



HEMATOPOIETIC SYSTEM AND RELATED DISORDERS

YEAR 2 COURSE 3

December 29th, 2014 – February 27th, 2015

Coordinator of the Course 2.3 Asist. Prof., Mümtaz GÜRAN	Coordinator of the Module 2.3 Asist. Prof., Mümtaz GÜRAN
Coordinator of Multidisciplinary Students' Lab. Instructor, Dila ŞENER	Coordinator of Clinical Skill Lab. Asist. Prof., Canan ZAIMOĞLU
Coordinator of Assessment Unite Asist. Prof., Ayşe ÜLGEN, Asist. Prof., Mümtaz GÜRAN, Instructor, Dila ŞENER	Coordinator of ICS Res. LAB. Asist. Prof., Ayşe ÜLGEN
Year 2 Coordinators Assoc. Prof., Özgür Kasımay ÇAKIR & Instructor, Burak AKSU	
Module Coordinator Assoc. Prof., Özlem SARIKAYA	Introduction to Clinician Skills(ICS) Coordinators Prof., Sibel SAKARYA, Assoc. Prof., Pemra ÜNALAN
Coordinator of Multidisciplinary Students' Lab. Assoc. Prof., Betül KARADEMİR	Coordinator of Assessment Unite Asist. Prof., Cevdet NACAR
Vice-Chief Coordinators	
Assessment Asist. Prof., Cevdet NACAR	Students' Affairs Asist. Prof., Can ERZİK
Chief Coordinator Assoc. Prof., Hasan YANANLI	Coordinator of Medical Education Program Evaluation and Development Commission Prof., Berrak Ç. YEĞEN
Educational Consultant Assoc. Prof., Mehmet Ali GÜLPINAR	

Dean (EMU)
Prof., Nahide GÖKÇORA

Dean (MU)
Prof., Ömer GÜNAL

LEARNING OUTCOMES / COMPETENCIES

- A. **Clinical Care: Qualified patient care and community oriented health care**
1. Basic clinical skills
 2. The organization and management of the patient and the patient care
 3. The organization and the management of health care delivery services / system
 4. Health promotion and disease prevention
- B. **Medical Knowledge and Evidence-Based Medicine**
5. Appropriate information retrieval and management skills
 6. The integration of knowledge, critical thinking and evidence-based decision making
 7. Scientific methods and basic research skills
- C. **Professional Attitudes and Values**
8. Communication skills and effective communication with patients / patient relatives
 9. Interpersonal relationships and team working
 10. Ethical and professional values, responsibilities
 11. Individual, social and cultural values and responsibilities
 12. Reflective practice and continuing development
 13. Healthcare delivery systems, management and community oriented health care
 14. Education and counseling

PHASE-1 LEARNING OBJECTIVES

1. Understanding the normal structures and functions of human body
2. Correlating the basic concepts and principles to each other that define health and disease; applying basic concepts and principles to health and disease conditions
3. Developing clinical problem solving, clinical reasoning and evaluation skills by integrating biomedical, clinical, social and humanities knowledge
4. Gaining basic clinical skills by applications in simulated settings.
5. Awareness of the professional values in health and disease processes (professional, individual, societal) and acquisition necessary related skills
6. Evaluating critically and synthesizing all the medical evidence and perform respecting scientific, professional and ethical values
7. Acquisition skills in reflective thinking and practicing, being open to continuous individual / professional development.

PHASES – 1 THEMA/ORGAN SYSTEM-BASED COURSE PROGRAMS

Year 1, Course 1: Introduction to Cell and Cellular Replication

Year 1, Course 2: Cellular Metabolism and Transport

Year 1, Course 3: Development and Organization of Human Body

Year 1, Course 4: Introduction to Nervous System and Human Behavior

Year 2, Course 1: Cell and Tissue Injury I

Year 2, Course 2: Cell and Tissue Injury II

Year 2, Course 3: Hematopoietic System and Related Disorders

Year 2, Course 4: Musculoskeletal, Integumentary Systems and Related Disorders

Year 2, Course 5: Respiratory System and Related Disorders

Year 3, Course 1: Cardiovascular System and Related Disorders

Year 3, Course 2: Gastrointestinal System, Metabolism and Related Disorders

Year 3, Course 3: Nervous System and Related Disorders

Year 3, Course : Growth, Development, Mental Health and Related Disorders
Year 3, Course 5: Urinary and Reproductive System and Related Disorders

HEMATOPOIETIC SYSTEM AND RELATED DISORDERS

AIM and LEARNING OBJECTIVES of COURSE

Aim:At the end of this committee, second year students will gain knowledge about the development, structure and physiology of the hematopoietic system and pathogenesis of the disorders related to system. They will also gain knowledge about the signs and symptoms of hematopoietic disorders, related risk factors, prevention, diagnosis, and principles of treatment.

