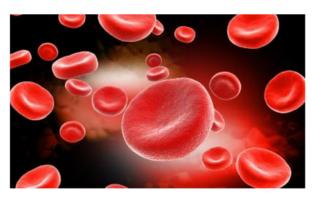


MARMARA UNIVERSITY – EASTERN MEDITERRANEAN UNIVERSITY INTERNATIONAL MEDICAL SCHOOL





HEMATOPOIETIC SYSTEM AND RELATED DISORDERS YEAR 2 COURSE 3

December 17th, 2018 – February 15th, 2019

Year 2 Coordinators		
Assoc. Prof., Özgür Kasımay ÇAKIR & Assist. Prof., Burak AKSU & Dr. Masoud AFSHANI		
Module Coordinators Introduction to Clinician Skills (ICS) Coordinat		
Assoc. Prof., Özlem SARIKAYA & Inst. Berfu Çerçi ONGUN	Assoc. Prof., Pemra ÜNALAN & Assist. Prof., Bülent SEZGIN	
Coordinators of Clinical Skill Lab.	Coordinators of ICS Res. Lab.	
A ssoc. Prof., Pemra ÜNALAN & Assist. Prof., Bülent Sezgin	Prof., Sibel SAKARYA & Assist. Prof., İlke AKÇAY	
Coordinators of Multidiciplinary Students' Lab.	Cooordinators of Assessment Unite	
Assoc. Prof., Betül KARADEMİR & Assist. Prof., Mümtaz GÜRAN	Asisst. Prof., Cevdet NACAR & Assist. Prof., H. Eren SAKALLI	
Vice-Chief C	oordinators	
Assessment Students' Affairs		
Asisst. Prof., Cevdet NACAR & Assist. Prof., H. Eren SAKALLI	Asisst. Prof., Can ERZİK & Assist. Prof., İlke AKÇAY & Assist. Prof., Mümtaz GÜRAN	
Chief Coordinators	Coordinator of Medical Education Program	
Assoc. Prof., Hasan YANANLI & Assist. Prof., Mümtaz	Evaluation and Development Commission	
GÜRAN	Prof., Berrak Ç. YEĞEN	
Educational Consultant		
Assoc. Prof., Mehmet Ali GÜLPINAR		
Dean (EMU)	Dean (MU)	
Prof., Nahide GÖKÇORA	Prof., Hakan GÜNDÜZ	

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

- Medical Genetics
- Microbiology
- Pathology
- Pharmacology
- Physiology
- Public Health

LECTURERS / TUTORS

Ahmet TOPUZOĞLU, Assoc. Professor of Public Health Alper YILDIRIM, Assoc. Professor of Physiology Berfu Çerçi ÖNGÜN, Instructor of Anatomy Bülent SEZGİN, Assist. Professor of Internal Medicine Burak AKSU, Assist. Professor of Microbiology Can ERZİK, Assist. Professor of Medical Biology Cemal GÜRKAN, Instructor of Forensic Sciences Emine ÖZERİNÇ, Instructor of School of Foreign Languages and Preparotary School Eren SAKALLI, Assist. Professor of Pharmacology Ergül MUTLU ALTUNDAĞ, Asisst. Professor of Biochemistry Goncagül HAKLAR, Professor of Biochemistry Kemal TÜRKÖZ, Assoc. Professor of Pathology Nurver ÜLGER, Professor of Microbiology

Masoud AFSHANİ, Assist. Professor of Histology and Embryology

Nilgün ÇERİKÇİOĞLU, Professor of Microbiology Mehmet AKMAN Assoc. Professor of Family Medicine Mümtaz GÜRAN, Assist. Professor of Microbiology Nurtane KARAGİL, Instructor of Arts and Crafts Özgür KASIMAY, Assoc. Professor of Physiology Özlem Tuğçe KAYA, Instructor of Histology and Embryology

Pınar ATA, Assoc. Professor of Medical Genetics Saime BATIREL, Assist. Professor of Biochemistry Şefik Görkey, Prof. Of Medical History and Ethics Tayfur Toptaş, Assist. Professor of Internal medicine Uluhan SİLİ, Assist. Professor of Infectious Diseases Ümit ŞEHİRLİ, Professor of Anatomy

Y2C3 Last update: January 16th 2019

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, 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	13	2	15
Family Medicine	1		1
Histology & Embryology	6	2	8
Infectious Diseases	3		3
Internal Medicine	26		26
Medical Biology	2		2
Medical Genetics	2		2
Pathology	5	1	6
Pharmacology	6		6
Physiology	5	2	7
Microbiology	6	2	8
Public Health	2		2
Subtotal	77	11	85
PBL Module	8		8
ICS-2: HTX and ICE Exam	2	6	8
ICS-2: HIM-Arts and Humanities	12		12
ICS-2: HIM-Social Concepts in Medicine	14		14
ICS-2: HIM-Ethics	12		12
Turkish For Medical Students-III	24		24
Turkish For Medical Students-III (Interactive Session)	0		0
Elective Course-II MDCN181 MDCN182 MDCN184	8		8
TOTAL	151	17	168

