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| **C:\Users\Namariel\Downloads\TıpF (1)\TıpF\TıpF-2.png****MARMARA UNIVERSITY SCHOOL of MEDICINE** |
| HEMATOPOIETIC SYSTEM AND RELATED DISORDERS YEAR 2 COURSE 3December 16, 2019 – February 13, 2020 |
| **Coordinator of the Course 2.3**Assoc. Prof., Deniz FİLİNTE  | **Coordinator of the Module 2.3**Prof., Özlem SARIKAYA |
| **Year 2 Coordinators** Assoc. Prof., Özgür Kasımay ÇAKIR & Assist. Prof., Burak AKSU |
| **Module Coordinator**Prof., Rezzan GÜLHAN, Assist.Prof., Sinem YILDIZ İNANICI | **Introduction to Clinical Practice (ICP) Coordinators**Prof., Pemra ÜNALAN  |
|  **Coordinator of Multidisciplinary Students’ Lab**.Assoc. Prof., Betül KARADEMİR | **Coordinator of Clinical Skills Lab.**Assoc. Prof., Çiğdem APAYDIN |
|  **Coordinator of Assessment Unite**Assist. Prof., Cevdet NACAR | **Coordinator of Student Exchange Programs**Assist. Prof., Can ERZİK |
| **Vice-Chief Coordinators** |
| **Program**Prof., Oya ORUN | **Assessment** Assoc. Prof., Hasan R. YANANLI | **Students’ Affairs**Assist. Prof., Can ERZİK |
| **Chief Coordinator (Pre-Clinical Education)** Prof., Serap ŞİRVANCI | **Coordinator of Medical Education Program Evaluation and Development Commission**Prof., Harika ALPAY |
| **Vice Dean (Education)**Prof., Ümit ŞEHİRLİ | **Dean**Prof., Hakan GÜNDÜZ |

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| MU MEDICAL SCHOOL PRE-CLINICAL EDUCATION PROGRAM |
| LEARNING OUTCOMES / COMPETENCIES1. Clinical Care: Qualified patient care and community oriented health care
2. Basic clinical skills
3. The organization and management of the patient and the patient care
4. The organization and the management of health care delivery services / system
5. Health promotion and disease prevention
6. Medical Knowledge and Evidence-Based Medicine
7. Appropriate information retrieval and management skills
8. The integration of knowledge, critical thinking and evidence-based decision making
9. Scientific methods and basic research skills
10. Professional Attitudes and Values
11. Communication skills and effective communication with patients / patient relatives
12. Interpersonal relationships and team working
13. Ethical and professional values, responsibilities
14. Individual, social and cultural values and responsibilities
15. Reflective practice and continuing development
16. Healthcare delivery systems, management and community oriented health care
17. Education and counseling
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| PHASE-1 LEARNING OBJECTIVES1. 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.
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| PHASES – 1 THEMA/ORGAN SYSTEM-BASED COURSE PROGRAMSYear 1, Course 1: Introduction to Cell and Cellular ReplicationYear 1, Course 2: Cellular Metabolism and TransportYear 1, Course 3: Development and Organization of Human BodyYear 1, Course 4: Introduction to Nervous System and Human BehaviorYear 2, Course 1: Cell and Tissue Injury I Year 2, Course 2: Cell and Tissue Injury IIYear 2, Course 3: Hematopoietic System and Related DisordersYear 2, Course 4: Musculoskeletal, Integumentary Systems and Related DisordersYear 2, Course 5: Respiratory System and Related DisordersYear 3, Course 1: Cardiovascular System and Related DisordersYear 3, Course 2: Gastrointestinal System, Metabolism and Related DisordersYear 3, Course 3: Nervous System and Related DisordersYear 3, Course: Growth, Development, Mental Health and Related DisordersYear 3, Course 5: Urinary and Reproductive System and Related Disorders |

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| 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, * understand the development and histology of the lymphoid organs and blood
* identify the structure and function of the hematopoietic system
* define the pathologic processes in hematological disorders
* gain knowledge about microorganisms affect the hematopoietic system and their pathogenesis in infectious process
* gain knowledge about the risk groups, risk factors related to hematological disorders and preventive measures
* gain knowledge about the signs and symptoms of these disorders
* gain knowledge about the approach to diagnosis, and principles of treatment in hematological disorders
* define the pharmacotherapy of hematological disorders
* acquire skills necessary to perform experimental applications.