Learning Objectives:At the end of this committee, second year students will,

1. understand the development and histology of the lymphoid organs and blood
2. identify the structure and function of the hematopoietic system
3. define the pathologic processes in hematological disorders
4. gain knowledge about microorganisms affect the hematopoietic system and their pathogenesis in infectious process
5. gain knowledge about the risk groups, risk factors related to hematological disorders and preventive measures
6. gain knowledge about the signs and symptoms of these disorders
7. gain knowledge about the approach to diagnosis, and principles of treatment in hematological disorders
8. define the pharmacotherapy of hematological disorders
9. acquire skills necessary to perform experimental applications.

ASSESSMENT SYSTEM

Module examination: Written exam at the end of the course and performance during the module

Practical examination: Practical exams at the end of course

Course examination: Written exam at the end of course

PROGRAM EVALUATION

Evaluation at the end of the course, is done both orally and by using structured evaluation forms

DEPARTMENTS PARTICIPATING IN COURSE-2.3

- Anatomy
- Biochemistry
- Family Medicine
- Histology and Embryology
- Internal Medicine
- Medical Biology

- Microbiology
- Pathology
- Pediatrics
- Pharmacology
- Physiology
- Public Health

LECTURERS / TUTORS

Alper YILDIRIM, Assist. Professor of Physiology
Atila KARAAALP, Professor of Pharmacology
Ayşe ÜLGEN, Assist. Professor of Biostatistics
Ayşegül KARAHASAN, Professor of Microbiology
Berfu Çerçi ÖNGÜN, Instructor of Anatomy
Betül KARADEMİR, Assoc. Professor of Biochemistry
Can ERZİK, Assist. Professor of Medical Biology
Canan ZAIMOĞLU, Assist. Prof. of Pediatrics
Dila ŞENER, Inst. Histology-Embriology
Dilek Akakin, Assoc. Professor of Histology-Embriology
Emine ÖZERİNÇ, Instructor of School of Foreign Languages and Preparatory School

Naife SEVDALI, Inst, Psychology
Nilgün ÇERİKÇİOĞLU, Professor of Microbiology
Nurver ÜLGER, Professor of Microbiology
Ömer Doğru,
Önder ŞİRİKÇİ, Professor of Biochemistry
Özgür KASIMAY, Assoc. Professor of Physiology
Pemra ÜNALAN, Assoc. Prof. Family Medicine
Pinar ATA, Assoc. Professor of Genetics
Pinar AY, Assoc. Prof. Public Health
Saime BATIREL, Assist. Professor of Biochemistry
Serap ÇİFÇİLİ, Assoc. Prof. Family Medicine
Süheyla BOZKURT, Assoc. Professor of Pathology

Goncagül HAKLAR, Professor of Biochemistry
 Güner SÖYLEDİR, Professor of Microbiology
 İnci ALİCAN, Professor of Physiology
 Işık ATAGÜNDÜZ, Assoc. Prof. Internal Medicine
 Lütfiye MÜLAZIMOĞLU, Professor of Infectious Diseases
 Mehmet AKMAN Assoc. Professor of Family Medicine
 Mümtaz GÜRAN, Assist. Professor of Microbiology

Tayfur TOPTAŞ, Assoc. Professor of Internal Medicine
 Tülin TUĞLULAR, Professor of Internal Medicine
 Ufuk HASDEMİR, Professor of Microbiology
 Ümit ŞEHİRLİ, Professor of Anatomy
 Zafer GÖREN, Professor of Pharmacology

