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| **C:\Users\Namariel\Downloads\TıpF (1)\TıpF\TıpF-2.png****MARMARA UNIVERSITY SCHOOL of MEDICINE** |
| **cardiovascular.gif**CARDIOVASCULAR SYSTEM AND RELATED DISORDERS YEAR 3 COURSE 1September 06 – October 22, 2021 |
| **Coordinator of the Course 3.1**Prof. Osman YEŞİLDAĞ  | **Coordinator of the Module 3.1**Assoc. Prof. Murat SÜNBÜL |
| **Year 3 Coordinators** Prof. Arzu İLKİ & Assoc. Prof. Pınar Mega TİBER |
| **Module Coordinator**Prof. Rezzan GÜLHANAssist. Prof. Sinem YILDIZ İNANICI | **Introduction to Clinical Practice (ICP) Coordinator**Prof. Pemra CÖBEK ÜNALANProf. Serap ÇİFÇİLİ |
|  **Coordinator of Multidisciplinary Students’ Lab**.Prof. Betül YILMAZ | **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** 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)**Assoc. Prof. Altuğ ÇİNÇİN & Prof. Hasan R. YANANLI | **Dean**Prof. Ümit Süleyman ŞEHİRLİ |

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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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| CARDIOVASCULAR SYSTEM AND RELATED DISORDERS |
| **AIM and LEARNING OBJECTIVES of COURSE** **Aim:** With an interdisciplinary approach, to learn about the morphology and functions of the cardiovascular system, about the principles of circulation and to correlate the pathophysiological mechanisms with the diseases of the cardiovascular system.**Learning Objectives:** * To learn the morphology of the heart and the vessels
* To describe the basic mechanisms of circulation
* To define and discuss the factors impairing the normal function of the cardiovascular system and their pathological reflections on the occurrence of the diseases
* To learn the major symptoms and signs of the cardiovascular diseases and the principles of therapeutic approaches
* To learn the methods of the prevention from the cardiovascular diseases and its epidemiological importance as related with the mortality and morbidity in the population
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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-3.1 & MODULE-3.1** |
| * Anatomy
* Biochemistry
* Biophysics
* Cardiology
* Cardiovascular Surgery
* Clinical Pharmacology
* Family Medicine
* Histology and Embryology
 | * Nuclear Medicine
* Microbiology
* Pathology
* Pediatric Cardiology
* Physiology
* Public Health
* Radiology
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| **LECTURERS / TUTORS** |
| Koray AK, Professor of Cardiovascular SurgeryFigen AKALIN, Professor of Pediatric CardiologyAhmet AKICI, Professor of Clinical PharmacologyHalil ATAŞ, Assoc. Professor of CardiologySaime BATIREL, Assoc. Professor of BiochemistryOnur BUĞDAYCI, Assist. Professor of RadiologyZeliha Leyla CİNEL, Professor of PathologyNilgün ÇERİKÇİOĞLU, Professor of MicrobiologyŞule ÇETİNEL, Professor of Histology and EmbryologyAhmet Altuğ ÇİNÇİN, Assoc. Professor of Cardiologyİpek ERBARUT, Assist. Professor of PathologyGünseli Ayşe GARİP İNHAN, Assoc. Professor of BiophysicsZafer GÖREN, Professor of PharmacologyRezzan GÜLHAN, Professor of PharmacologyNesrin KARTAL ÖZER, Professor of BiochemistryÖzgür KASIMAY ÇAKIR, Assoc. Professor of PhysiologyMert KAŞKAL, Lecturer of PharmacologyÖzlem Tuğçe KAYA, Assist. Professor of Histology and EmbryologyAlper KEPEZ, Assoc. Professor of Cardiology | Hızır KURTEL, Professor of PhysiologyNimet Emel LÜLECİ, Professor of Public HealthBülent MUTLU, Professor of CardiologyFiliz ONAT, Professor of Clinical PharmacologyOya ORUN, Professor of BiophysicsBeste ÖZBEN SADIÇ, Professor of CardiologyNecmettin Ömer ÖZDOĞMUŞ, Assoc. Professor of AnatomyNurten SAYAR, Professor of CardiologyMehmet Ali SÖYLEMEZ, Lecturer of Medical GeneticsMurat SÜNBÜL, Assoc. Professor of CardiologyHalil Turgut TUROĞLU, Professor of Nuclear MedicineHüseyin Kemal TÜRKÖZ, Assoc. Professor of PathologyArzu UZUNER, Professor of Family MedicineNurver ÜLGER, Professor of MicrobiologyGülru Pemra CÖBELEK ÜNALAN, Professor of Family MedicineAhmet Suha YALÇIN, Professor of BiochemistryBerrak YEĞEN, Professor of PhysiologyOsman YEŞİLDAĞ, Professor of CardiologyAlper YILDIRIM, Assoc. Professor of Physiology |

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| **READING / STUDYING MATERIALS*** Pocket Guide to ECG Diagnosis, Edward K.Chung, First edition, Blackwell Science.
