GAZI UNIVERSITY FACULTY OF MEDICINE

YEAR III, 2021-2022

NEOPLASIA AND HEMATOPOIETIC SYSTEM COURSE COMMITTEE

October 19 - November 11 2021

Examination: November 11, 2021 09:30 AM

Courses	Theoretical	Laboratory	Practice	Courses
INTERNAL MEDICINE (Hematology)	15			15
INTERNAL MEDICINE (Oncology)	2			2
PEDIATRICS (Hematology)	9			9
PEDIATRICS (Oncology)	3			3
PEDIATRICS(Allergy-Immunology)	1			1
MEDICAL PATHOLOGY	10			10
MEDICAL MICROBIOLOGY	6	1x8*		14
MEDICAL PHARMACOLOGY	4			4
PUBLIC HEALTH	2			2
IMMUNOLOGY	2			2
MEDICAL GENETICS	2			2
NUCLEAR MEDICINE	1			1
RADIOLOGY	1			1
TOTAL	58	8		66
CLINICAL SKILLS EDUCATION (CSE)			1x4	4
PROBLEM BASED LEARNİNG (PBL)*	4x3*			12
ELECTIVE COURSE*	4x2*			8
MEDICAL ENGLISH*	4x2*			8
TOTAL				32
FREE RUN-TIME				19

**Online lessons* *Total: 15,5 work days*

Medical English (online): Starting from October 6, 2021. It is every Wednesday between 6.00 pm and 6.40 pm.
Elective Course (online): Starting from October 6, 2021. It is every Wednesday between 1.30 pm and 2.15 pm.

Dean	Prof.Dr. Mustafa Necmi İLHAN
Vice Dean	Doç.Dr. İlyas OKUR
Vice Dean	Doç.Dr. Özlem GÜZEL TUNÇCAN
Head Coordinator	Prof.Dr. Çiğdem ÖZER
Assistant Head Coordinator	Prof.Dr.Akif Muhtar ÖZTÜRK
Assistant Head Coordinator(Eng)	Prof.Dr. M.Ali ERGÜN
Year III Coordinator	Assoc.Prof.Dr. Nazmi Mutlu KARAKAŞ
Assistant Year III Coordinator(Eng)	Assoc.Prof.Dr. Ergin DİLEKÖZ
Assistant Year III Coordinator(Eng)	Assoc.Prof.Dr. Hale Zeynep BATUR ÇAĞLAYAN
Assistant Year III Coordinator	Assoc.Prof.Dr. Muhittin YALÇIN
Assistant Year III Coordinator	Asist.Prof.Dr. Burak SEZENÖZ
Assistant Year III Coordinator	Lecturer MD Mehmet Arda İNAN

Clinical Skills Education (CSE) Coordinator	Doç.Dr. Melda AYBAR TÜRKOĞLU
Problem Based Learning (PBL) Coordinator	Doç.Dr. Özlem COŞKUN
Evidence Based Medicine (EBM) Coordinator	Prof.Dr. Mehmet Ali ERGÜN
Elective Course Coordinator	Assoc.Prof.Dr. Ergin DİLEKÖZ
Medical English	Lecturer Sibel ÖZKIN

MEMBERS OF COURSE COMMITTEE

INTERNAL MEDICINE (Hematology)	**PEDIATRICS (Hematology)**	**PEDIATRICS (Oncology)**	**MEDICAL MICROBIOLOGY**
Dr. Münci YAĞCI Dr. Z. Arzu YEĞİN	Dr. Ülker KOÇAK Dr. Deniz ASLAN Dr. Zühre KAYA	Dr. F.Güçlü PINARLI Dr. Özge VURAL **PEDIATRICS (Allergy-Immunology)** Dr.Arzu BAKIRTAŞ	Dr.Meltem YALINAY Dr.Funda DOĞRUMAN-AL Dr. Ayşe KALKANCI
INTERNAL MEDICINE (Oncology)	**RADIOLOGY**	**MEDICAL PATHOLOGY**	**PUBLIC HEALTH**
Dr.Ozan Yazıcı	Dr. Gonca ERBAŞ	Dr. Gülen AKYOL Dr. Nalan AKYÜREK	Dr. Asiye UĞRAŞ DİKMEN
MEDICAL GENETICS	**NUCLEAR MEDICINE**	**MEDICAL PHARMACOLOGY**	**IMMUNOLOGY**
Dr. Mehmet Ali ERGÜN	Dr.L.Özlem ATAY	Dr. Süreyya BARUN	Dr.E.Ümit BAĞRIAÇIK

AIM AND LEARNING OBJECTIVES OF COURSE

Aim: Following 12 days of Neoplasia and Hematopoietic system committee education, the students are expected to gain knowledge about the prevalence, importance, underlying mechanisms and diagnostic methods of neoplastic and hematopoietic system diseases, and, therapeutic agents and their mechanisms of action, built up on through understanding of the formation, development and pathology of hematopoietic system and tumor formation, development and pathophysiology.