	Week 1 (17 th -21 th December 2018)	
Monday	17 December	
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	Turkish For Medical Students-III (Foreign Students)	Inst. Emine Özerinç
14:40-15:30	Turkish For Medical Students-III (Foreign Students)	Inst. Emine Özerinç
15:40-16-30	Turkish For Medical Students-III (Foreign Students)	Inst. Emine Özerinç
16:40-17:30	Turkish For Medical Students-III (Foreign Students)	Inst. Emine Özerinç
Tuesday	18 December	
08:40-09:30	Introduction to the course and opening lecture	Dr. Masoud Afshani
09:40-10:30	Anatomy of lymphoid organs	Dr. Ümit Şehirli
10:40-11:30	Lymphoid circulation	Dr. Ümit Şehirli
11:40-12:30	STUDY TIME	
13:40-14:30	Anatomy LAB: Anatomy of lymphoid organs	Dr. Ümit Şehirli, Dr. Berfu Çerçi Ongun
14:40-15:30	Anatomy LAB: Anatomy of lymphoid organs	Dr. Ümit Şehirli, Dr. Berfu Çerçi Ongun
15:40-16-30	Constituents of blood	Dr. Ergül Mutlu Altundağ
16:40-17:30	STUDY TIME	
Wednesday	19 December	
08:40-09:30	STUDY TIME	
09:40-10:30	STUDY TIME	
10:40-11:30	Biochemistry of blood coagulation and fibrinolysis	Dr. Goncagül Haklar
11:40-12:30	Biochemistry of blood coagulation and fibrinolysis	Dr. Goncagül Haklar
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	20 December	
08:40-09:30	Histology of blood	Dr. Özlem Tuğçe Kaya
09:40-10:30	Histology of blood	Dr. Özlem Tuğçe Kaya
10:40-11:30	Lymphoid organs	Dr. Özlem Tuğçe Kaya
11:40-12:30	Lymphoid organs	Dr. Özlem Tuğçe Kaya

13:40-14:30	Histology LAB: Blood and Lymphoid organs - Group A	Dr. Özlem Tuğçe Kaya, Dr. Masoud Afshani
14:40-15:30	Histology LAB: Blood and Lymphoid organs - Group A	Dr. Özlem Tuğçe Kaya, Dr. Masoud Afshani
15:40-16-30	Histology LAB: Blood and Lymphoid organs - Group B	Dr. Özlem Tuğçe Kaya, Dr. Masoud Afshani
16:40-17:30	Histology LAB: Blood and Lymphoid organs - Group B	Dr. Özlem Tuğçe Kaya, Dr. Masoud Afshani
Friday	21 December	
08:40-09:30		
09:40-10:30	VACA THEODITICAL EVANA	
10:40-11:30	Y3C2 THEORITICAL EXAM	
11:40-12:30		
13:40-14:30	Hematopoiesis	Dr. Masoud Afshani
14:40-15:30	Development of lymphoid organs	Dr. Masoud Afshani
15:40-16-30	Structure and function of white blood cells	Dr. Ergül Mutlu Altundağ
16:40-17:30	Structure and function of white blood cells	Dr. Ergül Mutlu Altundağ
	Week 2 (24 th -28 th December 2018)	
Monday	24 December	
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	Turkish For Medical Students-III (Foreign Students)	Inst. Emine Özerinç
14:40-15:30	Turkish For Medical Students-III (Foreign Students)	Inst. Emine Özerinç
15:40-16-30	Turkish For Medical Students-III (Foreign Students)	Inst. Emine Özerinç
	Elective Course-II (Turkish Students) MDCN181 Forensic Sciences MDCN182 Art & Craft for Medicine Students	Dr. Cemal Gürkan Inst. Nurtane Karagil
	MDCN186 Modern Indian Dance	Inst. Hande Tuğcan
16:40 17:20	MDCN187 Aerial Fitness and High Intensity Interval Training	Inst. Yasemin Kurtoğlu
16:40-17:30	Turkish For Medical Students-III (Foreign Students)	Inst. Emine Özerinç
	Elective Course-II (Turkish Students) MDCN181 Forensic Sciences	Dr. Cemal Gürkan
	MDCN182 Art & Craft for Medicine Students	Inst. Nurtane Karagil
	MDCN186 Modern Indian Dance	Inst. Hande Tuğcan
	MDCN187 Aerial Fitness and High Intensity Interval Training	Inst. Yasemin Kurtoğlu
Tuesday	25 December	
08:40-09:30	CHRISTMAS DAY	
09:40-10:30	CHRISTMAS DAY	
10:40-11:30	CHRISTMAS DAY	
11:40-12:30	CHRISTMAS DAY	

