

GAZİ UNIVERSITY MEDICAL FACULTY

PHASE I – CELL BIOLOGY COMMITTEE

(9 DECEMBER 2024 – 17 JANUARY 2025)

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	14	2x2	-	18
Professionalism and Human Sciences in Medicine	6	-	-	6
TOTAL	79	26		105
ELECTIVE COURSE	10	-	-	10
INTRODUCTION TO CLINICAL PRACTICE				
CLINICAL SKILLS EDUCATION (CSE)		2x3		6
TOTAL	89	32		121
FREE STUDY TIME	76			

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	Dr. Öğr. Üyesi Meltem SEVGİLİ
Assistant Phase I Coordinator	Dr. Öğr. Üyesi Duygu Deniz USTA SALIMI
Assistant Phase I Coordinator	Öğr. Gör. Dr. Burak KAYABAŞI
Assistant Phase I Coordinator	Öğr. Gör. Dr. Sidre ERGANİŞ

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. Funda DOĞRUMAN AL		
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. Gülsüm KAYHAN	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	09.12.2024 MONDAY	10.12.2024 TUESDAY	11.12.2024 WEDNESDAY	12.12.2024 THURSDAY	13.12.2024 FRIDAY
08:30 – 09:20	Free Study Time	Bacterial cell structure Dr. M. Yalınay	Free Study Time	CSE-1	M. Mic. Lab. Equipment and media used in microbiology laboratory Group A (08.30-09.20)
09:30 – 10:20	Digestion of nucleic acids Dr. A. Sepici Dinçel	Bacterial cell structure Dr. M. Yalınay	Growth and metabolism of bacteria Dr. K. Çağlar		
10:30 – 11:20	De nova synthesis of purine nucleodites Dr. A. Sepici Dinçel	Chromosome structure, nomenclature and terminology Dr. M. Yirmibeş Karaoğuz	Synthesis and catabolism of porphyrins Dr. N. S. Yılmaz		
11:30 – 12:20	History and nomenclature of microbiology Dr. A. Kalkancı	Microscopy types and use of area Dr. Z. Yiğman	Synthesis and catabolism of porphyrins Dr. N. S. Yılmaz		
13:30 – 14:20	ENGLISH	Cell structure, cytoplasm and components Dr. D. Dayanır	Numerical chromosome aberrations: overview of common examples Dr. M. Yirmibeş Karaoğuz	Porphyria Dr. N. S. Yılmaz	M. Mic. Lab. Equipment and media used in microbiology laboratory Group B (16.30-17.20)
14:30 – 15:20		Cell structure, cytoplasm and components Dr. D. Dayanır	Numerical chromosome aberrations: overview of common examples Dr. M. Yirmibeş Karaoğuz	Exam evaluation and coordinator meeting	
15:30 – 16:20	ELECTIVE COURSES	Morphology and staining of bacteria Dr. A. E. Şahin	Free Study Time	Definition of inclusion and nucleus structure Dr. S. E. Özkoçer	M. Bioch. Lab. Determination of uric acid Group A
16:30 – 17:20		Free Study Time	Turkish Language	Definition of inclusion and nucleus structure Dr. S. E. Özkoçer	
18:00 - 18:50				Ataturk's Principles and History of His Revolutions	

