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|  Tıp Fakültesi | MARMARA UNIVERSITY EASTERN MEDITERRANEAN UNIVERSITY INTERNATIONAL MEDICAL SCHOOL |  |
|  | | |
| CARDIOVASCULAR SYSTEM AND RELATED DISORDERS YEAR 3 COURSE 1 September 6th, 2021 – October 21st, 2021 | | |
| Year 3 Coordinators Prof., Arzu Akşit İLKI & Assoc. Prof., Pınar Mega TİBER & Assoc. Prof., Amber EKER | | |
| PBL Module Coordinator Prof., Rezzan GÜLHAN Assist. Prof., Bülent SEZGİN | Coordinator of Multidisciplinary Students' Lab. Assoc. Prof., Betül KARADEMİR Assoc. Prof., Mümtaz GÜRAN | |
| Coordinator of Clinical Skill Lab. Prof., Pemra ÜNALAN Assoc. Prof., Nilüfer GÜZOĞLU | Coordinator of ICS Res. Lab. Prof., Pemra ÜNALAN Assist. Prof., İlke AKÇAY | |
| Vice-Chief Coordinators | | |
| Assessment Asist. Prof., Cevdet NACAR Assist. Prof., Halil Eren SAKALLI | Student Affairs Asist. Prof., Can ERZİK Inst. Ayşen Şekerim | |
| Chief Coordinator Assoc. Prof., Hasan YANANLI Assoc. Prof., Mümtaz GÜRAN | Coordinator of Medical Education Program Evaluation and Development Commission Prof., Harika Alpay | |
| Coordinator of the Joint Program Prof., Ümit Şehirli | | |
| Dean (EMU) Prof., Nahide GÖKÇORA | Dean (MU) 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 4: Growth, Development, Mental Health and Related Disorders

Year 3, Course 5: Urinary and Reproductive System and Related Disorders

Year 3, Course 6: Growth, Development, Mental Health and Related Disorders

Year 3, Course 7: Urinary and Reproductive System and Related Disorders

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

| ASSESSMENT SYSTEM | PROGRAM EVALUATION |
|---|---|
| <p>Module examination: Written exam at the end of the course and performance during the module</p> <p>Practical examination: Practical exams at the end of course</p> <p>Course examination: Written exam at the end of course</p> | <p>Evaluation at the end of the course, is done both orally and by using structured evaluation forms</p> |
| DEPARTMENTS PARTICIPATING IN COURSE-3.1 & MODULE-3.1 | |
| <ul style="list-style-type: none">• Anatomy• Biophysics• Cardiology• Cardiovascular Surgery• Child Health and Diseases• Family Medicine• Histology and Embryology• Medical Biochemistry | <ul style="list-style-type: none">• Medical Genetics• Medical Microbiology• Nuclear Medicine• Pathology• Pharmacology• Physiology• Public Health• Radiology |
| LECTURERS / TUTORS | |
| <p>Ahmet AKICI, Prof., Pharmacology Alper YILDIRIM, Assoc. Prof., Physiology Amber EKER, Assoc. Prof., Neurology Arzu UZUNER, Assoc. Prof., Family Medicine Ayşe ATASOYLU, Assist. Prof., Internal Medicine Berfu Çerçi ÖNGÜN, Inst. Anatomy Berrak YEĞEN, Prof., Physiology Bülent SEZGİN, Assist. Prof., Internal Medicine Emine Özerinç, Inst. Turkish Language Figen AKALIN, Prof., Child Health and Diseases Gülru Pemra ÜNALAN, Prof., Family Medicine Günseli Ayşe GARİP İNHAN, Assoc. Prof., Biophysics Halil Eren SAKALLI, Assist. Prof., Pharmacology Hızır KURTEL, Prof., Physiology Hüseyin Kemal TÜRKÖZ, Assoc. Prof., Medical Pathology İlke AKÇAY, Assist. Prof., Biostatistics İpek ERBARUT, Assist. Prof., Pathology</p> | <p>Koray AK, Prof., Cardiovascular Surgery Masoud AFSHANI, Asst. Prof., Histology and Embryology Mehmet Ali SÖYLEMEZ, Instructor Dr., Medical Genetics Mert KAŞKAL, Inst., Medical Pharmacology Nahide GÖKÇORA, Prof., Nuclear Medicine Necmettin Ömer ÖZDOĞMUŞ, Assoc. Prof., Anatomy Nilüfer GÜZOĞLU, Assoc. Prof., Neonatology Nimet Emel LÜLECİ, Prof., Public Health Nurver ÜLGER, Prof., Medical Microbiology Onur BUĞDAYCI, Assist. Prof., Radiology Osman YEŞİLDAĞ, Prof., Cardiology Özgür KASIMAY ÇAKIR, Assoc. Prof., Physiology Özlem Tuğçe KAYA, Assist. Prof., Histology and Embryology Pınar MEGA TİBER, Assoc. Prof., Biophysics Rezzan GÜLHAN, Prof., Pharmacology Saime BATIREL, Assoc. Prof., Medical Biochemistry Şule ÇETİNEL, Prof., Histology and Embryology Zafer GÖREN, Prof., Pharmacology Zeliha Leyla CİNEL, Prof., Pathology Zeynep Arzu İLKİ, Prof., Medical Microbiology</p> |