13:40-14:30	CHRISTMAS DAY	
14:40-15:30	CHRISTMAS DAY	
15:40-16-30	CHRISTMAS DAY	
16:40-17:30	CHRISTMAS DAY	
Wednesday	26 December	
08:40-09:30	ICS-2: HIM-Arts and Humanities	Dr. Mehmet Akman, Dr. Bülent Sezgin
09:40-10:30	ICS-2: HIM-Arts and Humanities	Dr. Mehmet Akman, Dr. Bülent Sezgin
10:40-11:30	ICS-2: HIM-Arts and Humanities	Dr. Mehmet Akman, Dr. Bülent Sezgin
11:40-12:30	ICS-2: HIM-Arts and Humanities	Dr. Mehmet Akman, Dr. Bülent Sezgin
13:40-14:30	ICS-2: HIM-Arts and Humanities	Dr. Mehmet Akman, Dr. Bülent Sezgin
14:40-15:30	ICS-2: HIM-Arts and Humanities	Dr. Mehmet Akman, Dr. Bülent Sezgin
15:40-16-30	ICS-2: HIM-Arts and Humanities	Dr. Mehmet Akman, Dr. Bülent Sezgin
16:40-17:30	ICS-2: HIM-Arts and Humanities	Dr. Mehmet Akman, Dr. Bülent Sezgin
Th	27 Becomber	
Thursday	27 December	Dr. Mahmat Akman
08:40-09:30	ICS-2: HIM-Arts and Humanities	Dr. Mehmet Akman, Dr. Bülent Sezgin
09:40-10:30	ICS-2: HIM-Arts and Humanities	Dr. Mehmet Akman, Dr. Bülent Sezgin
10:40-11:30	ICS-2: HIM-Arts and Humanities	Dr. Mehmet Akman, Dr. Bülent Sezgin
11:40-12:30	ICS-2: HIM-Arts and Humanities	Dr. Mehmet Akman, Dr. Bülent Sezgin
13:40-14:30	(Case) An adult patient with lymphadenopathies	Dr. Mehmet Akman
14:40-15:30	PBL-MODULE 1	Dr. Eren Sakallı, Dr.
15:40-16-30	PBL-MODULE 1	Ergül Altundağ, Dr. Maryam Norouzbahari
16:40-17:30	STUDY TIME	
Friday	28 December	
08:40-09:30	Systemic fungal infections	Dr. Nilgün Çerikçioğlu
09:40-10:30	Systemic fungal infections	Dr. Nilgün Çerikçioğlu
10:40-11:30	Malaria and other infections due to blood and tissue protozoa	Dr. Nurver Ülger
11:40-12:30	Malaria and other infections due to blood and tissue protozoa	Dr. Nurver Ülger

13:40-14:30	Toxoplasmosis	Dr. Nurver Ülger
14:40-15:30	Microbiology LAB: Diagnosis of hematopoietic system infections	Dr. Nurver Ülger, Dr. Mümtaz Güran
15:40-16-30	Microbiology LAB: Diagnosis of hematopoietic system infections	Dr. Nurver Ülger, Dr. Mümtaz Güran
16:40-17:30	STUDY TIME	
	Week 3 (31 th December 2018 - 04 th January 2019)	
Monday	31 December	
08:40-09:30	NEW YEAR'S EVE	
09:40-10:30	NEW YEAR'S EVE	
10:40-11:30	NEW YEAR'S EVE	
11:40-12:30	NEW YEAR'S EVE	
13:40-14:30	NEW YEAR'S EVE	
14:40-15:30	NEW YEAR'S EVE	
15:40-16-30	NEW YEAR'S EVE	
16:40-17:30	NEW YEAR'S EVE	
Tuesday	1 January	
08:40-09:30		
09:40-10:30		
10:40-11:30		
11:40-12:30		
	NEW YEAR HOLIDAY	
13:40-14:30		
14:40-15:30		
15:40-16-30		
16:40-17:30		
Wednesday	02 January	
08:40-09:30	Turkish For Medical Students-III (Foreign Students)	Inst. Emine Özerinç
09:40-10:30	Turkish For Medical Students-III (Foreign Students)	Inst. Emine Özerinç
10:40-11:30	Turkish For Medical Students-III (Foreign Students)	Inst. Emine Özerinç
11:40-12:30	Turkish For Medical Students-III (Foreign Students)	Inst. Emine Özerinç
13:40-14:30	Genetics of hematological disorders	Dr. Pınar Ata
14:40-15:30	Genetics of hematological disorders	Dr. Pınar Ata
15:40-16-30	STUDY TIME	
16:40-17:30	STUDY TIME	
Thursday	03 January	
08:40-09:30	Structure and function of erythrocytes	Dr. Saime Batırel