* Chou’s Electrocardiography in Clinical Practice, 6th edition, Surawicz, Kinilans, 2008, Saunders, Elsevier.
* Clinical Cardiology, Lange Medical Books, Melvin D. Cheitlin, Maurice Sokolow, Malcolm B. Mc Ilroy.
* Cardiac Imaging Secrets, Elsevier Neil J. Weissman MD, Gabriel A. Adelman MD, 2004.
* Clinical Electrocardiography, Ary L. Goldberger, Simplified Approach Mosby-Elsevier, 2008.
* Drugs for the Heart, Lionel H. Opie, Bernard J. Gersh 7th Edition, Saunders Elsevier.
* Current Diagnosis and Treatment in Cardiology, Michael Crawford Lange Medical Books, McGraw Hill, 2006.
* Clinical Skills, Bouchier and Morris, Saunders.
* Braunwald Heart Disease, 8th Edition, W. B. Saunders, Eugene Braunwald, Douglas P.Zipes, Peter Libby, 2012.
* **K**ardiyoloji, Editörler: İsfendiyar Candan, Derviş Oral, Ankara Üniversitesi, Tıp Fakültesi Yayınları.
* Klinik Kardiyoloji, Hasan Gök, Nobel Kitabevi, 2002.
* Lecture Notes on Cardiology, Huon H Gray, Keith H Dawkins, John M. Morgan, T. Simpson, 4th Edition Blackwell Science.
* Lecture Notes on Clinical Skills, Robert Turner, Roger Blackwood, 3rd Edition, Blackwell Science, 2003.
* Pathophysiology of Heart Disease, Leonard S. Lilly, Lea & Febiger, 2008.
* Manual of Cardiovascular Medicine, 3rd Edition, Brian P Griffin, Eric J. Topol, Lippincott Williams & Wilkins, 2004.
* Cardiovascular Diagnosis The Initial Examination, J. Willis Hurst Mosby Wolfe Medical Communication, 2004.
* Cardiac Drug Therapy, M. Gabriel Kahn, 6th Edition, Saunders.
* Handbook of Cardiovascular Emergencies, 2nd Edition, James W. Hoekstra, Lippincott Williams Wilkins.
* Hurst’s The Heart, Manual of Cardiology, 10th Edition, Robert A. O’Rourke, Valentin Fuster, R.Wayne Alexander.
* Cardiovascular Physiology Lange Physiology Series, David E. Rohrman, Louis J. Heller, 6th Edition, 2006.
* A Pocket Guide to Physical Examination and History Taking, Barbara Bates J. B., Lippincott.
* Kardiyoloji Modern Semiyoloji, Prof. Dr. Dinçer Uçak, Nobel Kitabevi, 2003.
* A Colour Atlas of Physical Signs in Cardiovascular Disease, L. M. Shapiro, K. M. Fox Wolfe Medical Publication.
* Netter’s Cardiology, Marschall S Runge, Magnus Ohman, Icon Learning Systems 2004.