READING / STUDYING MATERIALS

- Manual of Pediatric Hematology & Oncology, Philip Lanzkowsky
- Nathan and Oski's Hematology of Infancy and Childhood, David G. Nathan, Stuart H. Orkin, A. Thomas Look, David Ginsburg.
- Manual of Clinical Hematology, Joseph J Mazza (Lippincott Williams & Wilkins).
- A Color Atlas of Comperative, Diagnostic and Experimental Hematology, C.A. Smith, et al., London, Wolfe, 1994.
- Wintrobe's Clinical Hematology, G. Richard Lee, et al., Philedelphia, Lea &Febiger, 2008.
- KanHastalıkları, B. Berkarda, Istanbul, c.U. BasımveYayınevi, 2003
- Principles of Physiology, Berne & Levy
- Textbook of Physiology, Guyton and Hall
- Clinical Diagnosis and Management by Laboratory Methods, John Bernard Henry (Saunders).
- Medical Microbiology; Patrick R Murray, Michael A. Pfaller, Ken S. Rosenthal.
- Jawetz, Melnick, and Adelberg's Medical Microbiology (Lange Basic Science).
- Basic & Clinical Pharmacology ISBN: 0071410929 Copyright year: 2004 Bertram G Katzung Ninth edition.
- Goodman & Gilman's The Pharmacological Basis of Therapeutics tenth edition (August 13, 2001) McGraw-Hill Professional ISBN-10: 0071354697.
- Aster JC Disease of White Blood Cells, Lymph nodes, spleen. In: Kumar V, Abbas AK, Fausto N(eds). Pathological basis of disease. 7th ed. China: Elsevier Saunders. 2005: 661-705.
- McKenna RW, Maiese RL, Croft SH. Disorders of bone marrow. In Sternberg SS(ed). Diagnostic surgical pathology. 3rd ed. Philadelphia: Lippincott Williams&Wilkins 1999:661-708.

SUMMARY OF THE COURSE 2.3

Discipline	Lecture & Group Discussion	Multidisciplinary Lab. & Clinical Skills Lab. Practice	Total
Anatomy	2	2	4
Biochemistry	11	2	13
Family Medicine	1		1
Histology & Embryology	6	2	8
Infectious Diseases	3		3
Internal Medicine	20	1	21
Medical Biology	2		2
Pathology	5	2	7
Pediatrics	6		6
Pharmacology	8		8
Physiology	5	3	8
Microbiology	9	2	11
Public Health	2		2
Subtotal	80	14	94
PBL Module	8		8

ICS-2: Basic Clinical Skills, Human in Medicine, Students Research Activity	24		24
ELECTIVE-2	10		10
Communication in Turkish (Foreign Students)	12		2
TOTAL	124	14	138

THEORETICAL AND PRACTICAL SESSIONS		LECTURER/TUTOR
1. WEEK (29 December, 2014 – 02 January, 2015)		
Monday	December 29	
08:40-09:30		
09:40-10:30	Introduction to the course and opening lecture	Dr. Dila Şener
10:40-11:30	Biochemical aspect of anemia	Dr. Saime Batirel
11:40-12:30	Biochemical aspect of anemia	Dr. Saime Batirel
13:40-14:30	Structure and function of hemoglobin	Dr. Saime Batirel
14:40-15:30	Structure and function of hemoglobin	Dr. Saime Batirel
15:40-16:30	Structure and function of erythrocytes	Dr. Saime Batirel
16:40-17:30	Structure and function of erythrocytes	Dr. Saime Batirel
Tuesday	December 30	
08:40-09:30	Communication in Turkish-III	Emine Özerinç
09:40-10:30	Communication in Turkish-III	Emine Özerinç
10:40-11:30		
11:40-12:30		
13:40-14:30	Structure and function of white blood cells	Dr. Goncagül Haklar
14:40-15:30	Structure and function of white blood cells	Dr. Goncagül Haklar
15:40-16:30	Biochemistry of blood coagulation and fibrinolysis	Dr. Goncagül Haklar
16:40-17:30	Biochemistry of blood coagulation and fibrinolysis	Dr. Goncagül Haklar
Wednesday	December 31	
08:40-09:30	STUDY TIME	
09:40-10:30	STUDY TIME	
10:40-11:30	Communication in Turkish-III	Emine Özerinç
11:40-12:30	Communication in Turkish-III	Emine Özerinç
13:40-14:30	STUDY TIME	
14:40-15:30	STUDY TIME	
15:40-16:30	STUDY TIME	
16:40-17:30	STUDY TIME	
Thursday	January 01	