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| **ASSESSMENT SYSTEM**Module examination: Written exam at the end of module (10 % of final score)Practical examination: Practical exams at the end of courseCourse 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 & MODULE-2.3 |
| * Anatomy
* Biochemistry
* Family Medicine
* Histology and Embryology
* Internal Medicine
* Medical Biology
* Medical Education
 | * Microbiology
* Pathology
* Pediatrics
* Pharmacology
* Physiology
* Public Health
 |
| LECTURERS / TUTORS |
| Dilek AKAKIN, Assoc. Professor of Histology and EmbryologyAhmet AKICI, Professor of Pharmacology Mehmet AKMAN, Professor of Family Medicine Mehmet Burak AKSU, Assist. Professor of Microbiology Yaşar İnci ALİCAN, Professor of Physiology Pınar ATA, Professor of Medical GeneticsFergün AYDIN, Assist. Professor of Internal Medicine Saime BATIREL, Assoc. Professor of Biochemistry Süheyla BOZKURT, Professor of PathologyNilgün ÇERİKÇİOĞLU, Professor of Microbiology Ömer DOĞRU, Assist. Professor of Pediatrics Nurşah EKER, Assist. Professor of Pediatrics Deniz FİLİNTE, Assoc. Professor of Pathology Medine GÜLÇEBİ İDRİZ OĞLU, Assoc. Professor of Pharmacology Goncagül HAKLAR, Professor of BiochemistryUfuk HASDEMİR, Professor of Microbiology | Betül KARADEMİR, Assoc. Professor of BiochemistryÖzgür KASIMAY ÇAKIR, Assoc. Professor of Physiology Özlem Tuğçe KAYA, Assist. Professor of Histology and Embryology Volkan KORTEN, Professor of Internal Medicine Lütfiye MÜLAZIMOĞLU DURMUŞOĞLU, Professor of Internal Medicine Sıdıka Ayşe ÖZER, Professor of Medical Biology Uluhan SİLİ, Assoc. Professor of Infectious DiseasesGüner SÖYLEDİR, Professor of Microbiology Ümit Süleyman ŞEHİRLİ, Professor of Anatomy Önder ŞİRİKÇİ, Professor of BiochemistryTayfur TOPTAŞ, Assoc. Professor of Internal MedicineAhmet TOPUZOĞLU, Professor of Public Health Tülin TUĞLULAR, Professor of Internal MedicineHüseyin Kemal TÜRKÖZ, Assoc. Professor of Pathology Nurver ÜLGER, Professor of Microbiology Dilek YAĞCI ÇAĞLAYIK, Specialist of Infectious Diseases Hasan Raci YANANLI, Assoc. Professor of Pharmacology |

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| 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. • Kan Hastalıkları, B. Berkarda, Istanbul, ‹.U. Basım ve Yayınevi, 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. Aster JC (eds). Robbins and Cotran Pathological basis of disease. 8th ed. Philadelphia: Elsevier Saunders. 2010: 589-639.  |

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| SUMMARY OF THE COURSE |
| **Discipline** | **Lecture & Group Discussion** | **Multidisciplinary Lab. & Clinical Skills Lab. Practice** | **Total** |
| Anatomy | 2 | 1 | 3 |
| Biochemistry | 11 | 2 | 13 |
| Family Medicine | 1 |  | 1 |
| Genetics | 2 |  | 2 |
| Histology and Embryology | 6 | 2 | 8 |
| Infectious Diseases | 4 |  | 4 |
| Internal Medicine | 21 |  | 21 |
| Medical Biology | 2 |  | 2 |
| Microbiology | 9 | 4 | 13 |
| Pathology | 5 | 1 | 6 |
| Pediatrics | 6 |  | 6 |
| Pharmacology | 5 |  | 5 |
| Physiology | 5 | 3 | 8 |
| Public Health | 2 |  | 2 |
| Subtotal | 81 | 13 | 94 |
| PBL Module | 8 |  | 8 |
| TOTAL | 89 | 13 | 102 |
| ICP-2: Basic Clinical Skills, Human in Medicine (Students’ Research Activity) | 24 | 24 | 48 |
| **TOTAL** | **113** | **37** | **150** |

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| **SEVEN WEEK PROGRAM** |
|  | **THEORETICAL AND PRACTICAL SESSIONS** | **LECTURER(S)/TUTOR(S)** |
|  | **Week 1 (16 December - 20 December 2019)** |  |
| **Monday** | **16 December** |  |
| 08:45-09:30 |   |   |
| 09:30-09:35 |   |   |
| 09:45-10:30 | Introduction to course | Dr. Deniz Filinte |
| 10:30-10:35 | Discussion |   |
| 10:45-11:30 | Anatomy of the lymphoid organs | Dr. Ümit Süleyman Şehirli |
| 11:30-11:35 | Discussion |   |
| 11:45-12:30 | Lymphoid circulation | Dr. Ümit Süleyman Şehirli |
| 12:30-12:35 | Discussion |   |
|   |   |   |
| 13:45-14:30 | Elective course |   |
| 14:30-14:35 | Discussion |   |
| 14:45-15:30 | Elective course |   |
| 15:30-15:35 | Discussion |   |
| 15:45-16:30 |  |   |
| 16:30-16:35 |  |   |
| 16:45-17:30 |  |   |
| 17:30-17:35 |  |   |
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| **Tuesday** | **17 December** |  |