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| SUMMARY OF THE COURSE  |
| **Discipline** | **Lecture & Group Discussion** | **Multidisciplinary Lab. & Clinical Skills Lab. Practice** | Total |
| Anatomy | 4 | 1 | 5 |
| Biochemistry | 10 |  | 9 |
| Biophysics | 11 |  | 11 |
| Cardiology | 28 |  | 28 |
| Cardiovascular Surgery | 1 |  | 1 |
| Clinical Pharmacology | 13 |  | 13 |
| Family Medicine | 2 |  | 2 |
| Histology and Embryology | 5 | 2 | 7 |
| Nuclear Medicine | 1 |  | 1 |
| Microbiology  | 3 |  | 3 |
| Pathology | 7 | 2 | 7 |
| Pediatric Cardiology | 5 |  | 5 |
| Physiology | 18 | 3 | 21 |
| Public Health | 2 |  | 2 |
| Radiology | 1 |  | 1 |
| Genetics | 1 |  | 1 |
| Subtotal | 112 | 8 | 120 |
| PBL Module | 10 |  | 10 |
| ICP-3: Basic Medical Practices, Clinical Skills Lab., Student Research Activity | 1 |  12 | 13 |
| **TOTAL** | **138** | **23** | **143** |

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| **SEVEN WEEK PROGRAM** |
|  | **THEORETICAL AND PRACTICAL SESSIONS** | **LECTURER(S)/TUTOR(S)** |
| **Week-1 (06 September - 10 September 2021)** |
| **Monday** | **06 September** |   |
| 08:40-09:30 | Pathology Telafi Lab - Group A | Multidisciplinary Lab. |
| 09:40-10:30 | Pathology Telafi Lab - Group A | Multidisciplinary Lab. |
| 10:40-11:30 | Pathology Telafi Lab - Group B | Multidisciplinary Lab. |
| 11:40-12:30 | Pathology Telafi Lab - Group B | Multidisciplinary Lab. |
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| 13:40-14:30 | Pathology Telafi Lab - Group C | Multidisciplinary Lab. |
| 14:40-15:30 | Pathology Telafi Lab - Group C | Multidisciplinary Lab. |
| 15:40-16:30 | Pathology Telafi Lab - Group D | Multidisciplinary Lab. |
| 16:40-17:30 | Pathology Telafi Lab - Group D | Multidisciplinary Lab. |
| 17:40-18:30 |  |  |
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| **Tuesday** | **07 September** |  |
| 08:40-09:30 |  |  |
| 09:40-10:30 | Introduction to the course and opening lecture | Dr. Osman Yeşildağ |
| 10:40-11:30 | Heart and pericardium | Dr. Necmettin Ömer Özdoğmuş |
| 11:40-12:30 | Heart and pericardium | Dr. Necmettin Ömer Özdoğmuş |
|  |  |  |
| 13:40-14:30 | Heart and pericardium | Dr. Necmettin Ömer Özdoğmuş |
| 14:40-15:30 | Histology of the heart | Dr. Özlem Tuğçe Kaya |
| 15:40-16:30 | Histology of blood vessels | Dr. Özlem Tuğçe Kaya |
| 16:40-17:30 | Histology of blood vessels | Dr. Özlem Tuğçe Kaya |
| 17:40-18:30 |  |  |
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| **Wednesday** | **08 September** |  |
| 08:40-09:30 |  |  |
| 09:40-10:30 | Cardiac cycle | Dr. Berrak Yegen |
| 10:40-11:30 | Cardiac cycle | Dr. Berrak Yegen |
| 11:40-12:30 | Heart sounds | Dr. Özgür Kasımay Çakır |
|  |  |  |
| 13:40-14:30 | Electrical fields, potential at a point | Dr. Günseli Ayşe Garip İnhan |
| 14:40-15:30 | Electrical fields, potential at a point | Dr. Günseli Ayşe Garip İnhan |
| 15:40-16:30 | Development of the cardiovascular system | Dr. Şule Çetinel |
| 16:40-17:30 | Development of the cardiovascular system | Dr. Şule Çetinel |
| 17:40-18:30 |  |  |
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| **Thursday** | **09 September** |  |
| 08:40-09:30 | Pathology Telafi Lab - Group D | Multidisciplinary Lab. |
| 09:40-10:30 | Pathology Telafi Lab - Group C | Multidisciplinary Lab. |
| 10:40-11:30 | Pathology Telafi Lab - Group A | Multidisciplinary Lab. |
| 11:40-12:30 | Pathology Telafi Lab - Group B | Multidisciplinary Lab. |
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| 13:40-14:30 | Pathology Telafi Lab - Group C | Multidisciplinary Lab. |
| 14:40-15:30 | Pathology Telafi Lab - Group D | Multidisciplinary Lab. |
| 15:40-16:30 | Pathology Telafi Lab - Group B | Multidisciplinary Lab. |
| 16:40-17:30 | Pathology Telafi Lab - Group A | Multidisciplinary Lab. |
| 17:40-18:30 |  |  |
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| **Friday** | **10 September** |  |