08:40-09:30	HOLIDAY	
09:40-10:30		
10:40-11:30		
11:40-12:30		
13:40-14:30		
14:40-15:30		
15:40-16:30		
16:40-17:30		
Friday	January 02	
08:40-09:30	STUDY TIME	
09:40-10:30	STUDY TIME	
10:40-11:30	Communication in Turkish-III	Emine Özerinç
11:40-12:30	Communication in Turkish-III	Emine Özerinç
13:40-14:30	Molecular basis of hemoglobinopathies	Dr. Can Erzik
14:40-15:30	DNA diagnosis of hemaglobinopathies	Dr. Can Erzik
15:40-16:30	STUDY TIME	
16:40-17:30	STUDY TIME	
2. WEEK (05 January, 2015 – 9 January, 2015)		
Monday	January 05	
08:40-09:30	STUDY TIME	
09:40-10:30	STUDY TIME	
10:40-11:30	Anatomy of lymphoid organs	Dr. Ümit Şehirli
11:40-12:30	Lymphoid circulation	Dr. Ümit Şehirli
13:40-14:30	Anatomy LAB: Anatomy of lymphoid organs	Dr. Ümit Şehirli& Dr. Berfu Çerçi Öngün
14:40-15:30	Anatomy LAB: Anatomy of lymphoid organs	Dr. Ümit Şehirli& Dr. Berfu Çerçi Öngün
15:40-16:30	Histology of blood	Dr. Dila Şener
16:40-17:30	Histology of blood	Dr. Dila Şener
Tuesday	January 06	
08:40-09:30	STUDY TIME	
09:40-10:30	STUDY TIME	
10:40-11:30	STUDY TIME	
11:40-12:30	STUDY TIME	
13:40-14:30	Constituents of blood	Dr. Önder Şirikçi
14:40-15:30	Biochemistry LAB: Examination of red blood cells	Dr. Betül Karademir- Dr.Saime Batirel

15:40-16:30	Biochemistry LAB: Examination of red blood cells	Dr. Betül Karademir- Dr.Saime Batirel
16:40-17:30	STUDY TIME	
Wednesday	January 07	
08:40-09:30	Hematopoiesis	Dr. Dilek Akakın
09:40-10:30	Lymphoid organs	Dr. Dilek Akakın
10:40-11:30	Lymphoid organs	Dr. Dilek Akakın
11:40-12:30	Development of lymphoid organs	Dr. Dilek Akakın
13:40-14:30	Histology LAB: Blood and Lymphoid organs	Dr. Dilek Akakın-Dr. Dila Şener
14:40-15:30	Histology LAB: Blood and Lymphoid organs	Dr. Dilek Akakın-Dr. Dila Şener
15:40-16:30		
16:40-17:30		
Thursday	January 08	
08:40-09:30	STUDY TIME	
09:40-10:30		
10:40-11:30		
11:40-12:30	Genetics of hematological disorders	Dr. Pınar Ata
13:40-14:30	White and red blood cells	Dr. Özgür Kasımay Çakır
14:40-15:30	White and red blood cells	Dr. Özgür Kasımay Çakır
15:40-16:30	Blood Groups	Dr. Özgür Kasımay Çakır
16:40-17:30	STUDY TIME	
Friday	January 09	
08:40-09:30	ELECTIVE-2	
09:40-10:30	ELECTIVE-2	
10:40-11:30	Platelets: Coagulation and fibrinolysis	Dr. İnci Alican
11:40-12:30	Platelets: Coagulation and fibrinolysis	Dr. İnci Alican
13:40-14:30	Physiology LAB: Blood Physiology	Dr. Özgür Kasımay Çakır - Dr. Alper Yıldırım
14:40-15:30	Physiology LAB: Blood Physiology	Dr. Özgür Kasımay Çakır - Dr. Alper Yıldırım
15:40-16:30	Physiology LAB: Blood Physiology	Dr. Özgür Kasımay Çakır - Dr. Alper Yıldırım
16:40-17:30	STUDY TIME	
3. WEEK (12 January, 2015 – 16 January, 2015)		
Monday	January 12	
08:40-09:30	Pathology of bone marrow	Dr. Süheyla Bozkurt