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.
- Kardiyoloji, 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.

| SUMMARY OF THE COURSE 3.1 | | | |
|---|---------------------------------------|--|--------------|
| Discipline | Lecture & Group Discussion | Multidisciplinary Lab. & Clinical Skills Lab Practice | Total |
| Anatomy | 4 | 1 | 5 |
| Biophysics | 11 | | 11 |
| Cardiology | 28 | | 28 |
| Cardiovascular Surgery | 1 | | 1 |
| Child Health and Diseases | 5 | | 5 |
| Family Medicine | 2 | | 2 |
| Histology and Embryology | 5 | 2 | 7 |
| Medical Biochemistry | 10 | | 10 |
| Medical Genetics | 1 | | 1 |
| Medical Microbiology | 2 | | 2 |
| Nuclear Medicine | 1 | | 1 |
| Pathology | 8 | 1 | 9 |
| Pharmacology | 13 | | 13 |
| Physiology | 17 | 3 | 20 |
| Public Health | 2 | | 2 |
| Radiology | 1 | | 1 |
| Subtotal | 111 | 7 | 118 |
| PBL Module | 9 | | 9 |
| ICS-3 Introduction | 1 | | 1 |
| ICS-3 Clinical: Clinical Skills LAB | 7 | 6 | 13 |
| ICS-3 Research: Student Research Activity | 4 | 1 | 5 |
| TFMS301 – Turkish for Medical Students IV | 22 | | 22 |
| Turkish for Medical Students – IV (Interactive Session) | 14 | | 14 |
| TOTAL | 168 | 14 | 182 |

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| | THEORETICAL AND PRACTICAL SESSIONS | LECTURER/TUTOR | LECTURE PLATFORM |
|--|--|---------------------|------------------|
| 1st WEEK (06 - 10 September 2021) | | | |
| Monday | 06 September | | |
| 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-IV (Foreign Students) | Inst. Emine Özerinç | MS Teams |
| 14:40-15:30 | Turkish For Medical Students-IV (Foreign Students) | Inst. Emine Özerinç | MS Teams |
| 15:40-16:30 | Turkish For Medical Students-IV (Foreign Students) | Inst. Emine Özerinç | MS Teams |
| 16:40-17:30 | Turkish For Medical Students-IV (Foreign Students) | Inst. Emine Özerinç | MS Teams |
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| Tuesday | 07 September | | |
| 08:40-09:30 | STUDY TIME | | |
| 09:40-10:30 | Introduction to the course and opening lecture | Dr. Amber Eker | MS Teams |
| 10:40-11:30 | Cardiac cycle | Dr. Berrak Yegen | MS Teams |
| 11:40-12:30 | Cardiac cycle | Dr. Berrak Yegen | MS Teams |
| | | | |
| 13:40-14:30 | Development of the cardiovascular system | Dr. Şule Çetinel | MS Teams |
| 14:40-15:30 | Development of the cardiovascular system | Dr. Şule Çetinel | MS Teams |
| 15:40-16:30 | STUDY TIME | | |
| 16:40-17:30 | STUDY TIME | | |
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| Wednesday | 08 September | | |
| 08:40-09:30 | STUDY TIME | | |
| 09:40-10:30 | STUDY TIME | | |
| 10:40-11:30 | Heart and pericardium | Dr. Necmettin Ömer Özdoğan | MS Teams |
| 11:40-12:30 | Heart and pericardium | Dr. Necmettin Ömer Özdoğan | MS Teams |
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| 13:40-14:30 | Heart and pericardium | Dr. Necmettin Ömer Özdoğan | MS Teams |
| 14:40-15:30 | Histology of blood vessels | Dr. Özlem Tuğçe Kaya | MS Teams |
| 15:40-16-30 | Histology of blood vessels | Dr. Özlem Tuğçe Kaya | MS Teams |
| 16:40-17:30 | Histology of the heart | Dr. Özlem Tuğçe Kaya | MS Teams |
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| Thursday | 09 September | | |
| 08:40-09:30 | STUDY TIME | | |
| 09:40-10:30 | Anatomy of the vessels (arterial and venous system) | Dr. Necmettin Ömer Özdoğan | MS Teams |
| 10:40-11:30 | Principles of ECG | Dr. Berrak Yegen | MS Teams |
| 11:40-12:30 | Principles of ECG | Dr. Berrak Yegen | MS Teams |
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| 13:40-14:30 | Principles of hemodynamics | Dr. Hızır Kurtel | MS Teams |
| 14:40-15:30 | Principles of hemodynamics | Dr. Hızır Kurtel | MS Teams |
| 15:40-16-30 | STUDY TIME | | |
| 16:40-17:30 | STUDY TIME | | |
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| Friday | 10 September | | |
| 08:40-09:30 | STUDY TIME | | |
| 09:40-10:30 | STUDY TIME | | |