| 08:45-09:30 | ICP-2: Basic Clinical Skills-Human in Medicine- Students Research Activity-2 |   |
| 09:30-09:35 | Discussion |   |
| 09:45-10:30 | ICP-2: Basic Clinical Skills-Human in Medicine- Students Research Activity-2 |   |
| 10:30-10:35 | Discussion |   |
| 10:45-11:30 | ICP-2: Basic Clinical Skills-Human in Medicine- Students Research Activity-2 |   |
| 11:30-11:35 | Discussion |   |
| 11:45-12:30 | ICP-2: Basic Clinical Skills-Human in Medicine- Students Research Activity-2 |   |
| 12:30-12:35 | Discussion |   |
|   |   |   |
| 13:45-14:30 | ICP-2: Basic Clinical Skills-Human in Medicine- Students Research Activity-2 |   |
| 14:30-14:35 | Discussion |   |
| 14:45-15:30 | ICP-2: Basic Clinical Skills-Human in Medicine- Students Research Activity-2 |   |
| 15:30-15:35 | Discussion |   |
| 15:45-16:30 | ICP-2: Basic Clinical Skills-Human in Medicine- Students Research Activity-2 |   |
| 16:30-16:35 | Discussion |   |
| 16:45-17:30 | ICP-2: Basic Clinical Skills-Human in Medicine- Students Research Activity-2 |   |
| 17:30-17:35 | Discussion |   |
|   |  |  |
| **Wednesday** | 18 December |  |
| 08:45-09:30 | Histology of blood | Dr. Özlem Tuğçe Kaya |
| 09:30-09:35 | Discussion |   |
| 09:45-10:30 | Histology of blood | Dr. Özlem Tuğçe Kaya |
| 10:30-10:35 | Discussion |   |
| 10:45-11:30 | White and red blood cells | Dr. Özgür Kasımay Çakır |
| 11:30-11:35 | Discussion |   |
| 11:45-12:30 | White and red blood cells | Dr. Özgür Kasımay Çakır |
| 12:30-12:35 | Discussion |   |
|   |  |   |
| 13:45-14:30 | Hematopoiesis | Dr. Dilek Akakın |
| 14:30-14:35 | Discussion |   |
| 14:45-15:30 | Structure and function of erythrocytes | Dr. Saime Batırel |
| 15:30-15:35 | Discussion |   |
| 15:45-16:30 | Structure and function of erythrocytes | Dr. Saime Batırel |
| 16:30-16:35 | Discussion |   |
| 16:45-17:30 |  |   |
| 17:30-17:35 |  |   |
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| **Thursday** | **19 December** |  |
| 08:45-09:30 |   |   |
| 09:30-09:35 |   |   |
| 09:45-10:30 |   |   |
| 10:30-10:35 |   |   |
| 10:45-11:30 |   |   |
| 11:30-11:35 |   |   |
| 11:45-12:30 |   |   |
| 12:30-12:35 |   |   |
|   |  |   |
| 13:45-14:30 | Structure and function of white blood cells | Dr. Goncagül Haklar |
| 14:30-14:35 | Discussion |   |
| 14:45-15:30 | Structure and function of white blood cells | Dr. Goncagül Haklar |
| 15:30-15:35 | Discussion |   |
| 15:45-16:30 | Structure and function of hemoglobin | Dr. Betül Karademir |
| 16:30-16:35 | Discussion |   |
| 16:45-17:30 | Structure and function of hemoglobin | Dr. Betül Karademir |
| 17:30-17:35 | Discussion |   |
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| **Friday** | **20 December** |  |
| 08:45-09:30 | Vector borne diseases | Dr. Mehmet Burak Aksu |
| 09:30-09:35 | Discussion |   |
| 09:45-10:30 | Vector borne diseases | Dr. Mehmet Burak Aksu |
| 10:30-10:35 | Discussion |   |
| 10:45-11:30 | Lymphoid organs | Dr. Dilek Akakın |
| 11:30-11:35 | Discussion |   |
| 11:45-12:30 | Lymphoid organs | Dr. Dilek Akakın |
| 12:30-12:35 | Discussion |   |
|   |  |   |
| 13:45-14:30 |  |   |
| 14:30-14:35 |  |   |
| 14:45-15:30 | Blood groups | Dr. Özgür Kasımay Çakır |
| 15:30-15:35 | Discussion |   |
| 15:45-16:30 | Anatomy LAB: Anatomy of lymphoid organs-Group A | Anatomy Lab. |
| 16:30-16:35 | Discussion |   |
| 16:45-17:30 | Anatomy LAB: Anatomy of lymphoid organs-Group B | Anatomy Lab. |
| 17:30-17:35 | Discussion |   |
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|  | **Week 2 (23 December - 27 December 2019)** |  |
| **Monday** | **23 December** |  |
| 08:45-09:30 | Development of lymphoid organs | Dr. Dilek Akakın |
| 09:30-09:35 | Discussion |   |
| 09:45-10:30 | Physiology LAB: Blood Physiology-Group A | Multidisciplinary Lab. |
| 10:30-10:35 | Discussion |   |
| 10:45-11:30 | Physiology LAB: Blood Physiology-Group A | Multidisciplinary Lab. |
| 11:30-11:35 | Discussion |   |
| 11:45-12:30 | Physiology LAB: Blood Physiology-Group A | Multidisciplinary Lab. |
| 12:30-12:35 | Discussion |   |
|   |  |   |
| 13:45-14:30 | Elective course |   |
| 14:30-14:35 | Discussion |   |
| 14:45-15:30 | Elective course |   |
| 15:30-15:35 | Discussion |   |
| 15:45-16:30 |  |   |
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| 16:45-17:30 |  |   |
| 17:30-17:35 |  |   |