| 08:40-09:30 | Anatomy of the vessels (arterial and venous system) | Dr. Necmettin Ömer Özdoğmuş |
| 09:40-10:30 | Principles of ECG | Dr. Berrak Yegen |
| 10:40-11:30 | Principles of ECG | Dr. Berrak Yegen |
| 11:40-12:30 | Cardiac action potentials | Dr. Günseli Ayşe Garip İnhan |
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| 13:40-14:30 |  |  |
| 14:40-15:30 | Vascular events | Dr. Nesrin Kartal Özer  |
| 15:40-16:30 | Principles of hemodynamics | Dr. Hızır Kurtel |
| 16:40-17:30 | Principles of hemodynamics | Dr. Hızır Kurtel |
| 17:40-18:30 |  |  |
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| **Week-2 (13 September - 17 September 2021)** |
| **Monday** | **13 September** |  |
| 08:40-09:30 | ICP introduction online |  |
| 09:40-10:30 | ICP Self study (Bates videos and online lectures) |  |
| 10:40-11:30 | ICP Self study (Bates videos and online lectures) |  |
| 11:40-12:30 | ICP Self study (Bates videos and online lectures) |  |
|  |  |  |
| 13:40-14:30 | Anatomy LAB: Heart and pericardium-Group A | Anatomy Lab. |
| 14:40-15:30 | Anatomy LAB: Heart and pericardium-Group B | Anatomy Lab. |
| 15:40-16:30 | Anatomy LAB: Heart and pericardium-Group C | Anatomy Lab. |
| 16:40-17:30 | Anatomy LAB: Heart and pericardium-Group D | Anatomy Lab. |
| 17:40-18:30 |  |  |
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| **Tuesday** | **14 September** |  |
| 08:40-09:30 |  |  |
| 09:40-10:30 | Approach to the patient with cardiovascular system disease | Dr. Beste Özben Sadıç |
| 10:40-11:30 | Cardiac injury and markers | Dr. Ahmet Suha Yalçın |
| 11:40-12:30 | Cardiac injury and markers | Dr. Ahmet Suha Yalçın |
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| 13:40-14:30 | Regulation of blood pressure | Dr. Hızır Kurtel |
| 14:40-15:30 | Regulation of blood pressure | Dr. Hızır Kurtel |
| 15:40-16:30 | Regulation of blood pressure | Dr. Hızır Kurtel |
| 16:40-17:30 | ECG and its interpretation | Dr. Özgür Kasımay Çakır |
| 17:40-18:30 |  |  |
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| **Wednesday** | **15 September** |  |
| 08:40-09:30 | Physiology LAB: ECG-1 **–Group A-B** | Computer Lab. |
| 09:40-10:30 | Physiology LAB: ECG-1 **–Group A-B** | Computer Lab. |
| 10:40-11:30 | Physiology LAB: ECG-1 **–Group A-B** | Computer Lab. |
| 11:40-12:30 | Physiology LAB: ECG-1 **–Group A-B** | Computer Lab. |
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| 13:40-14:30 | Principles of electrocardiography | Dr. Günseli Ayşe Garip İnhan |
| 14:40-15:30 | Principles of electrocardiography | Dr. Günseli Ayşe Garip İnhan |
| 15:40-16:30 | Principal symptom and general signs in cardiovascular disease | Dr. Beste Özben Sadıç |
| 16:40-17:30 | Principal symptom and general signs in cardiovascular disease | Dr. Beste Özben Sadıç |
| 17:40-18:30 |  |  |
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| **Thursday** | **16 September** |  |
| 08:40-09:30 |  |  |
| 09:40-10:30 |  |  |
| 10:40-11:30 |  |  |
| 11:40-12:30 |  |  |
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| 13:40-14:30 | Examination of the heart and vessels | Dr. Osman Yeşildağ |
| 14:40-15:30 | Examination of the heart and vessels | Dr. Osman Yeşildağ |
| 15:40-16:30 | Physiological properties of the cardiac muscle | Dr. Alper Yıldırım |
| 16:40-17:30 | Regulation of cardiac functions | Dr. Alper Yıldırım |
| 17:40-18:30 |  |  |
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| **Friday** | **17 September** |  |
| 08:40-09:30 | Physiology LAB: ECG-1 **- Group C-D** | Computer Lab. |
| 09:40-10:30 | Physiology LAB: ECG-1 **- Group C-D** | Computer Lab. |
| 10:40-11:30 | Physiology LAB: ECG-1 **- Group C-D** | Computer Lab. |
| 11:40-12:30 | Physiology LAB: ECG-1 **- Group C-D** | Computer Lab. |
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| 13:40-14:30 |  |  |
| 14:40-15:30 | ICP-CSL Resp Group A | ICP Lab |
| 15:40-16:30 | ICP-CSL Resp Group A | ICP Lab |