Week 2	16.12.2024 MONDAY	17.12.2024 TUESDAY	18.12.2024 WEDNESDAY	19.12.2024 THURSDAY	20.12.2024 FRIDAY
08:30 – 09:20	Purine catabolism Dr. A. Sepici Dinçel	Genomic variants and clinical classification Dr. G. Kayhan	Medicine and Philosophy Dr. V. Bulut	M. Mic. Lab. Bacteria and colony Morphologies; staining methods Group A (08.30 - 09.20) M. Gen. Lab. Prenatal and postnatal celi culture Group B	Free Study Time
09:30 – 10:20	Pyrimidine biosynthesis and catabolism Dr. A. Sepici Dinçel	Genomic variants and clinical classification Dr. G. Kayhan	Medicine and Philosophy Dr. V. Bulut		Histology And Embryology Pre-Lab Discussion
10:30 – 11:20	Structural chromosomal rearrangements and clinical examples Dr. M. Yirmibeş Karaoğuz	Cell division, differentiation and aging Dr. D. Dayanır	Bacteria-host relationships Dr. K. Çağlar		Mechanism of actions of antimicrobial drugs and resistance mechanisms Dr. M. Yalınay
11:30 – 12:20	Structural chromosomal rearrangements and clinical examples Dr. M. Yirmibeş Karaoğuz	Regulation of purine and pyrimidine synthesis Dr. A. Sepici Dinçel	Bacteria-host relationships Dr. K. Çağlar		Mechanism of actions of antimicrobial drugs and resistance mechanisms Dr. M. Yalınay
13:30 – 14:20	ENGLISH	Bacterial genetics Dr. M. Yalınay	Bacteriophages Dr. M. Yalınay	M. Mic. Lab. Bacteria and colony Morphologies; staining methods Group B (16.30 - 17.20)	Mendelian and non-Mendelian disorders and pedigree charts Dr. M. A. Ergün
14:30 – 15:20		Bacterial genetics Dr. M. Yalınay	Prenatal diagnosis of chromosomal diseases Dr. M. Yirmibeş Karaoğuz		Multifactorial genetic disorders Dr. M. A. Ergün
15:30 – 16:20	ELECTIVE COURSES	Free Study Time	Free Study Time	M. Gen. Lab. Prenatal and postnatal celi culture Group A	Histochemical techniques Dr. Z. Yiğman
16:30 – 17:20			Turkish Language		Histochemical techniques Dr. Z. Yiğman
18:00 - 18:50				Ataturk's Principles and History of His Revolutions	

Week 3	23.12.2024 MONDAY	24.12.2024 TUESDAY	25.12.2024 WEDNESDAY	26.12.2024 THURSDAY	27.12.2024 FRIDAY		
08:30 – 09:20	Free Study Time	M. Mic. Lab. Antibiotic susceptibility tests Group A (08.30 - 09.20)	Genotype- phenotype correlations Dr. M. A. Ergün	M. Mic. Lab. Sterilization and disinfection Group A (08.30 - 09.20)	M. Bioch. Lab. Determinations of urine bilirubin and urobilinogen Group B		
09:30 – 10:20	Laboratory methods in antibiotic selection Dr. M. Yalınay		Familial Cancer Syndromes Dr. M. A. Ergün	His. Emb. Lab. Microscope, Spherical cell, Polyhedral cell, Pyriform cell Group B			
10:30 – 11:20	Genetic counseling in prenatal and postnatal period regarding chromosomal diseases Dr. M. Yirmibeş Karaoğuz		M. Gen. Lab. Harvesting and banding procedure of human chromosomes-images of abnormal karyotypes Group B	Web immunology Dr. V. Bulut		His. Emb. Lab. Microscope, Spherical cell, Polyhedral cell, Pyriform cell Group A	M. Bioch. Lab. Determinations of urine bilirubin and urobilinogen Group A
11:30 – 12:20	Identification of chromosomal alterations by molecular cytogenetic techniques Dr. M. Yirmibeş Karaoğuz			Defense mechanisms of the host against bacteria Dr. K. Çağlar			
13:30 – 14:20	ENGLISH	M. Mic. Lab. Antibiotic susceptibility tests Group B (16.30 - 17.20)	Sterilization and disinfection Dr. K. Çağlar	Taxonomy and evaluation of fungi Dr. A. Kalkancı	Fungi-host relationship Dr. A. Kalkancı		
14:30 – 15:20			M. Gen. Lab. Harvesting and banding procedure of human chromosomes-images of abnormal karyotypes Group A	Sterilization and disinfection Dr. K. Çağlar	Inorganic metabolism Dr. C. Karakaya	Virulence factors of fungi and mycotoxins Dr. A. Kalkancı	
15:30 – 16:20	ELECTIVE COURSES			Free Study Time	Inorganic metabolism Dr. C. Karakaya	Free Study Time	
16:30 – 17:20			Turkish Language	M. Mic. Lab. Sterilization and disinfection Group B	Free Study Time		
18:00 – 18:50				Ataturk's Principles and History of His Revolutions			