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| **Tuesday** | **24 December** |  |
| 08:45-09:30 | ICP-2: Basic Clinical Skills-Human in Medicine- Students Research Activity-2 |   |
| 09:30-09:35 | Discussion |   |
| 09:45-10:30 | ICP-2: Basic Clinical Skills-Human in Medicine- Students Research Activity-2 |   |
| 10:30-10:35 | Discussion |   |
| 10:45-11:30 | ICP-2: Basic Clinical Skills-Human in Medicine- Students Research Activity-2 |   |
| 11:30-11:35 | Discussion |   |
| 11:45-12:30 | ICP-2: Basic Clinical Skills-Human in Medicine- Students Research Activity-2 |   |
| 12:30-12:35 | Discussion |   |
|   |   |   |
| 13:45-14:30 | ICP-2: Basic Clinical Skills-Human in Medicine- Students Research Activity-2 |   |
| 14:30-14:35 | Discussion |   |
| 14:45-15:30 | ICP-2: Basic Clinical Skills-Human in Medicine- Students Research Activity-2 |   |
| 15:30-15:35 | Discussion |   |
| 15:45-16:30 | ICP-2: Basic Clinical Skills-Human in Medicine- Students Research Activity-2 |   |
| 16:30-16:35 | Discussion |   |
| 16:45-17:30 | ICP-2: Basic Clinical Skills-Human in Medicine- Students Research Activity-2 |   |
| 17:30-17:35 | Discussion |   |
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| **Wednesday** | **25 December** |  |
| 08:45-09:30 | Histology LAB: Blood and Lymphoid organs-Group A | Multidisciplinary Lab. |
| 09:30-09:35 | Discussion |   |
| 09:45-10:30 | Histology LAB: Blood and Lymphoid organs-Group A | Multidisciplinary Lab. |
| 10:30-10:35 | Discussion |   |
| 10:45-11:30 | Histology LAB: Blood and Lymphoid organs-Group B | Multidisciplinary Lab. |
| 11:30-11:35 | Discussion |   |
| 11:45-12:30 | Histology LAB: Blood and Lymphoid organs-Group B | Multidisciplinary Lab. |
| 12:30-12:35 | Discussion |   |
|   |   |   |
| 13:45-14:30 | Physiology LAB: Blood Physiology-Group B | Multidisciplinary Lab. |
| 14:30-14:35 | Discussion |   |
| 14:45-15:30 | Physiology LAB: Blood Physiology-Group B | Multidisciplinary Lab. |
| 15:30-15:35 | Discussion |   |
| 15:45-16:30 | Physiology LAB: Blood Physiology-Group B | Multidisciplinary Lab. |
| 16:30-16:35 | Discussion |   |
| 16:45-17:30 |  |   |
| 17:30-17:35 |  |   |
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| **Thursday** | **26 December** |  |
| 08:45-09:30 |  |   |
| 09:30-09:35 |  |   |
| 09:45-10:30 | Constituents of blood | Dr. Önder Şirikçi |
| 10:30-10:35 | Discussion |   |
| 10:45-11:30 | Systemic fungal infections | Dr. Nilgün Çerikçioğlu |
| 11:30-11:35 | Discussion |   |
| 11:45-12:30 | Systemic fungal infections | Dr. Nilgün Çerikçioğlu |
| 12:30-12:35 | Discussion |   |
|   |   |   |
| 13:45-14:30 | Biochemistry of blood coagulation and fibrinolysis | Dr. Goncagül Haklar |
| 14:30-14:35 | Discussion |   |
| 14:45-15:30 | Biochemistry of blood coagulation and fibrinolysis | Dr. Goncagül Haklar |
| 15:30-15:35 | Discussion |   |
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| 17:30-17:35 |  |   |
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| **Friday** | **27 December** |  |
| 08:45-09:30 |  |   |
| 09:30-09:35 |  |   |
| 09:45-10:30 | ICP-2: Research Course Written Exam (Group C-D) |   |
| 10:30-10:35 | Discussion |   |
| 10:45-11:30 | Neoplastic disorders of lymph node and spleen | Dr. Süheyla Bozkurt |
| 11:30-11:35 | Discussion |   |
| 11:45-12:30 | Neoplastic disorders of lymph node and spleen | Dr. Süheyla Bozkurt |
| 12:30-12:35 | Discussion |   |
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| 13:45-14:30 |   |   |
| 14:30-14:35 |   |   |
| 14:45-15:30 | Platelets: Coagulation and fibrinolysis | Dr. Yaşar İnci Alican |
| 15:30-15:35 | Discussion |   |
| 15:45-16:30 | Platelets: Coagulation and fibrinolysis | Dr. Yaşar İnci Alican |
| 16:30-16:35 | Discussion |   |
| 16:45-17:30 |  |   |
| 17:30-17:35 |  |   |
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|  | **Week 3 (30 December 2019 - 03 January 2020)** |  |
| **Monday** | **30 December** |  |
| 08:45-09:30 | Biochemical aspect of anemia | Dr. Saime Batırel |
| 09:30-09:35 | Discussion |   |
| 09:45-10:30 | Biochemical aspect of anemia | Dr. Saime Batırel |
| 10:30-10:35 | Discussion |   |
| 10:45-11:30 | Introduction to hematology, stem cell, and hematopoiesis | Dr. Tülin Tuğlular |
| 11:30-11:35 | Discussion |   |
| 11:45-12:30 | Iron metabolism and iron deficiencies | Dr. Fergün Aydın |