09:40-10:30	Pathology of bone marrow	Dr. Süheyla Bozkurt
10:40-11:30	Pathology of lymphatic nodule and spleen	Dr. Süheyla Bozkurt
11:40-12:30	Pathology of lymphatic nodule and spleen	Dr. Süheyla Bozkurt
13:40-14:30	Pathology of lymphatic nodule and spleen	Dr. Süheyla Bozkurt
14:40-15:30	Pathology LAB: Pathology of bone marrow and lymphoid tissues	Dr. Süheyla Bozkurt
15:40-16:30	Pathology LAB: Pathology of bone marrow and lymphoid tissues	Dr. Süheyla Bozkurt
16:40-17:30	STUDY TIME	
Tuesday	January 13	
08:40-09:30	STUDY TIME	
09:40-10:30	General principles of medical toxicology	Dr. Atila Karaalp
10:40-11:30	Bone marrow toxicity of drugs	Dr. Atila Karaalp
11:40-12:30	ELECTIVE-2	
13:40-14:30	ELECTIVE-2	
14:40-15:30	ELECTIVE-2	
15:40-16:30	Introduction to hemolytic anemia's of and mechanism of hemolysis	Dr. Ömer Doğru
16:40-17:30	Hemolytic anemia's due to membrane and enzyme defects	Dr. Ömer Doğru
Wednesday	January 14	
08:40-09:30	STUDY TIME	
09:40-10:30	STUDY TIME	
10:40-11:30	Sickle cell disease	Dr. Ömer Doğru
11:40-12:30	Thalassemias	Dr. Ömer Doğru
13:40-14:30	Hemophilia	Dr. Ömer Doğru
14:40-15:30	Quantitative disorders of platelets	Dr. Ömer Doğru
15:40-16:30	STUDY TIME	
16:40-17:30	STUDY TIME	
Thursday	January 15	
08:40-09:30	Malaria and other infections due to blood and tissue protozoa - 1	Dr. Nurver Ülger
09:40-10:30	Malaria and other infections due to blood and tissue protozoa - 2	Dr. Nurver Ülger
10:40-11:30	Multi-system zoonosis including tuleremia and brucellosis	Dr. Güner Söyledir
11:40-12:30	Multi-system zoonosis including tuleremia and brucellosis	Dr. Güner Söyledir
13:40-14:30	Microbiology LAB: Diagnosis of hematopoietic system infections	Dr. Nurver Ülger - Dr. Mümtaz Güran
14:40-15:30	Microbiology LAB: Diagnosis of hematopoietic system infections	Dr. Nurver Ülger - Dr. Mümtaz Güran
15:40-16:30		
16:40-17:30		

Friday	January 16	
08:40-09:30	STUDY TIME	
09:40-10:30	Toxoplasmosis	Dr. Ufuk Hasdemir
10:40-11:30	Systemic fungal infections	Dr. Nilgün Çerikçioğlu
11:40-12:30	Systemic fungal infections	Dr. Nilgün Çerikçioğlu
13:40-14:30	Vector borne diseases	Dr. Ayşegül Karahasan
14:40-15:30	Vector borne diseases	Dr. Ayşegül Karahasan
15:40-16:30		
16:40-17:30	STUDY TIME	
4. WEEK (19 January, 2015 – 23 January, 2015)		
Monday	January 19	
08:40-09:30	STUDY TIME	
09:40-10:30	Infections in immunocompromised host	Dr. Lütfiye Mülazımoğlu
10:40-11:30	Sepsis	Dr. Lütfiye Mülazımoğlu
11:40-12:30	Infectious mononucleosis	Dr. Lütfiye Mülazımoğlu
13:40-14:30	STUDY TIME	
14:40-15:30	STUDY TIME	
15:40-16:30	STUDY TIME	
16:40-17:30	STUDY TIME	
Tuesday	January 20	
08:40-09:30	STUDY TIME	
09:40-10:30	ICS-2: History Taking and Introduction to Physical Examination Course	Dr. Pemra C. Ünalın-Dr. Serap Çiftçili -Dr. Canan Zaimoğlu, Dr. Berfu Çerçi Öngün
10:40-11:30	ICS-2: History Taking and Introduction to Physical Examination Course	Dr. Pemra C. Ünalın-Dr. Serap Çiftçili -Dr. Canan Zaimoğlu, Dr. Berfu Çerçi Öngün
11:40-12:30	ICS-2: History Taking and Introduction to Physical Examination Course	Dr. Pemra C. Ünalın-Dr. Serap Çiftçili -Dr. Canan Zaimoğlu, Dr. Berfu Çerçi Öngün
13:40-14:30	ICS-2: History Taking and Introduction to Physical Examination Course	Dr. Pemra C. Ünalın-Dr. Serap Çiftçili -Dr. Canan Zaimoğlu, Dr. Berfu Çerçi Öngün
14:40-15:30	ICS-2: History Taking and Introduction to Physical Examination Course	Dr. Pemra C. Ünalın-Dr. Serap Çiftçili -Dr. Canan Zaimoğlu, Dr. Berfu Çerçi Öngün