| 16:40-17:30 | ICP-CSL Resp Group A | ICP Lab |
| 17:40-18:30 | ICP-CSL Resp Group A | ICP Lab |
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| **Week-3 (20 September - 24 September 2021)** |
| **Monday** | **20 September** |  |
| 08:40-09:30 | ICP-CSL Resp Group B / Microbiology Telafi Lab Group C | ICP Lab / Multidiciplinary Lab |
| 09:40-10:30 | ICP-CSL Resp Group B / Microbiology Telafi Lab Group C | ICP Lab / Multidiciplinary Lab |
| 10:40-11:30 | ICP-CSL Resp Group B / Microbiology Telafi Lab Group C | ICP Lab / Multidiciplinary Lab |
| 11:40-12:30 | ICP-CSL Resp Group B / Microbiology Telafi Lab Group C | ICP Lab / Multidiciplinary Lab |
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| 13:40-14:30 | PBL-1 |  |
| 14:40-15:30 | PBL-1 |  |
| 15:40-16:30 |  |  |
| 16:40-17:30 |  |  |
| 17:40-18:30 |  |  |
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| **Tuesday** | **21 September** |  |
| 08:40-09:30 | Biochemical aspects of the metabolic syndrome | Dr. Nesrin Kartal Özer |
| 09:40-10:30 | Biochemical aspects of the metabolic syndrome | Dr. Nesrin Kartal Özer |
| 10:40-11:30 | Cardiac output | Dr. Alper Yıldırım |
| 11:40-12:30 | Coronary circulation | Dr. Alper Yıldırım |
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| 13:40-14:30 | Physiology LAB: ECG-2 - **Group C-D/** Histology LAB: Histology of heart, blood vessels - **Group A** | Computer Lab./ Multidisciplinary Lab. |
| 14:40-15:30 | Physiology LAB: ECG-2 - **Group C-D/** Histology LAB: Histology of heart, blood vessels - **Group A** | Computer Lab./ Multidisciplinary Lab. |
| 15:40-16:30 | Physiology LAB: ECG-2 – **Group C-D /** Histology LAB: Histology of heart, blood vessels - **Group B** | Computer Lab./ Multidisciplinary Lab. |
| 16:40-17:30 | Physiology LAB: ECG-2 - **Group C-D /** Histology LAB: Histology of heart, blood vessels - **Group B** | Computer Lab./ Multidisciplinary Lab. |
| 17:40-18:30 |  |  |
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| **Wednesday** | **22 September** |  |
| 08:40-09:30 | Diagnostic methods in cardiology | Dr. Murat Sünbül |
| 09:40-10:30 | Diagnostic methods in cardiology | Dr. Murat Sünbül |
| 10:40-11:30 | Valvular heart disease  | Dr. Bülent Mutlu |
| 11:40-12:30 | Valvular heart disease  | Dr. Bülent Mutlu |
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| 13:40-14:30 | PBL Study Time |  |
| 14:40-15:30 | PBL-2 |  |
| 15:40-16:30 | PBL-2 |  |
| 16:40-17:30 |  |  |
| 17:40-18:30 |  |  |
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| **Thursday** | **23 September** |  |
| 08:40-09:30 | ICP-CSL Resp Group C / Microbiology Telafi Lab Group B | ICP Lab / Multidiciplinary Lab |
| 09:40-10:30 | ICP-CSL Resp Group C / Microbiology Telafi Lab Group B | ICP Lab / Multidiciplinary Lab |
| 10:40-11:30 | ICP-CSL Resp Group C / Microbiology Telafi Lab Group B | ICP Lab / Multidiciplinary Lab |
| 11:40-12:30 | ICP-CSL Resp Group C / Microbiology Telafi Lab Group B | ICP Lab / Multidiciplinary Lab |
|  |  |  |
| 13:40-14:30 | ICP-CSL Resp Group D / Microbiology Telafi Lab Group A | ICP Lab / Multidiciplinary Lab |
| 14:40-15:30 | ICP-CSL Resp Group D / Microbiology Telafi Lab Group A | ICP Lab / Multidiciplinary Lab |
| 15:40-16:30 | ICP-CSL Resp Group D / Microbiology Telafi Lab Group A | ICP Lab / Multidiciplinary Lab |
| 16:40-17:30 | ICP-CSL Resp Group D / Microbiology Telafi Lab Group A | ICP Lab / Multidiciplinary Lab |
| 17:40-18:30 |  |  |
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| **Friday** | **24 September** |  |
| 08:40-09:30 |  |  |
| 09:40-10:30 | Principles of hemodynamics | Dr. Günseli Ayşe Garip İnhan |
| 10:40-11:30 | Principles of hemodynamics | Dr. Günseli Ayşe Garip İnhan |
| 11:40-12:30 | Principles of echocardiography | Dr. Günseli Ayşe Garip İnhan |
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| 13:40-14:30 |  |  |
| 14:40-15:30 | Viscosity, laminar and turbulent flow | Dr. Oya Orun |