09:40-10:30	Structure and function of erythrocytes	Dr. Saime Batırel
10:40-11:30	Structure and function of hemoglobin	Dr. Saime Batırel
11:40-12:30	Structure and function of hemoglobin	Dr. Saime Batırel
13:40-14:30	White and red blood cells	Dr. Özgür Kasımay
14:40-15:30	White and red blood cells	Dr. Özgür Kasımay
15:40-16-30	Biochemical aspect of anemia	Dr. Saime Batırel
16:40-17:30	Biochemical aspect of anemia	Dr. Saime Batırel
Friday	04 January	
08:40-09:30	Blood groups	Dr. Özgür Kasımay
09:40-10:30	Physiology LAB: Blood Physiology-Group A	Dr. Özgür Kasımay, Dr. Alper Yıldırım
10:40-11:30	Physiology LAB: Blood Physiology-Group A	Dr. Özgür Kasımay, Dr. Alper Yıldırım
11:40-12:30	Physiology LAB: Blood Physiology-Group A	Dr. Özgür Kasımay, Dr. Alper Yıldırım
13:40-14:30	Physiology LAB: Blood Physiology-Group B	Dr. Özgür Kasımay, Dr. Alper Yıldırım
14:40-15:30	Physiology LAB: Blood Physiology-Group B	Dr. Özgür Kasımay, Dr. Alper Yıldırım
15:40-16-30	Physiology LAB: Blood Physiology-Group B	Dr. Özgür Kasımay, Dr. Alper Yıldırım
16:40-17:30	STUDY TIME	
	Week 4 (07 th -11 th January 2019)	
Monday	07 January	
08:40-09:30	Aberrations in immune responses- Immunodeficiencies	Dr. Tunç Akkoç
09:40-10:30	Aberrations in Immune Responses-Immunologic mechanisms of allergic diseases	Dr. Tunç Akkoç
10:40-11:30	Dermatophytes and their pathogenic mechanism	Dr. Mehmet Burak Aksu
11:40-12:30	Molds, dimorphic fungi, P. carinii (P. iroveci) and their pathogenic mechanisms	Dr. Mehmet Burak Aksu
13:40-14:30	Turkish For Medical Students-III (Foreign Students)	Inst. Emine Özerinç
14:40-15:30	Turkish For Medical Students-III (Foreign Students)	Inst. Emine Özerinç
15:40-16-30	Turkish For Medical Students-III (Foreign Students)	Inst. Emine Özerinç
	Elective Course-II (Turkish Students) MDCN181 Forensic Sciences MDCN182 Art & Craft for Medicine Students MDCN186 Modern Indian Dance MDCN187 Aerial Fitness and High Intensity Interval Training	Dr. Cemal Gürkan Inst. Nurtane Karagil Inst. Hande Tuğcan Inst. Yasemin Kurtoğlu
16:40-17:30	Turkish For Medical Students-III (Foreign Students)	Inst. Emine Özerinç
	Elective Course-II (Turkish Students) MDCN181 Forensic Sciences MDCN182 Art & Craft for Medicine Students MDCN186 Modern Indian Dance	Dr. Cemal Gürkan Inst. Nurtane Karagil Inst. Hande Tuğcan Inst. Yasemin Kurtoğlu

	MDCN187 Aerial Fitness and High Intensity Interval Training	
	installed and inglificency interval training	
Tuesday	08 January	
08:40-09:30	Vector borne diseases	Dr. Burak Aksu
09:40-10:30	Vector borne diseases	Dr. Burak Aksu
10:40-11:30	Epidemiology of diseases spread by arthropod vectors	Dr. Ahmet Topuzoğlu
11:40-12:30	Epidemiology of diseases spread by arthropod vectors	Dr. Ahmet Topuzoğlu
	-processes of consenses of consenses	
13:40-14:30	Tolerance and autoimmunity	Dr. Tunç Akkoç
14:40-15:30	Transplantation immunology	Dr. Tunç Akkoç
15:40-16-30	PBL-MODULE 2	Dr. Masoud Afshani,
16:40-17:30	PBL-MODULE 2	Dr. Eren Sakallı, Dr. Ergül Altundağ
		Li Bai / ii cai iaa b
Wednesday	09 January	
08:40-09:30	Biochemistry LAB: Examination of red blood cells - Group A	Dr. Saime Batırel, Dr.
	·	Ergül Mutlu Altundağ
09:40-10:30	Biochemistry LAB: Examination of red blood cells - Group A	Dr. Saime Batırel, Dr.
		Ergül Mutlu Altundağ
10:40-11:30	Biochemistry LAB: Examination of red blood cells - Group B	Dr. Saime Batırel, Dr. Ergül Mutlu Altundağ
11:40-12:30	Biochemistry LAB: Examination of red blood cells - Group B	Dr. Saime Batırel, Dr.
		Ergül Mutlu Altundağ
13:40-14:30	Infections in immunocompromised host	Dr. Uluhan Sili
14:40-15:30	Sepsis	Dr. Uluhan Sili
15:40-16-30	Infectious mononucleosis	Dr. Uluhan Sili
16:40-17:30	STUDY TIME	
Thursday	10 January	
08:40-09:30	Biological modifiers	Dr. Eren Sakallı
09:40-10:30	Heavy metals and antagonists	Dr. Eren Sakallı
10:40-11:30	Molecular basis of hemoglobinopathies (Remote Session)	Dr. Can Erzik
11:40-12:30	Molecular basis of hemoglobinopathies (Remote Session)	Dr. Can Erzik
13:40-14:30	ICS-2: HIM-Ethics	Dr. Şefik Görkey
14:40-15:30	ICS-2: HIM-Ethics	Dr. Şefik Görkey
15:40-16-30	ICS-2: HIM-Ethics	Dr. Şefik Görkey
16:40-17:30	ICS-2: HIM-Ethics	Dr. Şefik Görkey
Friday	11 January	
08:40-09:30	ICS-2: HIM-Ethics	Dr. Şefik Görkey
09:40-10:30	ICS-2: HIM-Ethics	Dr. Şefik Görkey
10:40-11:30	ICS-2: HIM-Ethics	Dr. Şefik Görkey