15:40-16:30	ICS-2: History Taking and Introduction to Physical Examination Course	Dr. Pemra C. Ünalán-Dr. Serap Çiftçili -Dr. Canan Zaimođlu, Dr. Berfu Çerçi Öngün
16:40-17:30	ELECTIVE-2	
Wednesday	January 21	
08:40-09:30		
09:40-10:30	ICS-2: History Taking and Introduction to Physical Examination Course	Dr. Pemra C. Ünalán-Dr. Serap Çiftçili -Dr. Canan Zaimođlu, Dr. Berfu Çerçi Öngün
10:40-11:30	ICS-2: History Taking and Introduction to Physical Examination Course	Dr. Pemra C. Ünalán-Dr. Serap Çiftçili -Dr. Canan Zaimođlu, Dr. Berfu Çerçi Öngün
11:40-12:30	ICS-2: History Taking and Introduction to Physical Examination Course	Dr. Pemra C. Ünalán-Dr. Serap Çiftçili -Dr. Canan Zaimođlu, Dr. Berfu Çerçi Öngün
13:40-14:30	ICS-2: History Taking and Introduction to Physical Examination Course	Dr. Pemra C. Ünalán-Dr. Serap Çiftçili -Dr. Canan Zaimođlu, Dr. Berfu Çerçi Öngün
14:40-15:30	ICS-2: History Taking and Introduction to Physical Examination Course	Dr. Pemra C. Ünalán-Dr. Serap Çiftçili -Dr. Canan Zaimođlu, Dr. Berfu Çerçi Öngün
15:40-16:30	ICS-2: History Taking and Introduction to Physical Examination Course	Dr. Pemra C. Ünalán-Dr. Serap Çiftçili -Dr. Canan Zaimođlu, Dr. Berfu Çerçi Öngün
16:40-17:30	STUDY TIME	
Thursday	January 22	
08:40-09:30	STUDY TIME	
09:40-10:30	ICS-2: History Taking and Introduction to Physical Examination Course	Dr. Pemra C. Ünalán-Dr. Serap Çiftçili -Dr. Canan Zaimođlu, Dr. Berfu Çerçi Öngün
10:40-11:30	ICS-2: History Taking and Introduction to Physical Examination Course	Dr. Pemra C. Ünalán-Dr. Serap Çiftçili -Dr. Canan Zaimođlu, Dr. Berfu Çerçi Öngün
11:40-12:30	ICS-2: History Taking and Introduction to Physical Examination Course	Dr. Pemra C. Ünalán-Dr. Serap Çiftçili -Dr. Canan Zaimođlu, Dr. Berfu Çerçi Öngün

13:40-14:30	ICS-2: History Taking and Introduction to Physical Examination Course	Dr. Pemra C. Ünalán-Dr. Serap Çiftçili -Dr. Canan Zaimoğlu, Dr. Berfu Çerçi Öngün
14:40-15:30	ICS-2: History Taking and Introduction to Physical Examination Course	Dr. Pemra C. Ünalán-Dr. Serap Çiftçili -Dr. Canan Zaimoğlu, Dr. Berfu Çerçi Öngün
15:40-16:30	ICS-2: History Taking and Introduction to Physical Examination Course	Dr. Pemra C. Ünalán-Dr. Serap Çiftçili -Dr. Canan Zaimoğlu, Dr. Berfu Çerçi Öngün
16:40-17:30	STUDY TIME	
Friday	January 23	
08:40-09:30	STUDY TIME	
09:40-10:30	ICS-2: History Taking and Introduction to Physical Examination Course	Dr. Pemra C. Ünalán-Dr. Serap Çiftçili -Dr. Canan Zaimoğlu, Dr. Berfu Çerçi Öngün
10:40-11:30	ICS-2: History Taking and Introduction to Physical Examination Course	Dr. Pemra C. Ünalán-Dr. Serap Çiftçili -Dr. Canan Zaimoğlu, Dr. Berfu Çerçi Öngün
11:40-12:30	ICS-2: History Taking and Introduction to Physical Examination Course	Dr. Pemra C. Ünalán-Dr. Serap Çiftçili -Dr. Canan Zaimoğlu, Dr. Berfu Çerçi Öngün
13:40-14:30	ICS-2: History Taking and Introduction to Physical Examination Course	Dr. Pemra C. Ünalán-Dr. Serap Çiftçili -Dr. Canan Zaimoğlu, Dr. Berfu Çerçi Öngün
14:40-15:30	ICS-2: History Taking and Introduction to Physical Examination Course	Dr. Pemra C. Ünalán-Dr. Serap Çiftçili -Dr. Canan Zaimoğlu, Dr. Berfu Çerçi Öngün
15:40-16:30	ICS-2: History Taking and Introduction to Physical Examination Course	Dr. Pemra C. Ünalán-Dr. Serap Çiftçili -Dr. Canan Zaimoğlu, Dr. Berfu Çerçi Öngün
16:40-17:30	STUDY TIME	
5. WEEK (09 February, 2015 – 13 February, 2015)		
Monday	February 09	
08:40-09:30	Classification and clinical approach to anemia	Dr. Işık Atagündüz
09:40-10:30	Megaloblastic anemias	Dr. Işık Atagündüz
10:40-11:30	PBL-MODULE 1	Dr. Işık Atagündüz-Dr. Mümtaz Güran- Dr. Dila Şener- Dr. Ayşe Ülgen- Dr. Canan Zaimoğlu - Dr. Naife Sevdalı