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| 10:40-11:30 | PBL-1 | Dr. Amber Eker Dr. Bülent Sezgin Dr. Halil Eren Sakallı Dr. Nilüfer Güzoğlu | MS Teams |
| 11:40-12:30 | PBL-1 | Dr. Amber Eker Dr. Bülent Sezgin Dr. Halil Eren Sakallı Dr. Nilüfer Güzoğlu | MS Teams |
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| 13:40-14:30 | STUDY TIME | | |
| 14:40-15:30 | STUDY TIME | | |
| 15:40-16-30 | STUDY TIME | | |
| 16:40-17:30 | STUDY TIME | | |
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| 2nd Week (13-17 September 2021) | | | |
| Monday | 13 September | | |
| 08:40-09:30 | STUDY TIME | | |
| 09:40-10:30 | Regulation of blood pressure | Dr. Hızır Kurtel | MS Teams |
| 10:40-11:30 | Regulation of blood pressure | Dr. Hızır Kurtel | MS Teams |
| 11:40-12:30 | Regulation of blood pressure | Dr. Hızır Kurtel | MS Teams |
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| 13:40-14:30 | STUDY TIME | | |
| 14:40-15:30 | STUDY TIME | | |
| 15:40-16-30 | STUDY TIME | | |
| 16:40-17:30 | STUDY TIME | | |
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| Tuesday | 14 September | | |
| 08:40-09:30 | STUDY TIME | | |
| 09:40-10:30 | STUDY TIME | | |
| 10:40-11:30 | Turkish For Medical Students-IV (Interactive Session for Foreign Students) | Inst. Emine Özerinç | MS Teams |

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| 11:40-12:30 | Turkish For Medical Students-IV (Interactive Session for Foreign Students) | Inst. Emine Özerinç | MS Teams |
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| 13:40-14:30 | PBL-2 | Dr. Amber Eker Dr. Bülent Sezgin Dr. Halil Eren Sakallı Dr. Nilüfer Güzoğlu | MS Teams |
| 14:40-15:30 | PBL-2 | Dr. Amber Eker Dr. Bülent Sezgin Dr. Halil Eren Sakallı Dr. Nilüfer Güzoğlu | MS Teams |
| 15:40-16:30 | ICS-3 Research: Introduction and Orientation to ICS-3 Student Research Activity (SRA). Informing about the aims and objectives of the ICS-3 SRA through 2021-22 | Dr. İlke Akçay | MS Teams |
| 16:40-17:30 | ICS-3 Research: Feedback from last year | Dr. İlke Akçay | MS Teams |
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| Wednesday | 15 September | | |
| 08:40-09:30 | STUDY TIME | | |
| 09:40-10:30 | Vascular events | Dr. Saime Batirel | IN CLASS |
| 10:40-11:30 | Cardiac injury and markers | Dr. Saime Batirel | IN CLASS |
| 11:40-12:30 | Cardiac injury and markers | Dr. Saime Batirel | IN CLASS |
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| 13:40-14:30 | Biochemical aspects of the metabolic syndrome | Dr. Saime Batirel | IN CLASS |
| 14:40-15:30 | Biochemical aspects of the metabolic syndrome | Dr. Saime Batirel | IN CLASS |
| 15:40-16:30 | Hyperlipidemias and atherosclerosis | Dr. Saime Batirel | IN CLASS |
| 16:40-17:30 | Hyperlipidemias and atherosclerosis | Dr. Saime Batirel | IN CLASS |
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| Thursday | 16 September | | |
| 08:40-09:30 | STUDY TIME | | |
| 09:40-10:30 | STUDY TIME | | |
| 10:40-11:30 | Electrical fields, potential at a point | Dr. Günseli Ayşe Garip İnhan | IN CLASS |