11:40-12:30	ICS-2: HIM-Ethics	Dr. Şefik Görkey
11.40 12.30	Tes 2. This Ethics	Dr. genk dorkey
13:40-14:30	ICS-2: HIM-Ethics	Dr. Şefik Görkey
14:40-15:30	ICS-2: HIM-Ethics	Dr. Şefik Görkey
15:40-16-30	ICS-2: HIM-Ethics	Dr. Şefik Görkey
16:40-17:30	ICS-2: HIM-Ethics	Dr. Şefik Görkey
10.40-17.30	Week 5 (14 th -18 th January 2019)	Dr. Jenk Gorkey
Monday	14 January	
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	Turkish For Medical Students-III (Foreign Students)	Inst. Emine Özerinç
14:40-15:30	Turkish For Medical Students-III (Foreign Students)	Inst. Emine Özerinç
15:40-16-30	Turkish For Medical Students-III (Foreign Students)	Inst. Emine Özerinç
	Elective Course-II (Turkish Students) MDCN181 Forensic Sciences MDCN182 Art & Craft for Medicine Students MDCN186 Modern Indian Dance MDCN187 Aerial Fitness and High Intensity Interval Training	Dr. Cemal Gürkan Inst. Nurtane Karagil Inst. Hande Tuğcan Inst. Yasemin Kurtoğlu
16:40-17:30	Turkish For Medical Students-III (Foreign Students)	Inst. Emine Özerinç
	Elective Course-II (Turkish Students) MDCN181 Forensic Sciences MDCN182 Art & Craft for Medicine Students MDCN186 Modern Indian Dance MDCN187 Aerial Fitness and High Intensity Interval Training	Dr. Cemal Gürkan Inst. Nurtane Karagil Inst. Hande Tuğcan Inst. Yasemin Kurtoğlu
Tuesday	15 January	
08:40-09:30	ICS-2: HIM-Social Concept in Medicine	Dr. Mehmet Akman, Dr. Hülya Akan, Dr. Bülent Sezgin
09:40-10:30	ICS-2: HIM-Social Concept in Medicine	Dr. Mehmet Akman, Dr. Hülya Akan, Dr. Bülent Sezgin
10:40-11:30	ICS-2: HIM-Social Concept in Medicine	Dr. Mehmet Akman, Dr. Hülya Akan, Dr. Bülent Sezgin
11:40-12:30	ICS-2: HIM-Social Concept in Medicine	Dr. Mehmet Akman, Dr. Hülya Akan, Dr. Bülent Sezgin
13:40-14:30	ICS-2: HIM-Social Concept in Medicine	Dr. Mehmet Akman, Dr. Hülya Akan, Dr. Bülent Sezgin
14:40-15:30	ICS-2: HIM-Social Concept in Medicine	Dr. Mehmet Akman, Dr. Hülya Akan, Dr. Bülent Sezgin

15:40-16-30	ICS-2: HIM-Social Concept in Medicine	Dr. Mehmet Akman, Dr. Hülya Akan, Dr.
		Bülent Sezgin
16:40-17:30	ICS-2: HIM-Social Concept in Medicine	Dr. Mehmet Akman, Dr. Hülya Akan, Dr. Bülent Sezgin
Wednesday	16 January	
08:40-09:30	Non-neoplastic disorders of lymph node and spleen	Dr. Kemal Türköz
09:40-10:30	Non-neoplastic disorders of lymph node and spleen	Dr. Kemal Türköz
10:40-11:30	Pathology of bone marrow	Dr. Kemal Türköz
11:40-12:30	Pathology of bone marrow	Dr. Kemal Türköz
13:40-14:30	Neoplastic disorders of lymph node and spleen	Dr. Kemal Türköz
14:40-15:30	Pathology LAB: Pathology of bone marrow and lymphoid tissues - A	Dr. Kemal Türköz
15:40-16-30	Pathology LAB: Pathology of bone marrow and lymphoid tissues - B	Dr. Kemal Türköz
16:40-17:30	STUDY TIME	
Thursday	17 January	
08:40-09:30	Introduction to hematology, stem cell, and hematopoiesis	Dr. Tayfur Toptaş
09:40-10:30	Classification and clinical approach to anemia	Dr. Tayfur Toptaş
10:40-11:30	Introduction to hemolytic anemia's of and mechanism of hemolysis	Dr. Tayfur Toptaş
11:40-12:30	Hemolytic anemia's due to membrane and enzyme defects	Dr. Tayfur Toptaş
13:40-14:30	PBL-MODULE 3	Dr. Masoud Afshani,
14:40-15:30	PBL-MODULE 3	Dr. Eren Sakallı, Dr. Ergül Altundağ
15:40-16-30	Turkish For Medical Students-III (Foreign Students)	Inst. Emine Özerinç
16:40-17:30	Turkish For Medical Students-III (Foreign Students)	Inst. Emine Özerinç
	, and the second	
Friday	18 January	
08:40-09:30	Sickle cell disease	Dr. Tayfur Toptaş
09:40-10:30	Thalassemia	Dr. Tayfur Toptaş
10:40-11:30	Hemophilia	Dr. Tayfur Toptaş
11:40-12:30	Megaloblastic anemias	Dr. Tayfur Toptaş
13:40-14:30	Reading blood smear (slide show)	Dr. Tayfur Toptaş
14:40-15:30	Pharmacotherapy of anemia	Dr. Eren Sakallı
15:40-16-30	Pharmacotherapy of anemia	Dr. Eren Sakallı
16:40-17:30	Hematopoietic agents: Growth factors	Dr. Eren Sakallı
	Week 8 (21 st - 25 th January 2019)	
Monday	21 January	