| 12:30-12:35 | Discussion |   |
|   |   |   |
| 13:45-14:30 | Elective course |   |
| 14:30-14:35 | Discussion |   |
| 14:45-15:30 | Elective course |   |
| 15:30-15:35 | Discussion |   |
| 15:45-16:30 |   |   |
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| **Tuesday** | **31 December** |  |
| 08:45-09:30 |  |   |
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| 17:30-17:35 |  |   |
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| **Wednesday** | **01 January** |  |
| 08:45-09:30 | **YILBAŞI TATİLİ** |   |
| 09:30-09:35 |   |
| 09:45-10:30 |   |
| 10:30-10:35 |   |
| 10:45-11:30 |   |
| 11:30-11:35 |   |
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| 15:45-16:30 |   |
| 16:30-16:35 |   |
| 16:45-17:30 |   |
| 17:30-17:35 |   |
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| **Thursday** | **02 January** |  |
| 08:45-09:30 | Classification and clinical approach to anemia | Dr. Tayfur Toptaş |
| 09:30-09:35 | Discussion |   |
| 09:45-10:30 | Megaloblastic anemias | Dr. Tayfur Toptaş |
| 10:30-10:35 | Discussion |   |
| 10:45-11:30 | Toxoplasmosis | Dr. Ufuk Hasdemir |
| 11:30-11:35 | Discussion |   |
| 11:45-12:30 |  |  |
| 12:30-12:35 |  |  |
|   |   |   |
| 13:45-14:30 | Malaria and other infections due to blood and tissue protozoa | Dr. Nurver Ülger |
| 14:30-14:35 | Discussion |   |
| 14:45-15:30 | Malaria and other infections due to blood and tissue protozoa | Dr. Nurver Ülger |
| 15:30-15:35 | Discussion |   |
| 15:45-16:30 |  |   |
| 16:30-16:35 |  |   |
| 16:45-17:30 |  |   |
| 17:30-17:35 |  |   |
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| **Friday** | **03 January** |  |
| 08:45-09:30 |  |   |
| 09:30-09:35 |  |   |
| 09:45-10:30 | Myelodysplastic syndrome | Dr. Tayfur Toptaş |
| 10:30-10:35 | Discussion |   |
| 10:45-11:30 | Acquired and congenital thrombophilias | Dr. Tayfur Toptaş |
| 11:30-11:35 | Discussion |   |
| 11:45-12:30 | Multiple myeloma and other paraproteinemias | Dr. Tayfur Toptaş |
| 12:30-12:35 | Discussion |   |
|   |   |   |
| 13:45-14:30 |   |   |
| 14:30-14:35 |   |   |
| 14:45-15:30 | PBL-1 |   |
| 15:30-15:35 | Discussion |   |
| 15:45-16:30 | PBL-1 |   |
| 16:30-16:35 | Discussion |   |
| 16:45-17:30 |  |   |
| 17:30-17:35 |  |   |
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|  | **Week 4 (06 January - 10 January 2020)** |  |
| **Monday** | **06 January** |  |
| 08:45-09:30 | Non-neoplastic disorders of lymph node and spleen | Dr. Süheyla Bozkurt |
| 09:30-09:35 | Discussion |   |
| 09:45-10:30 | Reading blood smear (slide show) | Dr. Tayfur Toptaş |
| 10:30-10:35 | Discussion |   |
| 10:45-11:30 | Acute leukemia’s: Classification and molecular aspect | Dr. Tayfur Toptaş |
| 11:30-11:35 | Discussion |   |
| 11:45-12:30 | Acute leukemia’s: Classification and molecular aspect | Dr. Tayfur Toptaş |
| 12:30-12:35 | Discussion |   |
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| 13:45-14:30 | Elective course |   |
| 14:30-14:35 | Discussion |   |
| 14:45-15:30 | Elective course |   |
| 15:30-15:35 | Discussion |   |
| 15:45-16:30 |   |   |
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| **Tuesday** | **07 January** |  |
| 08:45-09:30 | ICP-2: Basic Clinical Skills-Human in Medicine- Students Research Activity-2 |   |
| 09:30-09:35 | Discussion |   |
| 09:45-10:30 | ICP-2: Basic Clinical Skills-Human in Medicine- Students Research Activity-2 |   |
| 10:30-10:35 | Discussion |   |
| 10:45-11:30 | ICP-2: Basic Clinical Skills-Human in Medicine- Students Research Activity-2 |   |
| 11:30-11:35 | Discussion |   |
| 11:45-12:30 | ICP-2: Basic Clinical Skills-Human in Medicine- Students Research Activity-2 |   |
| 12:30-12:35 | Discussion |   |
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| 13:45-14:30 | ICP-2: Basic Clinical Skills-Human in Medicine- Students Research Activity-2 |   |
| 14:30-14:35 | Discussion |   |
| 14:45-15:30 | ICP-2: Basic Clinical Skills-Human in Medicine- Students Research Activity-2 |   |
| 15:30-15:35 | Discussion |   |
| 15:45-16:30 | ICP-2: Basic Clinical Skills-Human in Medicine- Students Research Activity-2 |   |
| 16:30-16:35 | Discussion |   |
| 16:45-17:30 | ICP-2: Basic Clinical Skills-Human in Medicine- Students Research Activity-2 |   |
| 17:30-17:35 | Discussion |   |