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| 11:40-12:30 | Electrical fields, potential at a point | Dr. Günseli Ayşe Garip İnan | IN CLASS |
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| 13:40-14:30 | Cardiac action potentials | Dr. Günseli Ayşe Garip İnan | IN CLASS |
| 14:40-15:30 | Principles of echocardiography | Dr. Günseli Ayşe Garip İnan | IN CLASS |
| 15:40-16:30 | STUDY TIME | | |
| 16:40-17:30 | Respiratory System examination adult Tutor Presentation /Video (ICS-3: Basic Medical Practice) | Dr. Ayşe Atasoylu | MS Teams |
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| Friday | 17 September | | |
| 08:40-09:30 | Normal and abnormal breath sounds Respiratory Rate Tutor Presentation /Audio (ICS-3: Basic Medical Practice) | Dr. Bülent Sezgin | MS Teams |
| 09:40-10:30 | STUDY TIME | | |
| 10:40-11:30 | Principles of hemodynamics | Dr. Günseli Ayşe Garip İnan | IN CLASS |
| 11:40-12:30 | Principles of hemodynamics | Dr. Günseli Ayşe Garip İnan | IN CLASS |
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| 13:40-14:30 | Principles of electrocardiography | Dr. Günseli Ayşe Garip İnan | IN CLASS |
| 14:40-15:30 | Principles of electrocardiography | Dr. Günseli Ayşe Garip İnan | IN CLASS |
| 15:40-16:30 | Palpation, percussion techniques and auscultation points demonstrations in the manikins (ICS-3: Clinical Skills Lab.) (5 group- each group divide 3 subgroup) | Dr. Ayşe Atasoylu Dr. Bülent Sezgin Dr. Amber Eker Dr. Nilüfer Güzoğlu Dr. Halil Eren Sakallı | ICS Lab. |
| 16:40-17:30 | Auscultation of breath sounds and respiratory rate practice (ICS-3: Clinical Skills Lab.) (5 group- each group divide 3 subgroup) | Dr. Ayşe Atasoylu Dr. Bülent Sezgin Dr. Amber Eker Dr. Nilüfer Güzoğlu Dr. Halil Eren Sakallı | ICS Lab. |
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| Sunday | 19 September | | |
| 11:00-15:00 | Turkish For Medical Students-IV (Foreign Students) | Inst. Emine Özerinç | MS Teams |
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| 3rd Week (20-24 September 2017) | | | |
| Monday | 20 September | | |
| 08:40-09:30 | ICS-3 Research: Theme, Assessment, Timeline and Schedule of the Year | Dr. İlke Akçay | MS Teams |
| 09:40-10:30 | ICS-3 Research: Informing about Ethical Board Application Process | Dr. İlke Akçay | MS Teams |
| 10:40-11:30 | PBL-3 | Dr. Amber Eker Dr. Bülent Sezgin Dr. Halil Eren Sakallı Dr. Nilüfer Güzoğlu | MS Teams |
| 11:40-12:30 | PBL-3 | Dr. Amber Eker Dr. Bülent Sezgin Dr. Halil Eren Sakallı Dr. Nilüfer Güzoğlu | MS Teams |
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| 13:40-14:30 | Turkish For Medical Students-IV (Foreign Students) | Inst. Emine Özerinç | IN CLASS |
| 14:40-15:30 | Turkish For Medical Students-IV (Foreign Students) | Inst. Emine Özerinç | IN CLASS |
| 15:40-16:30 | Turkish For Medical Students-IV (Foreign Students) | Inst. Emine Özerinç | IN CLASS |
| 16:40-17:30 | Turkish For Medical Students-IV (Foreign Students) | Inst. Emine Özerinç | IN CLASS |
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| Tuesday | 21 September | | |
| 08:40-09:30 | Cardiovascular System examination adult Tutor Presentation /Video (ICS-3: Basic Medical Practice) | Dr. Ayşe Atasoylu | MS Teams |
| 09:40-10:30 | Heart sounds- murmur Tutor Presentation /Audio (ICS-3: Basic Medical Practice) | Dr. Bülent Sezgin | MS Teams |
| 10:40-11:30 | CVS examination pediatrics Tutor Presentation /Video (ICS-3: Basic Medical Practice) | Dr. Nilüfer Güzoğlu | MS Teams |