00.40 00.20	Incurrence have allutin amounting	Dy Toufus Toutes
08:40-09:30	Immune hemolytic anemias	Dr. Tayfur Toptaş
09:40-10:30	Non-immune acquired hemolytic anemias	Dr. Tayfur Toptaş
10:40-11:30	Iron metabolism and iron deficiencies	Dr. Tayfur Toptaş
11:40-12:30	Aplastic anemia	Dr. Tayfur Toptaş
13:40-14:30	Quantitative disorders of platelets	Dr. Tayfur Toptaş
14:40-15:30	Thrombocytopenia and Immune Thrombocytopenic Purpura	Dr. Tayfur Toptaş
15:40-16-30	Acquired and congenital thrombophilia	Dr. Tayfur Toptaş
16:40-17:30	STUDY TIME	
Tuesday	22 January	
08:40-09:30	Transfusion medicine: Blood components	Dr. Tayfur Toptaş
09:40-10:30	Blood transfusion indications and complications	Dr. Tayfur Toptaş
10:40-11:30	Myelodysplastic syndrome	Dr. Tayfur Toptaş
11:40-12:30	Chronic lymphocytic leukemia's (CLL)	Dr. Tayfur Toptaş
		D. M. LACL
13:40-14:30	PBL-MODULE 4	Dr. Masoud Afshani, Dr. Eren Sakallı, Dr.
14:40-15:30	PBL-MODULE 4	Ergül Altundağ
15:40-16-30	Turkish For Medical Students-III (Foreign Students)	Inst. Emine Özerinç
16:40-17:30	Turkish For Medical Students-III (Foreign Students)	Inst. Emine Özerinç
Wednesday	23 January	
Wednesday 08:40-09:30	Myeloproliferative disorders: CML, Polycythemia Vera,	Dr. Tayfur Toptaş
08:40-09:30	Myeloproliferative disorders: CML, Polycythemia Vera, essential thrombocytosis and primary myelofibrosis	
-	Myeloproliferative disorders: CML, Polycythemia Vera, essential thrombocytosis and primary myelofibrosis Myeloproliferative disorders: CML, Polycythemia Vera,	Dr. Tayfur Toptaş Dr. Tayfur Toptaş
08:40-09:30 09:40-10:30	Myeloproliferative disorders: CML, Polycythemia Vera, essential thrombocytosis and primary myelofibrosis Myeloproliferative disorders: CML, Polycythemia Vera, essential thrombocytosis and primary myelofibrosis	Dr. Tayfur Toptaş
08:40-09:30 09:40-10:30 10:40-11:30	Myeloproliferative disorders: CML, Polycythemia Vera, essential thrombocytosis and primary myelofibrosis Myeloproliferative disorders: CML, Polycythemia Vera, essential thrombocytosis and primary myelofibrosis Acute leukemia's: Classification and molecular aspect	Dr. Tayfur Toptaş Dr. Tayfur Toptaş
08:40-09:30 09:40-10:30	Myeloproliferative disorders: CML, Polycythemia Vera, essential thrombocytosis and primary myelofibrosis Myeloproliferative disorders: CML, Polycythemia Vera, essential thrombocytosis and primary myelofibrosis	Dr. Tayfur Toptaş
08:40-09:30 09:40-10:30 10:40-11:30	Myeloproliferative disorders: CML, Polycythemia Vera, essential thrombocytosis and primary myelofibrosis Myeloproliferative disorders: CML, Polycythemia Vera, essential thrombocytosis and primary myelofibrosis Acute leukemia's: Classification and molecular aspect	Dr. Tayfur Toptaş Dr. Tayfur Toptaş
08:40-09:30 09:40-10:30 10:40-11:30 11:40-12:30	Myeloproliferative disorders: CML, Polycythemia Vera, essential thrombocytosis and primary myelofibrosis Myeloproliferative disorders: CML, Polycythemia Vera, essential thrombocytosis and primary myelofibrosis Acute leukemia's: Classification and molecular aspect Acute leukemia's: Classification and molecular aspect	Dr. Tayfur Toptaş Dr. Tayfur Toptaş Dr. Tayfur Toptaş
08:40-09:30 09:40-10:30 10:40-11:30 11:40-12:30 13:40-14:30	Myeloproliferative disorders: CML, Polycythemia Vera, essential thrombocytosis and primary myelofibrosis Myeloproliferative disorders: CML, Polycythemia Vera, essential thrombocytosis and primary myelofibrosis Acute leukemia's: Classification and molecular aspect Acute leukemia's: Classification and molecular aspect Platelets: Coagulation and fibrinolysis	Dr. Tayfur Toptaş Dr. Tayfur Toptaş Dr. Tayfur Toptaş Dr. Alper Yıldırım
08:40-09:30 09:40-10:30 10:40-11:30 11:40-12:30 13:40-14:30 14:40-15:30	Myeloproliferative disorders: CML, Polycythemia Vera, essential thrombocytosis and primary myelofibrosis Myeloproliferative disorders: CML, Polycythemia Vera, essential thrombocytosis and primary myelofibrosis Acute leukemia's: Classification and molecular aspect Acute leukemia's: Classification and molecular aspect Platelets: Coagulation and fibrinolysis Platelets: Coagulation and fibrinolysis	Dr. Tayfur Toptaş Dr. Tayfur Toptaş Dr. Tayfur Toptaş Dr. Alper Yıldırım Dr. Alper Yıldırım
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	Myeloproliferative disorders: CML, Polycythemia Vera, essential thrombocytosis and primary myelofibrosis Myeloproliferative disorders: CML, Polycythemia Vera, essential thrombocytosis and primary myelofibrosis Acute leukemia's: Classification and molecular aspect Acute leukemia's: Classification and molecular aspect Platelets: Coagulation and fibrinolysis Platelets: Coagulation and fibrinolysis Multiple myeloma and other paraproteinemias	Dr. Tayfur Toptaş Dr. Tayfur Toptaş Dr. Tayfur Toptaş Dr. Alper Yıldırım Dr. Alper Yıldırım Dr. Tayfur Toptaş
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	Myeloproliferative disorders: CML, Polycythemia Vera, essential thrombocytosis and primary myelofibrosis Myeloproliferative disorders: CML, Polycythemia Vera, essential thrombocytosis and primary myelofibrosis Acute leukemia's: Classification and molecular aspect Acute leukemia's: Classification and molecular aspect Platelets: Coagulation and fibrinolysis Platelets: Coagulation and fibrinolysis Multiple myeloma and other paraproteinemias	Dr. Tayfur Toptaş Dr. Tayfur Toptaş Dr. Tayfur Toptaş Dr. Alper Yıldırım Dr. Alper Yıldırım Dr. Tayfur Toptaş