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| **Wednesday** | **08 January** |  |
| 08:45-09:30 | Pathology of bone marrow | Dr. Hüseyin Kemal Türköz |
| 09:30-09:35 | Discussion |   |
| 09:45-10:30 | Pathology of bone marrow | Dr. Hüseyin Kemal Türköz |
| 10:30-10:35 | Discussion |   |
| 10:45-11:30 | Introduction to hemolytic anemia’s of and mechanism of hemolysis | Dr. Ömer Doğru |
| 11:30-11:35 | Discussion |   |
| 11:45-12:30 | Hemolytic anemia’s due to membrane and enzyme defects | Dr. Ömer Doğru |
| 12:30-12:35 | Discussion |   |
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| 13:45-14:30 | PBL STUDY TIME |   |
| 14:30-14:35 | Discussion |   |
| 14:45-15:30 | PBL-2 |   |
| 15:30-15:35 | Discussion |   |
| 15:45-16:30 | PBL-2 |   |
| 16:30-16:35 | Discussion |   |
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| **Thursday** | **09 January** |  |
| 08:45-09:30 | Epidemiology of diseases spread by arthropod vectors | Dr. Ahmet Topuzoğlu |
| 09:30-09:35 | Discussion |   |
| 09:45-10:30 | Epidemiology of diseases spread by arthropod vectors | Dr. Ahmet Topuzoğlu |
| 10:30-10:35 | Discussion |   |
| 10:45-11:30 | Hemophilia | Dr. Ömer Doğru |
| 11:30-11:35 | Discussion |   |
| 11:45-12:30 | Quantitative disorders of the platelets | Dr. Ömer Doğru |
| 12:30-12:35 | Discussion |   |
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| 13:45-14:30 | Biochemistry LAB: Examination of red blood cells-Group A | Multidisciplinary Lab. |
| 14:30-14:35 | Discussion |   |
| 14:45-15:30 | Biochemistry LAB: Examination of red blood cells-Group A | Multidisciplinary Lab. |
| 15:30-15:35 | Discussion |   |
| 15:45-16:30 | Biochemistry LAB: Examination of red blood cells-Group A | Multidisciplinary Lab. |
| 16:30-16:35 | Discussion |   |
| 16:45-17:30 | Biochemistry LAB: Examination of red blood cells-Group A | Multidisciplinary Lab. |
| 17:30-17:35 | Discussion |   |
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| **Friday** | **10 January** |  |
| 08:45-09:30 | Biochemistry LAB: Examination of red blood cells-Group B | Multidisciplinary Lab. |
| 09:30-09:35 | Discussion |   |
| 09:45-10:30 | Biochemistry LAB: Examination of red blood cells-Group B | Multidisciplinary Lab. |
| 10:30-10:35 | Discussion |   |
| 10:45-11:30 | Biochemistry LAB: Examination of red blood cells-Group B | Multidisciplinary Lab. |
| 11:30-11:35 | Discussion |   |
| 11:45-12:30 | Biochemistry LAB: Examination of red blood cells-Group B | Multidisciplinary Lab. |
| 12:30-12:35 | Discussion |   |
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| 13:45-14:30 | PBL STUDY TIME |   |
| 14:30-14:35 | Discussion |   |
| 14:45-15:30 | PBL-3 |   |
| 15:30-15:35 | Discussion |   |
| 15:45-16:30 | PBL-3 |   |
| 16:30-16:35 | Discussion |   |
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| 17:30-17:35 |  |   |
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|  | **Week 5 (13 January - 17 January 2020)** |  |
| **Monday** | **13 January** |  |
| 08:45-09:30 | Pathology LAB: Pathology of bone marrow and lymphoid tissues-Group A | Multidisciplinary Lab. |
| 09:30-09:35 | Discussion |   |
| 09:45-10:30 | Pathology LAB: Pathology of bone marrow and lymphoid tissues-Group B | Multidisciplinary Lab. |
| 10:30-10:35 | Discussion |   |
| 10:45-11:30 | Pathology LAB: Pathology of bone marrow and lymphoid tissues-Group C | Multidisciplinary Lab. |
| 11:30-11:35 | Discussion |   |
| 11:45-12:30 | Pathology LAB: Pathology of bone marrow and lymphoid tissues-Group D | Multidisciplinary Lab. |
| 12:30-12:35 | Discussion |   |
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| 13:45-14:30 | Viral hemorrhagic diseases | Dr. Dilek Yağcı Çağlayık |
| 14:30-14:35 | Discussion |   |
| 14:45-15:30 |   |   |
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| **Tuesday** | **14 January** |  |
| 08:45-09:30 | ICP-2: Basic Clinical Skills-Human in Medicine- Students Research Activity-2 |   |
| 09:30-09:35 | Discussion |   |
| 09:45-10:30 | ICP-2: Basic Clinical Skills-Human in Medicine- Students Research Activity-2 |   |
| 10:30-10:35 | Discussion |   |
| 10:45-11:30 | ICP-2: Basic Clinical Skills-Human in Medicine- Students Research Activity-2 |   |
| 11:30-11:35 | Discussion |   |