| 15:40-16:30 | Viscosity, laminar and turbulent flow | Dr. Oya Orun |
| 16:40-17:30 | Bernouilli's equation, the role of gravity in the circulation | Dr. Oya Orun |
| 17:40-18:30 |  |  |
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| **Week-4 (27 September - 01 October 2021)** |  |  |
| **Monday** | **27 September** |  |
| 08:40-09:30 | Histology telafi lab - Group A | Multidisciplinary Lab. |
| 09:40-10:30 | Histology telafi lab - Group A | Multidisciplinary Lab. |
| 10:40-11:30 | Histology telafi lab - Group B | Multidisciplinary Lab. |
| 11:40-12:30 | Histology telafi lab - Group B | Multidisciplinary Lab. |
|  |  |  |
| 13:40-14:30 | PBL Study Time |  |
| 14:40-15:30 | PBL-3 |  |
| 15:40-16:30 | PBL-3 |  |
| 16:40-17:30 | Clinical electrocardiography | Dr. Alper Kepez |
| 17:40-18:30 | Clinical electrocardiography | Dr. Alper Kepez |
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| **Tuesday** | **28 September** |  |
| 08:40-09:30 | Hyperlipidemias and atherosclerosis | Dr. Nesrin Kartal Özer  |
| 09:40-10:30 | Hyperlipidemias and atherosclerosis | Dr. Nesrin Kartal Özer  |
| 10:40-11:30 | Epidemiology of coronary heart disease | Dr. Nimet Emel Lüleci |
| 11:40-12:30 | Circulation through specific organs | Dr. Özgür Kasımay Çakır |
|  |  |  |
| 13:40-14:30 | Physiology LAB: ECG-2 - **Group A-B /** Histology LAB: Histology of heart, blood vessels - **Group C** | Computer Lab./ Multidisciplinary Lab. |
| 14:40-15:30 | Physiology LAB: ECG-2 - **Group A-B /** Histology LAB: Histology of heart, blood vessels - **Group C** | Computer Lab./ Multidisciplinary Lab. |
| 15:40-16:30 | Physiology LAB: ECG-2 - **Group A-B /** Histology LAB: Histology of heart, blood vessels - **Group D** | Computer Lab./ Multidisciplinary Lab. |
| 16:40-17:30 | Physiology LAB: ECG-2 - **Group A-B /** Histology LAB: Histology of heart, blood vessels - **Group D** | Computer Lab./ Multidisciplinary Lab. |
| 17:40-18:30 |  |  |
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| **Wednesday** | **29 September** |  |
| 08:40-09:30 | Physiology LAB: Blood pressure, heart sounds, pulse - **Group A** | ICP Lab. |
| 09:40-10:30 | Physiology LAB: Blood pressure, heart sounds, pulse - **Group B** | ICP Lab. |
| 10:40-11:30 | Physiology LAB: Blood pressure, heart sounds, pulse - **Group C** | ICP Lab. |
| 11:40-12:30 | Physiology LAB: Blood pressure, heart sounds, pulse - **Group D** | ICP Lab. |
|  |  |  |
| 13:40-14:30 | PBL Study Time |  |
| 14:40-15:30 | PBL-4 |  |
| 15:40-16:30 | PBL-4 |  |
| 16:40-17:30 |  |  |
| 17:40-18:30 |  |  |
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| **Thursday** | **30 September** |  |
| 08:40-09:30 |  ICP-CSL Card Group A / Microbiology Telafi Lab Group D | ICP Lab / Multidiciplinary Lab |
| 09:40-10:30 |  ICP-CSL Card Group A / Microbiology Telafi Lab Group D | ICP Lab / Multidiciplinary Lab |
| 10:40-11:30 |  ICP-CSL Card Group A / Microbiology Telafi Lab Group D | ICP Lab / Multidiciplinary Lab |
| 11:40-12:30 |  ICP-CSL Card Group A / Microbiology Telafi Lab Group D | ICP Lab / Multidiciplinary Lab |
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| 13:40-14:30 | Arterial pulse | Dr. Özgür Kasımay Çakır |
| 14:40-15:30 | Regulation of blood flow | Dr. Özgür Kasımay Çakır |
| 15:40-16:30 | Approach to thromboembolic disorders | Dr. Koray Ak |
| 16:40-17:30 |  |  |
| 17:40-18:30 |  |  |
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| **Friday** | **01 October** |  |
| 08:40-09:30 | Vasculitis | Dr. Zeliha Leyla Cinel |
| 09:40-10:30 | Coronary artery disease | Dr. Nurten Sayar |
| 10:40-11:30 | Coronary artery disease | Dr. Nurten Sayar |
| 11:40-12:30 | Syncope and sudden cardiac death | Dr. Halil Ataş |
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| 13:40-14:30 |  |  |
| 14:40-15:30 |  |  |
| 15:40-16:30 |  |  |
| 16:40-17:30 | Pericarditis | Dr. Murat Sünbül |
| 17:40-18:30 |  |  |