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	Myeloproliferative disorders: CML, Polycythemia Vera, essential thrombocytosis and primary myelofibrosis Myeloproliferative disorders: CML, Polycythemia Vera, essential thrombocytosis and primary myelofibrosis Acute leukemia's: Classification and molecular aspect Acute leukemia's: Classification and molecular aspect Platelets: Coagulation and fibrinolysis Platelets: Coagulation and fibrinolysis Multiple myeloma and other paraproteinemias Hodgkin disease and non-Hodgkin lymphomas (1 & 2)	Dr. Tayfur Toptaş Dr. Tayfur Toptaş Dr. Tayfur Toptaş Dr. Alper Yıldırım Dr. Alper Yıldırım Dr. Tayfur Toptaş Dr. Tayfur Toptaş Dr. Tayfur Toptaş Dr. Bülent Sezgin, Dr.
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	Myeloproliferative disorders: CML, Polycythemia Vera, essential thrombocytosis and primary myelofibrosis Myeloproliferative disorders: CML, Polycythemia Vera, essential thrombocytosis and primary myelofibrosis Acute leukemia's: Classification and molecular aspect Acute leukemia's: Classification and molecular aspect Platelets: Coagulation and fibrinolysis Platelets: Coagulation and fibrinolysis Multiple myeloma and other paraproteinemias Hodgkin disease and non-Hodgkin lymphomas (1 & 2)	Dr. Tayfur Toptaş Dr. Tayfur Toptaş Dr. Tayfur Toptaş Dr. Alper Yıldırım Dr. Alper Yıldırım Dr. Tayfur Toptaş Dr. Tayfur Toptaş Dr. Tayfur Toptaş Dr. Bülent Sezgin, Dr. Halil Eren Sakallı, Dr.
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 08:40-09:30	Myeloproliferative disorders: CML, Polycythemia Vera, essential thrombocytosis and primary myelofibrosis Myeloproliferative disorders: CML, Polycythemia Vera, essential thrombocytosis and primary myelofibrosis Acute leukemia's: Classification and molecular aspect Acute leukemia's: Classification and molecular aspect Platelets: Coagulation and fibrinolysis Platelets: Coagulation and fibrinolysis Multiple myeloma and other paraproteinemias Hodgkin disease and non-Hodgkin lymphomas (1 & 2) 24 January ICS-2: History Taking and IPE (Written Exam)	Dr. Tayfur Toptaş Dr. Tayfur Toptaş Dr. Tayfur Toptaş Dr. Alper Yıldırım Dr. Alper Yıldırım Dr. Tayfur Toptaş Dr. Tayfur Toptaş Dr. Tayfur Toptaş Dr. Bülent Sezgin, Dr. Halil Eren Sakallı, Dr. Didem Rıfkı, Dr. Cihan
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 08:40-09:30 09:40-10:30	Myeloproliferative disorders: CML, Polycythemia Vera, essential thrombocytosis and primary myelofibrosis Myeloproliferative disorders: CML, Polycythemia Vera, essential thrombocytosis and primary myelofibrosis Acute leukemia's: Classification and molecular aspect Acute leukemia's: Classification and molecular aspect Platelets: Coagulation and fibrinolysis Platelets: Coagulation and fibrinolysis Multiple myeloma and other paraproteinemias Hodgkin disease and non-Hodgkin lymphomas (1 & 2) 24 January ICS-2: History Taking and IPE (Written Exam) ICS-2: History Taking and IPE (Written Exam)	Dr. Tayfur Toptaş Dr. Tayfur Toptaş Dr. Tayfur Toptaş Dr. Alper Yıldırım Dr. Alper Yıldırım Dr. Tayfur Toptaş Dr. Tayfur Toptaş Dr. Tayfur Toptaş Dr. Bülent Sezgin, Dr. Halil Eren Sakallı, Dr.
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 08:40-09:30 09:40-10:30 10:40-11:30	Myeloproliferative disorders: CML, Polycythemia Vera, essential thrombocytosis and primary myelofibrosis Myeloproliferative disorders: CML, Polycythemia Vera, essential thrombocytosis and primary myelofibrosis Acute leukemia's: Classification and molecular aspect Acute leukemia's: Classification and molecular aspect Platelets: Coagulation and fibrinolysis Platelets: Coagulation and fibrinolysis Multiple myeloma and other paraproteinemias Hodgkin disease and non-Hodgkin lymphomas (1 & 2) 24 January ICS-2: History Taking and IPE (Written Exam) ICS-2: History Taking and IPE (Written Exam) ICS-2: History Taking and IPE (Practical Exam)	Dr. Tayfur Toptaş Dr. Tayfur Toptaş Dr. Tayfur Toptaş Dr. Alper Yıldırım Dr. Alper Yıldırım Dr. Tayfur Toptaş Dr. Tayfur Toptaş Dr. Tayfur Toptaş Dr. Bülent Sezgin, Dr. Halil Eren Sakallı, Dr. Didem Rıfkı, Dr. Cihan
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 08:40-09:30 09:40-10:30 10:40-11:30	Myeloproliferative disorders: CML, Polycythemia Vera, essential thrombocytosis and primary myelofibrosis Myeloproliferative disorders: CML, Polycythemia Vera, essential thrombocytosis and primary myelofibrosis Acute leukemia's: Classification and molecular aspect Acute leukemia's: Classification and molecular aspect Platelets: Coagulation and fibrinolysis Platelets: Coagulation and fibrinolysis Multiple myeloma and other paraproteinemias Hodgkin disease and non-Hodgkin lymphomas (1 & 2) 24 January ICS-2: History Taking and IPE (Written Exam) ICS-2: History Taking and IPE (Written Exam) ICS-2: History Taking and IPE (Practical Exam)	Dr. Tayfur Toptaş Dr. Tayfur Toptaş Dr. Tayfur Toptaş Dr. Alper Yıldırım Dr. Alper Yıldırım Dr. Tayfur Toptaş Dr. Tayfur Toptaş Dr. Bülent Sezgin, Dr. Halil Eren Sakallı, Dr. Didem Rıfkı, Dr. Cihan Tüccar
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 08:40-09:30 09:40-10:30 10:40-11:30 11:40-12:30	Myeloproliferative disorders: CML, Polycythemia Vera, essential thrombocytosis and primary myelofibrosis Myeloproliferative disorders: CML, Polycythemia Vera, essential thrombocytosis and primary myelofibrosis Acute leukemia's: Classification and molecular aspect Acute leukemia's: Classification and molecular aspect Platelets: Coagulation and fibrinolysis Platelets: Coagulation and fibrinolysis Multiple myeloma and other paraproteinemias Hodgkin disease and non-Hodgkin lymphomas (1 & 2) 24 January ICS-2: History Taking and IPE (Written Exam) ICS-2: History Taking and IPE (Practical Exam) ICS-2: History Taking and IPE (Practical Exam) ICS-2: History Taking and IPE (Practical Exam)	Dr. Tayfur Toptaş Dr. Tayfur Toptaş Dr. Tayfur Toptaş Dr. Alper Yıldırım Dr. Alper Yıldırım Dr. Tayfur Toptaş Dr. Tayfur Toptaş Dr. Tayfur Toptaş Dr. Bülent Sezgin, Dr. Halil Eren Sakallı, Dr. Didem Rıfkı, Dr. Cihan