11:40-12:30	PBL-MODULE 1	Dr. Işık Atagündüz-Dr. Mümtaz Güran- Dr. Dila Şener- Dr. Ayşe Ülgen- Dr. Canan Zaimoğlu - Dr. Naife Sevdalı
13:40-14:30	Immune hemolytic anemias	Dr. Işık Atagündüz
14:40-15:30	Non-immune acquired hemolytic anemias	Dr. Işık Atagündüz
15:40-16:30	Communication in Turkish-III	Emine Özerinç
16:40-17:30	Communication in Turkish-III	Emine Özerinç
Tuesday	February 10	
08:40-09:30	Blood transfusion indications and complications	Dr. Işık Atagündüz
09:40-10:30	Multiple myeloma and other paraproteinemias	Dr. Işık Atagündüz
10:40-11:30	Transfusion medicine: Blood components	Dr. Tayfur Toptaş
11:40-12:30	Reading blood smear (slide show)	Dr. Tayfur Toptaş
13:40-14:30	PBL RESEARCH	
14:40-15:30	ELECTIVE-2	
15:40-16:30	ELECTIVE-2	
16:40-17:30	PBL RESEARCH	
Wednesday	February 11	
08:40-09:30	Epidemiology of diseases spread by arthropod vectors	Dr. Pınar Ay
09:40-10:30	Epidemiology of diseases spread by arthropod vectors	Dr. Pınar Ay
10:40-11:30	PBL-MODULE 2	Dr. Pınar Ay-Dr. Mümtaz Güran- Dr. Dila Şener- Dr. Ayşe Ülgen- Dr. Canan Zaimoğlu - Dr. Naife Sevdalı
11:40-12:30	PBL-MODULE 2	Dr. Pınar Ay-Dr. Mümtaz Güran- Dr. Dila Şener- Dr. Ayşe Ülgen- Dr. Canan Zaimoğlu - Dr. Naife Sevdalı
13:40-14:30	Introduction to hematology, stem cell, and hematopoiesis	Dr. Tülin Tuğlular
14:40-15:30	Iron metabolism and iron deficiencies	Dr. Tülin Tuğlular
15:40-16:30	Aplastic anemia	Dr. Tülin Tuğlular
16:40-17:30	PBL RESEARCH	
Thursday	February 12	
08:40-09:30	PBL RESEARCH	
09:40-10:30	Thrombocytopenias and Immune Thrombocytopenic Purpura	Dr. Tülin Tuğlular
10:40-11:30	Myelodysplastic syndrome	Dr. Tülin Tuğlular
11:40-12:30	Acquired and congenital thrombophilias	Dr. Tülin Tuğlular