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| **Week-5 (04 October - 08 October 2021)** |
| **Monday** | **04 October** |  |
| 08:40-09:30 | Systemic hypertension and hypertensive heart disease | Dr. Osman Yeşildağ |
| 09:40-10:30 | Systemic hypertension and hypertensive heart disease | Dr. Osman Yeşildağ |
| 10:40-11:30 | Histology telafi lab - Group C | Multidisciplinary Lab. |
| 11:40-12:30 | Histology telafi lab - Group C | Multidisciplinary Lab. |
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| 13:40-14:30 | PBL Study Time |  |
| 14:40-15:30 | PBL-5 |  |
| 15:40-16:30 | PBL-5 |  |
| 16:40-17:30 | Valvular heart disease (Online) | Dr. Bülent Mutlu |
| 17:40-18:30 | Valvular heart disease (Online) | Dr. Bülent Mutlu |
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| **Tuesday** | **05 October** |  |
| 08:40-09:30 |  |  |
| 09:40-10:30 | Cardiac dysrhythmias  | Dr. Alper Kepez |
| 10:40-11:30 | Cardiac dysrhythmias  | Dr. Alper Kepez |
| 11:40-12:30 | Diseases of the aorta and the peripheral blood vessels | Dr. Ahmet Altuğ Çinçin |
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| 13:40-14:30 |  |  |
| 14:40-15:30 | Ischaemic heart disease | Dr. İpek Erbarut |
| 15:40-16:30 | Ischaemic heart disease | Dr. İpek Erbarut |
| 16:40-17:30 | Cardiomyopathies and myocarditis | Dr. Halil Ataş |
| 17:40-18:30 |  |  |
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| **Wednesday** | **06 October** |  |
| 08:40-09:30 | Radiology of the cardiovascular system | Dr. Onur Buğdaycı |
| 09:40-10:30 | Valvular diseases of the heart | Dr. Hüseyin Kemal Türköz |
| 10:40-11:30 | Neoplastic diseases of the heart & blood vessels  | Dr. Hüseyin Kemal Türköz |
| 11:40-12:30 |  |  |
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| 13:40-14:30 | Heart failure and cardiogenic shock | Dr. Nurten Sayar |
| 14:40-15:30 | Heart failure and cardiogenic shock | Dr. Nurten Sayar |
| 15:40-16:30 |  |  |
| 16:40-17:30 |  |   |
| 17:40-18:30 |  |  |
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| **Thursday** | **07 October** |  |
| 08:40-09:30 | ICP-CSL Card Group B | ICP Lab. |
| 09:40-10:30 | ICP-CSL Card Group B | ICP Lab. |
| 10:40-11:30 | ICP-CSL Card Group B | ICP Lab. |
| 11:40-12:30 | ICP-CSL Card Group B | ICP Lab. |
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| 13:40-14:30 | Pulmonary hypertension in cardiology | Dr. Bülent Mutlu |
| 14:40-15:30 | Infective endocarditis | Dr. Bülent Mutlu |
| 15:40-16:30 | Myocardial scintigraphy and radionuclide ventriculography | Dr. Halil Turgut Turoğlu |
| 16:40-17:30 |  |  |
| 17:40-18:30 |  |  |
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| **Friday** | **08 October** |  |
| 08:40-09:30 |  |  |
| 09:40-10:30 | Lipoprotein metabolism | Dr. Saime Batırel |
| 10:40-11:30 | Lipoprotein metabolism | Dr. Saime Batırel |
| 11:40-12:30 | Lipoprotein metabolism | Dr. Saime Batırel |
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| 13:40-14:30 |  |  |
| 14:40-15:30 | Pharmacotherapy of hypertension | Dr. Ahmet Akıcı |
| 15:40-16:30 | Pharmacotherapy of hypertension | Dr. Ahmet Akıcı |
| 16:40-17:30 | Pharmacotherapy of hypertension | Dr. Ahmet Akıcı |
| 18:00-18.40 | Acute coronary syndrome | Dr. Ahmet Altuğ Çinçin |
|  18.50-19.30 | Acute coronary syndrome |  Dr. Ahmet Altuğ Çinçin |
| **Week-6 (11 October - 15 October 2021)** |
| **Monday** | **11 October** |  |
| 08:40-09:30 | Atherosclerosis & hypertensive cardiovascular events | Dr. Zeliha Leyla Cinel |
| 09:40-10:30 | Atherosclerosis & hypertensive cardiovascular events | Dr. Zeliha Leyla Cinel |
| 10:40-11:30 | Histology telafi lab - Group D | Multidisciplinary Lab. |
| 11:40-12:30 | Histology telafi lab - Group D | Multidisciplinary Lab. |
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| 13:40-14:30 | Acute rheumatic fever | Dr. Figen Akalın |
| 14:40-15:30 | Acute rheumatic fever | Dr. Figen Akalın |
| 15:40-16:30 | Adult patient with chest pain. Primary care approach | Dr. Arzu Uzuner |