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| 11:40-12:30 | Pulse and blood pressure measurement Tutor Presentation /Video (ICS-3: Basic Medical Practice) | Dr. Nilüfer Güzoğlu | MS Teams |
| 13:40-14:30 | <ul style="list-style-type: none"> • Palpation, percussion techniques and auscultation points demonstrations in the manikins • Pulse and blood pressure measurement practice • Auscultation practice (ICS-3: Clinical Skills Lab.) (5 group- each group divide 3 subgroup) | Dr. Ayşe Atasoylu Dr. Bülent Sezgin Dr. Amber Eker Dr. Nilüfer Güzoğlu Dr. Halil Eren Sakallı | ICS Lab. |
| 14:40-15:30 | | | |
| 15:40-16:30 | | | |
| 16:40-17:30 | | | |
| Wednesday | 22 September | | |
| 08:40-09:30 | Heart sounds | Dr. Özgür Kasımay Çakır | IN CLASS |
| 09:40-10:30 | ECG and its interpretation | Dr. Özgür Kasımay Çakır | IN CLASS |
| 10:40-11:30 | Physiology LAB: ECG-1 (Group 1) | Dr. Alper Yıldırım Dr. Özgür Kasımay Çakır | Multidisciplinary Lab. |
| 11:40-12:30 | Physiology LAB: ECG-1 (Group 2) | Dr. Alper Yıldırım Dr. Özgür Kasımay Çakır | Multidisciplinary Lab. |
| 13:40-14:30 | Physiology LAB: ECG-1 (Group 3) | Dr. Alper Yıldırım Dr. Özgür Kasımay Çakır | Multidisciplinary Lab. |
| 14:40-15:30 | Physiology LAB: ECG-1 (Group 4) | Dr. Alper Yıldırım Dr. Özgür Kasımay Çakır | Multidisciplinary Lab. |
| 15:40-16:30 | Physiology LAB: ECG-1 (Group 5) | Dr. Alper Yıldırım Dr. Özgür Kasımay Çakır | Multidisciplinary Lab. |
| 16:40-17:30 | Physiology LAB: ECG-1 (Group 6) | Dr. Alper Yıldırım Dr. Özgür Kasımay Çakır | Multidisciplinary Lab. |
| | | | Multidisciplinary Lab. |
| Thursday | 23 September | | |
| 08:40-09:30 | Circulation through specific organs | Dr. Özgür Kasımay Çakır | IN CLASS |
| 09:40-10:30 | Arterial pulse | Dr. Özgür Kasımay Çakır | IN CLASS |
| 10:40-11:30 | Physiology LAB: ECG-2 (Group 6) | Dr. Alper Yıldırım Dr. Özgür Kasımay Çakır | Multidisciplinary Lab. |
| 11:40-12:30 | Physiology LAB: ECG-2 (Group 5) | Dr. Alper Yıldırım Dr. Özgür Kasımay Çakır | Multidisciplinary Lab. |

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| 13:40-14:30 | Physiology LAB: ECG-2 (Group 4) | Dr. Alper Yıldırım Dr. Özgür Kasımay Çakır | Multidisciplinary Lab. |
| 14:40-15:30 | Physiology LAB: ECG-2 (Group 3) | Dr. Alper Yıldırım Dr. Özgür Kasımay Çakır | Multidisciplinary Lab. |
| 15:40-16-30 | Physiology LAB: ECG-2 (Group 2) | Dr. Alper Yıldırım Dr. Özgür Kasımay Çakır | Multidisciplinary Lab. |
| 16:40-17:30 | Physiology LAB: ECG-2 (Group 1) | Dr. Alper Yıldırım Dr. Özgür Kasımay Çakır | Multidisciplinary Lab. |
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| Friday | 24 September | | |
| 08:40-09:30 | Regulation of blood flow | Dr. Özgür Kasımay Çakır | IN CLASS |
| 09:40-10:30 | Regulation of cardiac functions | Dr. Alper Yıldırım | IN CLASS |
| 10:40-11:30 | Physiology LAB: Blood pressure, heart sounds, pulse (Group 1,3,5) | Dr. Alper Yıldırım Dr. Özgür Kasımay Çakır | ICS Lab. |
| 11:40-12:30 | Physiology LAB: Blood pressure, heart sounds, pulse (Group 2,4,6) | Dr. Alper Yıldırım Dr. Özgür Kasımay Çakır | ICS Lab. |
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| 13:40-14:30 | Cardiac output | Dr. Alper Yıldırım | IN CLASS |
| 14:40-15:30 | Coronary circulation | Dr. Alper Yıldırım | IN CLASS |
| 15:40-16-30 | Physiological properties of the cardiac muscle | Dr. Alper Yıldırım | IN CLASS |
| 16:40-17:30 | Turkish For Medical Students-IV (Interactive Session for Foreign Students) | Inst. Emine Özerinç | IN CLASS |
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| 4th Week (27 September- 01 October 2021) | | | |
| Monday | 27 September | | |
| 08:40-09:30 | STUDY TIME | | |
| 09:40-10:30 | STUDY TIME | | |
| 10:40-11:30 | PBL-4 | Dr. Amber Eker Dr. Bülent Sezgin Dr. Halil Eren Sakallı Dr. Nilüfer Güzoğlu | MS Teams |