| 11:45-12:30 | ICP-2: Basic Clinical Skills-Human in Medicine- Students Research Activity-2 |   |
| 12:30-12:35 | Discussion |   |
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| 13:45-14:30 | ICP-2: Basic Clinical Skills-Human in Medicine- Students Research Activity-2 |   |
| 14:30-14:35 | Discussion |   |
| 14:45-15:30 | ICP-2: Basic Clinical Skills-Human in Medicine- Students Research Activity-2 |   |
| 15:30-15:35 | Discussion |   |
| 15:45-16:30 | ICP-2: Basic Clinical Skills-Human in Medicine- Students Research Activity-2 |   |
| 16:30-16:35 | Discussion |   |
| 16:45-17:30 | ICP-2: Basic Clinical Skills-Human in Medicine- Students Research Activity-2 |   |
| 17:30-17:35 | Discussion |   |
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| **Wednesday** | **15 January** |  |
| 08:45-09:30 | Microbiology LAB: Diagnosis of hematopoietic system infections Group A | Multidisciplinary Lab. |
| 09:30-09:35 | Discussion |   |
| 09:45-10:30 | Microbiology LAB: Diagnosis of hematopoietic system infections Group A | Multidisciplinary Lab. |
| 10:30-10:35 | Discussion |   |
| 10:45-11:30 | Microbiology LAB: Diagnosis of hematopoietic system infections Group B | Multidisciplinary Lab. |
| 11:30-11:35 | Discussion |   |
| 11:45-12:30 | Microbiology LAB: Diagnosis of hematopoietic system infections Group B | Multidisciplinary Lab. |
| 12:30-12:35 | Discussion |   |
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| 13:45-14:30 | Microbiology LAB: Diagnosis of hematopoietic system infections Group A | Multidisciplinary Lab. |
| 14:30-14:35 | Discussion |   |
| 14:45-15:30 | Microbiology LAB: Diagnosis of hematopoietic system infections Group A | Multidisciplinary Lab. |
| 15:30-15:35 | Discussion |   |
| 15:45-16:30 | Microbiology LAB: Diagnosis of hematopoietic system infections Group B | Multidisciplinary Lab. |
| 16:30-16:35 | Discussion |   |
| 16:45-17:30 | Microbiology LAB: Diagnosis of hematopoietic system infections Group B | Multidisciplinary Lab. |
| 17:30-17:35 | Discussion |   |
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| **Thursday** | **16 January** |  |
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| 13:45-14:30 | Sepsis | Dr. Lütfiye Mülazımoğlu Durmuşoğlu |
| 14:30-14:35 | Discussion |   |
| 14:45-15:30 | Infections in immunocompromised host | Dr. Volkan Korten |
| 15:30-15:35 | Discussion |   |
| 15:45-16:30 | Myeloproliferative disorders: CML, Polycythemia Vera, essential thrombocytosis and primary myelofibrosis | Dr. Tülin Tuğlular |
| 16:30-16:35 | Discussion |   |
| 16:45-17:30 | Myeloproliferative disorders: CML, Polycythemia Vera, essential thrombocytosis and primary myelofibrosis | Dr. Tülin Tuğlular |
| 17:30-17:35 | Discussion |   |
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| **Friday** | **17 January** |  |
| 08:45-09:30 |   |   |
| 09:30-09:35 |   |   |
| 09:45-10:30 | Infectious mononucleosis | Dr. Uluhan Sili |
| 10:30-10:35 | Discussion |   |
| 10:45-11:30 | Aplastic anemia | Dr. Tülin Tuğlular |
| 11:30-11:35 | Discussion |   |
| 11:45-12:30 | Thrombocytopenias and immune thrombocytopenic purpura | Dr. Tülin Tuğlular |
| 12:30-12:35 | Discussion |   |
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| 13:45-14:30 | PBL STUDY TIME |   |
| 14:30-14:35 | Discussion |   |
| 14:45-15:30 | PBL-4 |   |
| 15:30-15:35 | Discussion |   |
| 15:45-16:30 | PBL-4 |   |
| 16:30-16:35 | Discussion |   |
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|  | **Week 6 (20 January - 24 January 2020)** |  |
| **Monday** | **20 January** |  |
| 08:45-09:30 | Immune hemolytic anemias | Dr. Fergün Aydın |
| 09:30-09:35 | Discussion |   |
| 09:45-10:30 | Non-immune acquired hemolytic anemias | Dr. Fergün Aydın |
| 10:30-10:35 | Discussion |   |
| 10:45-11:30 | Multi-system zoonosis including tuleremia and brucellosis | Dr. Mehmet Burak Aksu |
| 11:30-11:35 | Discussion |   |
| 11:45-12:30 | Multi-system zoonosis including tuleremia and brucellosis | Dr. Mehmet Burak Aksu |
| 12:30-12:35 | Discussion |   |
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| 13:45-14:30 | Elective course |   |
| 14:30-14:35 | Discussion |   |
| 14:45-15:30 | Elective course |   |
| 15:30-15:35 | Discussion |   |
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| **Tuesday** | **21 January** |  |