16:40-17:30	ICS-2: History Taking and IPE (Practical Exam)	Didem Rıfkı, Dr. Cihan Tüccar
Friday	25 January	
08:40-09:30	Anticancer Chemotherapy	Dr. Eren Sakallı
09:40-10:30	ICS-2: HIM-Social Concept in Medicine	Dr. Mehmet Akman,
10:40-11:30	ICS-2: HIM-Social Concept in Medicine	Dr. Hülya Akan, Dr.
11:40-12:30	ICS-2: HIM-Social Concept in Medicine	Bülent Sezgin
13:40-14:30	ICS-2: HIM-Social Concept in Medicine	Dr. Mehmet Akman,
14:40-15:30	ICS-2: HIM-Social Concept in Medicine	Dr. Hülya Akan, Dr.
15:40-16-30	ICS-2: HIM-Social Concept in Medicine	Bülent Sezgin
16:40-17:30	STUDY TIME	
	SEMESTER HOLIDAYS	
	(28 January-8 February)	
	and the cabo	
	Week 9 (11 th -15 th February 2019)	
Monday	11 February	
08:40-09:30		
09:40-10:30 10:40-11:30	PRACTICAL EXAM	
11:40-12:30		
11:40-12:50		
13:40-14:30		
14:40-15:30		
15:40-16-30	PRACTICAL EXAM	
16:40-17:30		
Tuesday	12 February	
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	

Wednesday	13 February
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
Thursday	14 February
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
Friday	15 February
08:40-09:30	
09:40-10:30	Y2C3 THEORETICAL EXAM (09:30 a.m.)
10:40-11:30	
11:40-12:30	
13:40-14:30	
14:40-15:30	
15:40-16-30	