| 16:40-17:30 | Elderly patient with leg pain: Primary care approach | Dr. Gülru Pemra Ünalan |
| 17:40-18:30 |  |  |
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| **Tuesday** | **12 October** |  |
| 08:40-09:30 | Introduction to cardiovascular pharmacology | Dr. Zafer Gören |
| 09:40-10:30 | Nosocomial fungal infections | Dr. Nilgün Çerikçioğlu |
| 10:40-11:30 | Pharmacotherapy of ischemic heart disease and MI | Dr. Ahmet Akıcı |
| 11:40-12:30 | Pharmacotherapy of ischemic heart disease and MI | Dr. Ahmet Akıcı |
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| 13:40-14:30 | Congenital acyanotic heart disease with left to right shunt | Dr. Figen Akalın |
| 14:40-15:30 | Congenital heart disease with valvular obstruction or stenosis | Dr. Figen Akalın |
| 15:40-16:30 | Pharmacotherapy of heart failure | Dr. Mert Kaşkal |
| 16:40-17:30 | Pharmacotherapy of heart failure | Dr. Mert Kaşkal |
| 17:40-18:30 |  |  |
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| **Wednesday** | **13 October** |  |
| 08:40-09:30 |  |  |
| 09:40-10:30 | Pathology LAB: Heart and valvular diseases | Multidisciplinary Lab. |
| 10:40-11:30 | Pathology LAB: Heart and valvular diseases | Multidisciplinary Lab. |
| 11:40-12:30 | Pathology LAB: Heart and valvular diseases | Multidisciplinary Lab. |
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| 13:40-14:30 | Pathology LAB: Heart and valvular diseases | Multidisciplinary Lab. |
| 14:40-15:30 | Pathology LAB: Heart and valvular diseases | Multidisciplinary Lab. |
| 15:40-16:30 | Pathology LAB: Heart and valvular diseases | Multidisciplinary Lab. |
| 16:40-17:30 | Pathology LAB: Heart and valvular diseases | Multidisciplinary Lab. |
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| **Thursday** | **14 October** |  |
| 08:40-09:30 | ICP-CSL Card Group C | ICP Lab |
| 09:40-10:30 | ICP-CSL Card Group C | ICP Lab. |
| 10:40-11:30 | ICP-CSL Card Group C | ICP Lab. |
| 11:40-12:30 | ICP-CSL Card Group C | ICP Lab. |
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| 13:40-14:30 | Cardiovascular diseases in special population | Dr. Halil Ataş |
| 14:40-15:30 | Congenital cyanotic heart disease | Dr. Figen Akalın |
| 15:40-16:30 | Pharmacotherapy of cardiac dysrhythmias | Dr. Rezzan Gülhan |
| 16:40-17:30 | Pharmacotherapy of cardiac dysrhythmias | Dr. Rezzan Gülhan |
| 17:40-18:30 |  |  |
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| **Friday** | **15 October** |  |
| 08:40-09:30 |  |  |
| 09:40-10:30 | Pharmacotherapy of hyperlipidemias | Dr. Ahmet Akıcı |
| 10:40-11:30 | Genetic basis of the cardiovascular diseases | Dr. Mehmet Ali Söylemez |
| 11:40-12:30 | Microbiological approach to cardiovascular infections | Dr. Nurver Ülger |
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| 13:40-14:30 |  |  |
| 14:40-15:30 | Epidemiology of hypertension and rheumatic fever | Dr. Nimet Emel Lüleci |
| 15:40-16:30 | Pharmacotherapy in peripheral arterial occlusive diseases (Online) | Dr. Filiz Onat |
| 16:40-17:30 | Pharmacotherapy in venous thromboembolic disease (Online) | Dr. Filiz Onat |
| 17:40-18:30 |  |  |
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| **Week-7 (18 October - 22 October 2021)** |
| **Monday** | **18 October** |  |
| 08:40-09:30 |  |  |
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| 15:40-16:30 |  |  |
| 16:40-17:30 |  |  |
| 17:40-18:30 | Elective course |  |
| 18:40-19:30 | Elective course |  |
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| **Thursday** | **19 October** |  |
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| **Wednesday** | **20 October** |   |
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| **Thursday** | **21 October** |   |
| 08:40-09:30 | **Y3C1 THEORETICAL EXAM** |   |
| 09:40-10:30 |   |
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| **Friday** | **22 October** |  |
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