LEARNING OBJECTIVES:

Knowledge:

1. To be able to describe the concepts of embryonic stem cells, induced pluripotent stem cells and hematopoietic stem cells, to define hematopoietic stem cell and bone marrow micro environmental relationship, to summarize the bone marrow structure and function.
2. To be able to define the term bone marrow failure, to sort and list clinical and laboratory findings of the disease, to list the frequently observed causes of bone marrow failure, to be capable of approaching for preliminary and differential diagnosis.
3. To be able to list the causes of anemia which are common in childhood and adulthood, to list clinical and laboratory findings of anemia, to make differential diagnosis between the causes of anemia.
4. To be able to comprehend the physiology of iron-metabolism, to sort the clinical and pathological conditions observed frequently in iron metabolism, to summarize clinical and laboratory findings.
5. To be able to list the etiological factors of iron deficiency anemia, to tell clinical and laboratory findings and to make the differential diagnosis, to learn and comprehend the treatment methods and treatment follow-up, to sort the risk groups for iron deficiency and preventive measures and treatments.
6. To be able to define the concepts of megaloblastic and macrocytosis, to be able to list the etiological factors of megaloblastic anemia and macrocytosis, to be able to describe the absorption, transport and reactions of cobalamin and folic acid that are taking place in megaloblastic anemia physiopathology, to list the pathological and clinical conditions of cobalamin and folic acid metabolism, leading to megaloblastic anemia, the clinical and laboratory findings, the diagnosis and treatment methods, to be able to tell daily requirements for cobalamin and folic acid, to summarize risk groups and preventive measures for cobalamin and folate deficiency.

7. To be able to understand the concepts of coagulation and physiology of fibrinolysis in the context of haemostasis physiology, to classify congenital or acquired primary and secondary hemostasis disorders and list the clinical and laboratory findings, to make differential diagnosis between hemorrhagic disorders, to describe the examination approach to a hemorrhagic patient, and to interpret first-step diagnostic tests.

8. To be able to identify the concepts of haemolysis and haemolytic anemia, to list the etiological factors of haemolysis and to classify the haemolytic anemia appropriately,

to list the differences between immunological and non-immunological hemolytic anomalies, to list the differences between intravascular and extravascular haemolysis, to list diagnostic methods and clinical and laboratory findings of a hemolytic anemia patient, to be able to differentiate between hemolytic anemia and other diseases those may be misdiagnosed.

9. To be able to interpret clinical and laboratory findings of hereditary hemolytic anemia, to explain the physiological role of erythrocyte membrane skeleton, to list and describe the names of crucial membrane proteins, and how deficiency of these proteins would effect the membrane and the shape of the erythrocyte, to interpret the hemolysis mechanisms and the role of spleen in hereditary spherocytosis, to describe clinical and laboratory findings, and, complications of hereditary spherocytosis and elliptocytosis, to describe the clinical manifestation of erythrocyte enzyme deficiencies, to classify the erythrocyte enzyme deficiencies, to list physiopathological, clinical and laboratory features of hereditary hemoglobin disorders and thalassemia syndromes, to comprehend the differential diagnostic and therapeutic methods, to sort and list the preventive techniques.

10. To be able to list the thrombotic events frequently observed in childhood and adulthood, to summarize the physiopathological progress and clinical and laboratory findings of thrombosis, to describe risky factors for thrombosis and preventive measures.

11. To be able to list the blood components and basic properties of these components, to explain the additional procedures applied to the blood components and the necessities of these procedures, to list the indications of the blood component therapy, to describe the basic principles to be followed during the blood component transfusion and the possible adverse effects that can develop.

12. To be able to define myeloproliferative diseases, to understand the pathophysiology of myeloproliferative diseases, to know the clinical and laboratory characteristics of myeloproliferative diseases, to list and explain the required diagnostic test for myeloproliferative diseases and how to interpret the test results, to discriminate myeloproliferative diseases.

13. To be able to classify the pathophysiology of lymphoma, to summarize the clinical and laboratory findings, and, diagnostic methods.

14. To be able to sort the types of plasma cell dyscrasias, to describe the common features and the differences, clinical and laboratory findings, diagnostic methods of diseases in this group.

15. To be able to describe the factors that play a role in the etiopathogenesis of neoplasia, be able to comprehend the cytopathology, genetics and physiopathology of cancer, possess knowledge about basic definitions.

16. To be able to sort and describe the common cancer types, their importance in terms of community health, diagnostic features and early diagnosis methods, to comprehend the importance of early diagnosis.