| 08:45-09:30 | ICP-2: Basic Clinical Skills-Human in Medicine- Students Research Activity-2 |   |
| 09:30-09:35 | Discussion |   |
| 09:45-10:30 | ICP-2: Basic Clinical Skills-Human in Medicine- Students Research Activity-2 |   |
| 10:30-10:35 | Discussion |   |
| 10:45-11:30 | ICP-2: Basic Clinical Skills-Human in Medicine- Students Research Activity-2 |   |
| 11:30-11:35 | Discussion |   |
| 11:45-12:30 | ICP-2: Basic Clinical Skills-Human in Medicine- Students Research Activity-2 |   |
| 12:30-12:35 | Discussion |   |
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| 13:45-14:30 | ICP-2: Basic Clinical Skills-Human in Medicine- Students Research Activity-2 |   |
| 14:30-14:35 | Discussion |   |
| 14:45-15:30 | ICP-2: Basic Clinical Skills-Human in Medicine- Students Research Activity-2 |   |
| 15:30-15:35 | Discussion |   |
| 15:45-16:30 | ICP-2: Basic Clinical Skills-Human in Medicine- Students Research Activity-2 |   |
| 16:30-16:35 | Discussion |   |
| 16:45-17:30 | ICP-2: Basic Clinical Skills-Human in Medicine- Students Research Activity-2 |   |
| 17:30-17:35 | Discussion |   |
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| **Wednesday** | **22 January** |  |
| 08:45-09:30 | Biological modifiers | Dr. Medine Gülçebi İdriz Oğlu  |
| 09:30-09:35 | Discussion |   |
| 09:45-10:30 | Sickle cell disease | Dr. Nurşah Eker |
| 10:30-10:35 | Discussion |   |
| 10:45-11:30 | Transfusion medicine: Blood components | Dr. Fergün Aydın |
| 11:30-11:35 | Discussion |   |
| 11:45-12:30 | Blood transfusion indications and complications | Dr. Fergün Aydın |
| 12:30-12:35 | Discussion |   |
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| 13:45-14:30 | Thalassemias | Dr. Ömer Doğru |
| 14:30-14:35 | Discussion |   |
| 14:45-15:30 | Chronic lymphocytic leukemia’s (CLL) | Dr. Tülin Tuğlular |
| 15:30-15:35 | Discussion |   |
| 15:45-16:30 | (Case) An adult patient with lymphadenopathies | Dr. Mehmet Akman |
| 16:30-16:35 | Discussion |   |
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| **Thursday** | **23 January** |  |
| 08:45-09:30 |  |   |
| 09:30-09:35 |  |   |
| 09:45-10:30 | Pharmacotherapy of anemia | Dr. Hasan Raci Yananlı |
| 10:30-10:35 | Discussion |   |
| 10:45-11:30 | Anticancer chemotherapy | Dr. Ahmet Akıcı |
| 11:30-11:35 | Discussion |   |
| 11:45-12:30 | Pharmacotherapy of malaria | Dr. Medine Gülçebi İdriz Oğlu  |
| 12:30-12:35 | Discussion |   |
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| 13:45-14:30 | Genetics of hematological disorders | Dr. Pınar Ata |
| 14:30-14:35 | Discussion |   |
| 14:45-15:30 | Genetics of hematological disorders | Dr. Pınar Ata |
| 15:30-15:35 | Discussion |   |
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| **Friday** | **24 January** |  |
| 08:45-09:30 |   |   |
| 09:30-09:35 |   |   |
| 09:45-10:30 | Molecular basis of hemoglobinopathies | Dr. Sıdıka Ayşe Özer |
| 10:30-10:35 | Discussion |   |
| 10:45-11:30 | DNA diagnosis of hemaglobinopathies | Dr. Sıdıka Ayşe Özer |
| 11:30-11:35 | Discussion |   |
| 11:45-12:30 | Heavy metals and antagonists | Dr. Hasan Raci Yananlı |
| 12:30-12:35 | Discussion |   |
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| 13:45-14:30 |   |   |
| 14:30-14:35 |   |   |
| 14:45-15:30 | Hodgkin disease and non-Hodgkin lymphomas | Dr. Tülin Tuğlular |
| 15:30-15:35 | Discussion |   |
| 15:45-16:30 | Hodgkin disease and non-Hodgkin lymphomas | Dr. Tülin Tuğlular |
| 16:30-16:35 | Discussion |   |
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|  | **Week 7 (10 February - 14 February 2020)** |  |
| **Monday** | **10 February** |  |
| 08:45-09:30 | **PRACTICAL EXAM** |   |
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| 13:45-14:30 | Elective course  |   |
| 14:30-14:35 | Discussion |   |
| 14:45-15:30 | Elective course  |   |
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| **Tuesday** | **11 February** |  |
| 08:45-09:30 | **PRACTICAL EXAM** |   |
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| **Wednesday** | **12 February** |  |
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| **Thursday** | **13 February** |  |
| 08:45-09:30 | **Y2C3 THEORETICAL EXAM** |   |
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| **Friday** | **14 February** |  |
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