13:40-14:30	Myeloproliferative disorders: CML, Polycythemia Vera, essential thrombocytosis and primary myelofibrosis	Dr. Tülin Tuğlular
14:40-15:30	Myeloproliferative disorders: CML, Polycythemia Vera, essential thrombocytosis and primary myelofibrosis	Dr. Tülin Tuğlular
15:40-16:30	PBL RESEARCH	
16:40-17:30	PBL RESEARCH	
Friday	February 13	
08:40-09:30		
09:40-10:30	Chronic lymphocytic leukemia's (CLL)	Dr. Tülin Tuğlular
10:40-11:30	Acute leukemia's: Classification and molecular aspect	Dr. Tülin Tuğlular
11:40-12:30	Acute leukemia's: Classification and molecular aspect	Dr. Tülin Tuğlular
13:40-14:30	Hodgkin disease and non-Hodgkin lymphomas	Dr. Tülin Tuğlular
14:40-15:30	Hodgkin disease and non-Hodgkin lymphomas	Dr. Tülin Tuğlular
15:40-16:30	PBL RESEARCH	
16:40-17:30	PBL RESEARCH	
6. WEEK (16 February, 2015 –20 February, 2015)		
Monday	February 16	
08:40-09:30	STUDY TIME	
09:40-10:30	(Case) An adult patient with lymphadenopathies	Dr. Mehmet Akman
10:40-11:30	PBL-MODULE 3	Dr. Mehmet Akman-Dr. Mümtaz Güran- Dr. Dila Şener- Dr. Ayşe Ülgen- Dr. Canan Zaimoğlu - Dr. Naife Sevdalı
11:40-12:30	PBL-MODULE 3	Dr. Mehmet Akman-Dr. Mümtaz Güran- Dr. Dila Şener- Dr. Ayşe Ülgen- Dr. Canan Zaimoğlu - Dr. Naife Sevdalı
13:40-14:30	STUDY TIME	
14:40-15:30	STUDY TIME	
15:40-16:30	Communication in Turkish-III	Emine Özerinç
16:40-17:30	Communication in Turkish-III	Emine Özerinç
Tuesday	February 17	
08:40-09:30	PBL RESEARCH	
09:40-10:30	PBL RESEARCH	
10:40-11:30	PBL RESEARCH	
11:40-12:30	PBL RESEARCH	

13:40-14:30	Pharmacotherapy of malaria	Dr. Zafer Gören
14:40-15:30	Pharmacotherapy of anemia	Dr. Zafer Gören
15:40-16:30	ELECTIVE-2	
16:40-17:30	ELECTIVE-2	
Wednesday	February 18	
08:40-09:30	STUDY TIME	
09:40-10:30	Pharmacotherapy of anemia	Dr. Zafer Gören
10:40-11:30	PBL-MODULE 4	Dr. Zafer Gören-Dr. Mümtaz Güran- Dr. Dila Şener- Dr. Ayşe Ülgen- Dr. Canan Zaimoğlu - Dr. Naife Sevdalı
11:40-12:30	PBL-MODULE 4	Dr. Zafer Gören-Dr. Mümtaz Güran- Dr. Dila Şener- Dr. Ayşe Ülgen- Dr. Canan Zaimoğlu - Dr. Naife Sevdalı
13:40-14:30	Hematopoietic agents: growth factors	Dr. Zafer Gören
14:40-15:30	Heavy metals and antagonists	Dr. Zafer Gören
15:40-16:30	Anticancer Chemotherapy	Dr. Zafer Gören
16:40-17:30	STUDY TIME	
Thursday	February 19	
08:40-09:30	STUDY TIME	
09:40-10:30	STUDY TIME	
10:40-11:30	Communication in Turkish-III	Emine Özerinç
11:40-12:30	Communication in Turkish-III	Emine Özerinç
13:40-14:30	STUDY TIME	
14:40-15:30	STUDY TIME	
15:40-16:30	STUDY TIME	
16:40-17:30		
Friday	February 20	
08:40-09:30	STUDY TIME	
09:40-10:30	STUDY TIME	
10:40-11:30	STUDY TIME	
11:40-12:30	STUDY TIME	
13:40-14:30	STUDY TIME	
14:40-15:30	STUDY TIME	
15:40-16:30	STUDY TIME	

16:40-17:30	STUDY TIME	
7. WEEK (23 February, 2015 – 27 February, 2015)		
Monday	February 23	
08:40-09:30	PRACTICAL EXAM	
09:40-10:30		
10:40-11:30		
11:40-12:30		
13:40-14:30		
14:40-15:30		
15:40-16:30		
16:40-17:30		
Tuesday	February 24	
08:40-09:30	PRACTICAL EXAM	
09:40-10:30		
10:40-11:30		
11:40-12:30		
13:40-14:30		
14:40-15:30		
15:40-16:30		
16:40-17:30		
Wednesday	February 25	
08:40-09:30		
09:40-10:30		
10:40-11:30		
11:40-12:30		
13:40-14:30		
14:40-15:30		
15:40-16:30		
16:40-17:30		
Thursday	February 26	
08:40-09:30		
09:40-10:30	THEORETICAL EXAM	
10:40-11:30		
11:40-12:30		
13:40-14:30		

14:40-15:30		
15:40-16:30		
16:40-17:30		
Friday	February 27	
08:40-09:30		
09:40-10:30		
10:40-11:30		
11:40-12:30		
13:40-14:30		
14:40-15:30		
15:40-16:30		
16:40-17:30		