17. To be able to explain laboratory methods used in cancer diagnosis, be able to list microorganisms which may cause infections in immunosuppressive patients, be able to explain viruses with oncogenic potential and their contributions to pathogenesis.

18. To be able to explain the principles of cancer treatment, pharmacokinetics, pharmacodynamics, effects and complications of chemotherapeutics, to know surgical approaches used in cancer treatment, to explain treatment options with radiotherapy.

19. To be able to explain environmental factors that can affect health (air pollution, water pollution, wastes, etc.), to list cronic diseases and explain the ways of prevention, to be able to define the concept of early diagnosis and be able to list early diagnosis methods for chroic diseases, be able to describe nutrition and health relation.

20. To be able to know normal lymph node histology and basic reactive lymphadenopathy patterns.

21. To be able to identify the lymphadenitis and to list the lymphadenitis types.

22. To be able to list common causes of lymphadenopathy.

23. To be able to classify the lymph node and spleen tumors.

24. To be able to cite the causes that often lead to splenomegaly, to define hypersplenism and list its causes.

25. To be able to know and list the Hodgkin lymphoma etiopathogenesis, histological classification, clinical features and staging.

26. To be able to describe the basic classification of non-Hodgkin's lymphomas and the properties of different types.

27. To be able to distinguish Hodgkin and non-Hodgkin lymphomas.

28. To be able to define neoplasms with histiocytic and dendritic cells.

29. To be able to know the basic features of Langerhans cell histiocytosis.

Skills:

30. To be able to enumerate and apply the diagnostic methods used for the laboratory diagnosis of opportunistic fungal infections, be able to collect samples and apply planting techniques.

Attitude:

31. To be able to comprehend the importance of hematologic and oncologic diseases and to develop a viewpoint of preventive medicine, to be able to define physician identity, deontology, medical ethics, ethics-deontology-law relation

	October 18, 2021 MONDAY	October 19, 2021 TUESDAY	October 20, 2021 WEDNESDAY	October 21, 2021 THURSDAY	October 22, 2021 FRIDAY
08:30-09:15	**YEAR III COURSE I EXAM**	Epidemiology of cancer Dr. A. Uğraş Dikmen	Free Run-Time	Tumor immunology Dr. Ü. Bağrıaçık	Evidence based cancer genetics and cytogenetics Dr. M. Ali Ergün
09:30-10:15		Epidemiology of cancer Dr. A. Uğraş Dikmen	Childhood Cancer and Predisposition To Malignancy Dr. G. Pınarlı	Tumor immunology Dr. Ü. Bağrıaçık	Evidence based cancer genetics and cytogenetics Dr. M. Ali Ergün
10:30-11:15		Etiology and epidemiology of cancer and principals of treatment Dr.O. Yazıcı	The Nomenclature of Tumors Dr. G. Akyol	The etiopathogenesis of cancer D. G. Akyol	General principles of cancer treatment and cytotoxic drugs Dr. S. Barun
11:30-12:15		Early Diagnosis and Cancer screening Dr.O. Yazıcı	The Nomenclature of Tumors Dr. G. Akyol	The etiopathogenesis of cancer D. G. Akyol	General principles of cancer treatment and cytotoxic drugs Dr. S. Barun
13:30-14:15	Free Run-Time	Oncogenic viruses Dr.A.Kalkancı	ELECTIVE COURSE	Tumor growth and heterogeneity D. G. Akyol	**Immune deficiencies** **Dr A. Bakırtaş**
14:30-15:15	Free Run-Time	The epidemiology and etiology of childhood Cancers Dr. Özge Vural	Free Run-Time	Tumor progression D. G. Akyol	Microbiological approach to immunosupressive patients Dr. A. Kalkancı
15:30-16:15	Free Run-Time	Signs and Symptoms of Childhood Cancer Dr. Özge Vural	Free Run-Time	Metastasis Dr. G. Akyol	Viral infection agents in immunosuppressive patients 1: Poliomaviruses and papilloma viruses Dr. M. Yalınay
16:30-17:15	Free Run-Time	Free Run-Time	Free Run-Time	Free Run-Time	
18:00-18:40			MEDİCAL ENGLİSH		