Week 4	30.12.2024 MONDAY	31.12.2024 TUESDAY	01.01.2025 WEDNESDAY	02.01.2025 THURSDAY	03.01.2025 FRIDAY		
08:30 – 09:20	Free Study Time	M. Bioc. Lab. Determination of serum inorganic phosphate Group A	YENİ YIL TATİLİ	CSE-2	M. Mic. Lab. Fungi Group A (08.30 - 09.20)		
09:30 – 10:20					Phase - 1 ENGLISH Final Exam		
10:30 – 11:20	General properties of molds Dr. A. Kalkancı	M. Bioc. Lab. Determination of serum inorganic phosphate Group B					M. Mic. Lab. Fungi Group B (11.30 - 12.20)
11:30 – 12:20	General properties of yeast Dr. A. Kalkancı						
13:30 – 14:20	ENGLISH	General properties and structure of viruses Dr. A. E. Şahin				Viral genetics Dr. A. Kalkancı	His. Emb. Lab. Squamous cell, Cuboidal cell, Columnar cell, Fusiform cell Group B
14:30 – 15:20		General properties and structure of viruses Dr. A. E. Şahin				Free Study Time	
15:30 – 16:20	ELECTIVE COURSES	Introduction to the immune system: Defense mechanisms Dr. V. Bulut				Free Study Time	His. Emb. Lab. Squamous cell, Cuboidal cell, Columnar cell, Fusiform cell Group A
16:30 – 17:20		Free Study Time				Free Study Time	

Week 5	06.01.2025 MONDAY	07.01.2025 TUESDAY	08.01.2025 WEDNESDAY	09.01.2025 THURSDAY	10.01.2025 FRIDAY
08:30 – 09:20	Professionalism in Medicine Dr. S. Tunaoglu	Free Study Time	CSE 3	M. Mic. Lab. Serological methods Group A	Free Study Time
09:30 – 10:20	Antigen Dr. R. Karakuş	Viral oncogenesis Dr. K. Çağlar		Free Study Time	Epidemiology and control of parasitic infections Dr. K. Çağlar
10:30 – 11:20	TURKISH FINAL EXAM	Virus-host relationship Dr. K. Çağlar		Professionalism in Medicine Dr. S. Tunaoglu	General properties of protozoa Dr. S. Erganiş
11:30 – 12:20	TURKISH FINAL EXAM	Virus-host relationship Dr. K. Çağlar		Introduction to parasitology and parasitism Dr. K. Çağlar	General properties of helminths Dr. S. Erganiş
13:30 – 14:20	Antibody Dr. R. Karakuş	Introduction to molecular microbiology Dr. M. Yalınay	HISTORY FINAL EXAM	His. Emb. Lab. Special Stains Group B	His. Emb. Lab. Make-Up Group A
14:30 – 15:20	Antigen-antibody reactions and serological tests Dr. N. Örüklü	Serological reactions and microorganism antigens Dr. K. Çağlar			
15:30 – 16:20	ELECTIVE COURSES FINAL	Introduction to microbiota Dr. M. Yalınay	CSE 3	M. Mic. Lab. Serological methods Group B (16.30 - 17.20)	His. Emb. Lab. Make-Up Group B
16:30 – 17:20		Free Study Time		His. Emb. Lab. Special Stains Group A	

Week 6	13.01.2025 MONDAY	14.01.2025 TUESDAY	15.01.2025 WEDNESDAY	16.01.2025 THURSDAY	17.01.2025 FRIDAY
08:30 – 09:20	Free Study Time	Free Study Time	M. Mic. Lab. Make-Up Group B	Free Study Time	CELL BIOLOGY COMMITTEE EXAM
09:30 – 10:20	Philosophy of Science Dr. B. Küçük Biçer	Free Study Time	Free Study Time	Free Study Time	
10:30 – 11:20	Philosophy of Science Dr. B. Küçük Biçer	Free Study Time	Free Study Time	Free Study Time	
11:30 – 12:20	Medical entomology Dr. A. Kalkancı	Free Study Time	Free Study Time	Free Study Time	
13:30 – 14:20	Immune response to the microorganisms and escape mechanisms from immune system Dr. A. Kalkancı	Free Study Time	Free Study Time	Free Study Time	
14:30 – 15:20	M. Mic. Lab. Parasites Group A	Free Study Time	Free Study Time	Free Study Time	
15:30 – 16:20	M. Mic. Lab. Parasites Group B	Free Study Time	Free Study Time	Free Study Time	
16:30 – 17:20	Free Study Time	Free Study Time	M. Mic. Lab. Make-Up Group A	Free Study Time	