure of viruses Dr. A. E. Şahin
16:30 – 17:20			Turkish Language	Free Study Time	General properties and structure of viruses Dr. A. E. Şahin
18:00 - 18:50				Ataturk's Principles and History of His Revolutions	

Week 4	29.12.2025 MONDAY	30.12.2025 TUESDAY	31.12.2025 WEDNESDAY	01.01.2026 THURSDAY	02.01.2026 FRIDAY
08:30 – 09:20	General properties of yeast Dr. A. Kalkancı	CSE	Virus-host relationship Dr. K. Çağlar	YENİ YIL (NEW YEAR)	Free Study Time
09:30 – 10:20	Viral genetics Dr. A. Kalkancı		Virus-host relationship Dr. K. Çağlar		Free Study Time
10:30 – 11:20	Inorganic metabolism Dr. C. Karakaya		Web immunology Dr. V. Bulut		M. Mic. Lab. Fungi Group A
11:30 – 12:20	Inorganic metabolism Dr. C. Karakaya		Introduction to the immune system: Defense mechanisms Dr. V. Bulut		
13:30 – 14:20	ENGLISH	M. Mic. Lab. Sterilization and disinfection Group A	Free Study Time		
		M. Bioc. Lab. Determination of serum inorganic phosphate Group B	Free Study Time		
14:30 – 15:20					
15:30 – 16:20	ELECTIVE COURSES	M. Mic. Lab. Sterilization and disinfection Group B	Free Study Time		M. Mic. Lab. Fungi Group B
16:30 – 17:20		M. Bioc. Lab. Determination of serum inorganic phosphate Group A	Free Study Time		

Week 5	05.01.2026 MONDAY	06.01.2026 TUESDAY	07.01.2026 WEDNESDAY	08.01.2026 THURSDAY	09.01.2026 FRIDAY
08:30 – 09:20	M. Mic. Lab. Serological methods Group A	Free Study Time	CSE	Free Study Time	Introduction to parasitology and parasitism Dr. K. Çağlar
09:30 – 10:20		Free Study Time		Free Study Time	Epidemiology and control of parasitic infections Dr. K. Çağlar
10:30 – 11:20	M. Mic. Lab. Serological methods Group B	5i SINAV		5i SINAV	General proopies of protozoa Dr. S. Erganiş
11:30 – 12:20					General proopies of helminths Dr. S. Erganiş
13:30 – 14:20	Viral oncogenesis Dr. K. Çağlar	Serological reactions and microorganism antigens Dr. K. Çağlar	5i SINAV	Free Study Time	Philosophy of Science Dr. B. Küçük Biçer
14:30 – 15:20	Antigen-antibody reactions and serological tests Dr. N. Örüklü	Introduction to molecular microbiology Dr. M. Yalınay		Free Study Time	Philosophy of Science Dr. B. Küçük Biçer
15:30 – 16:20	ELECTIVE COURSES FINAL	Introduction to microbiota Dr. M. Yalınay	CSE	Free Study Time	Professionalism in Medicine Dr. S. Tunaoğlu
16:30 – 17:20				Free Study Time	Professionalism in Medicine Dr. S. Tunaoğlu

Week 6	12.01.2026 MONDAY	13.01.2026 TUESDAY	14.01.2026 WEDNESDAY	15.01.2026 THURSDAY	16.01.2026 FRIDAY
08:30 – 09:20	M. Mic. Lab. Parasites Group A	Free Study Time	CELL BIOLOGY COMMITTEE PRACTICAL EXAM	CELL BIOLOGY COMMITTEE THEORETICAL EXAM	
09:30 – 10:20		Free Study Time			
10:30 – 11:20	M. Mic. Lab. Parasites Group B	Free Study Time			
11:30 – 12:20		Free Study Time			
13:30 – 14:20	Introduction to the immune response to microorganisms Dr. A. Kalkancı	M. Mic. Lab. His. Emb. Lab.	Free Study Time	Free Study Time	
14:30 – 15:20	Introduction to the immune response to microorganisms Dr. A. Kalkancı		Free Study Time	Free Study Time	
15:30 – 16:20	Free Study Time		Free Study Time	Free Study Time	
16:30 – 17:20	Free Study Time		Free Study Time	Free Study Time	