	October 25, 2021 MONDAY	October 26, 2021 TUESDAY	October 27, 2021 WEDNESDAY	October 28, 2021 THURSDAY	October 29, 2021 FRIDAY
08:30-09:15	Free Run-Time	Opportunistic mold infections and pneumocystis Dr. A. Kalkancı	YEAR II COURSE I EXAM	Free Run-Time	**29 OCTOBER HAPPY REPUBLİC DAY**
09:30-10:15	**LABORATORY MICROBIOLOGY**	Opportunistic yeast infections Dr. A. Kalkancı		The metabolism and abnormalities of iron; Iron deficiency Iron overload Dr. Z.A. Yeğin	
10:30-11:15	Free Run-Time	The structure and function of bone marrow Dr. M. Yağcı		The metabolism and abnormalities of iron; Iron deficiency Iron overload Dr. Z.A. Yeğin	
11:30-12:15	Free Run-Time	The structure and function of bone marrow Dr. M. Yağcı		Nuclear Medicine in Oncology and Hematology Dr.L.Ö.Atay	
13:30-14:15	**PROBLEM BASED LEARNİNG (PBL)** **1st SESSİON**	The classification, pathophysiology and diagnosis of anemias Dr. M. Yağcı	ELECTIVE COURSE	**29 OCTOBER HAPPY REPUBLİC DAY**	**29 OCTOBER HAPPY REPUBLİC DAY**
14:30-15:15		The classification, pathophysiology and diagnosis of anemias Dr. M. Yağcı	Free Run-Time		
15:30-16:15		Hemolysis Dr. M.Yağcı	Free Run-Time		
16:30-17:15		Viral infection agents in immunosuppressive patients 2: Retroviruses Dr. F. Doğruman-Al	Free Run-Time		
18:00-18:40			MEDİCAL ENGLİSH		

	November 1, 2021 MONDAY	November 2, 2021 TUESDAY	November 3, 2021 WEDNESDAY	November 4, 2021 THURSDAY	November 5, 2021 FRIDAY
08:30-09:15	Hemostasis and abnormalities Tendency to bleeding Tendency to thrombosis Dr. Z.A. Yeğin	**CLİNİCAL SKİLLS EDUCATİON** **(CSE)**	Free Run-Time	Myeloproliferative disorders Dr. M. Yağcı	Free Run-Time
09:30-10:15	Hemostasis and abnormalities Tendency to bleeding Tendency to thrombosis Dr. Z.A. Yeğin		Thrombosis during childhood Dr. Ü.Koçak	Lymphomas Dr. M. Yağcı	Free Run-Time
10:30-11:15	Approach to anemia during childhood Dr. Ü. Koçak		Basic principles of transfusion Dr. Ü. Koçak	Hemoglobinopathies Dr. D. Aslan	Megaloblastic anemias Dr. Z.A. Yeğin
11:30-12:15	Approach to anemia during childhood Dr. Ü. Koçak		Basic principles of transfusion Dr. Ü. Koçak	Hemoglobinopathies Dr. D. Aslan	Megaloblastic anemias Dr. Z.A. Yeğin
13:30-14:15	**PROBLEM BASED LEARNİNG (PBL)** **2nd SESSİON**	**CLİNİCAL SKİLLS EDUCATİON** **(CSE)**	ELECTIVE COURSE	Approach to patient with hemophilia and bleeding disorders in childhood Dr. Z. Kaya	Radiologic imaging in hematopoietic system diseases Dr. G. Erbaş
14:30-15:15			Free Run-Time	Approach to patient with hemophilia and bleeding disorders in childhood Dr. Z. Kaya	Targeted cancer treatment and monoclonal antibodies Dr. S. Barun
15:30-16:15			Free Run-Time	Drugs used in the treatment of anemia Dr. S. Barun	Free Run-Time
16:30-17:15			Free Run-Time	Free Run-Time	Free Run-Time
18:00-18:40			MEDİCAL ENGLİSH		

	November 8, 2021 MONDAY	November 9, 2021 TUESDAY	November 10, 2021 WEDNESDAY	November 11, 2021 THURSDAY	November 12, 2021 FRIDAY
08:30-09:15	Free Run-Time	Free Run-Time	Free Run-Time	**YEAR III COURSE II EXAM**	**Y**
09:30-10:15	The pathology of lymphadenopathy and splenomegaly Dr. N. Akyürek	Free Run-Time	Free Run-Time		**EAR III COURSE III LESSONS**
10:30-11:15	The pathology of lymphadenopathy and splenomegaly Dr. N. Akyürek	Plasma cell disorders Dr. Z.A. Yeğin	Free Run-Time		
11:30-12:15	The pathology of lymphadenopathy and splenomegaly Dr. N. Akyürek	Bone marrow failure Dr. Z.A. Yeğin	Free Run-Time		
13:30-14:15	**PROBLEM BASED LEARNİNG (PBL)** **3rd SESSİON**	Free Run-Time	ELECTIVE COURSE	Free Run-Time	**YEAR III COURSE III LESSONS**
14:30-15:15		Free Run-Time	Free Run-Time	Free Run-Time	
15:30-16:15		Free Run-Time	Free Run-Time	Free Run-Time	
16:30-17:15		Free Run-Time	Free Run-Time	Free Run-Time	
18:00-18:40			MEDİCAL ENGLİSH		

EXAM
November 11, 2021
09:30 AM