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| 11:40-12:30 | PBL-4 | Dr. Amber Eker Dr. Bülent Sezgin Dr. Halil Eren Sakallı Dr. Nilüfer Güzoğlu | MS Teams |
| | | | |
| 13:40-14:30 | Turkish For Medical Students-IV (Foreign Students) | Inst. Emine Özerinç | IN CLASS |
| 14:40-15:30 | Turkish For Medical Students-IV (Foreign Students) | Inst. Emine Özerinç | IN CLASS |
| 15:40-16:30 | Turkish For Medical Students-IV (Foreign Students) | Inst. Emine Özerinç | IN CLASS |
| 16:40-17:30 | Turkish For Medical Students-IV (Foreign Students) | Inst. Emine Özerinç | IN CLASS |
| | | | |
| Tuesday | 28 September | | |
| 08:40-09:30 | Approach to the patient with cardiovascular system disease | Dr. Osman Yeşildağ | IN CLASS |
| 09:40-10:30 | Principal symptom and general signs in cardiovascular disease | Dr. Osman Yeşildağ | IN CLASS |
| 10:40-11:30 | Principal symptom and general signs in cardiovascular disease | Dr. Osman Yeşildağ | IN CLASS |
| 11:40-12:30 | Turkish For Medical Students-IV (Interactive Session for Foreign Students) | Inst. Emine Özerinç | IN CLASS |
| | | | |
| 13:40-14:30 | Examination of the heart and vessels | Dr. Osman Yeşildağ | IN CLASS |
| 14:40-15:30 | Examination of the heart and vessels | Dr. Osman Yeşildağ | IN CLASS |
| 15:40-16:30 | Clinical electrocardiography | Dr. Osman Yeşildağ | IN CLASS |
| 16:40-17:30 | Clinical electrocardiography | Dr. Osman Yeşildağ | IN CLASS |
| | | | |
| Wednesday | 29 September | | |
| 08:40-09:30 | Diagnostic methods in cardiology | Dr. Osman Yeşildağ | IN CLASS |
| 09:40-10:30 | Diagnostic methods in cardiology | Dr. Osman Yeşildağ | IN CLASS |
| 10:40-11:30 | Valvular heart disease | Dr. Osman Yeşildağ | IN CLASS |
| 11:40-12:30 | Valvular heart disease | Dr. Osman Yeşildağ | IN CLASS |
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| 13:40-14:30 | Cardiac dysrhythmias | Dr. Osman Yeşildağ | IN CLASS |
| 14:40-15:30 | Cardiac dysrhythmias | Dr. Osman Yeşildağ | IN CLASS |
| 15:40-16:30 | Histology LAB: Histology of heart and vessels | Dr. Masoud Afshani | IN CLASS |
| 16:40-17:30 | Histology LAB: Histology of heart and vessels | Dr. Masoud Afshani | IN CLASS |
| | | | |
| Thursday | 30 September | | |
| 08:40-09:30 | Coronary artery disease | Dr. Osman Yeşildağ | IN CLASS |
| 09:40-10:30 | Coronary artery disease | Dr. Osman Yeşildağ | IN CLASS |
| 10:40-11:30 | Syncope and sudden cardiac death | Dr. Osman Yeşildağ | IN CLASS |
| 11:40-12:30 | Turkish For Medical Students-IV (Interactive Session for Foreign Students) | Inst. Emine Özerinç | IN CLASS |
| | | | |
| 13:40-14:30 | Acute coronary syndrome | Dr. Osman Yeşildağ | IN CLASS |
| 14:40-15:30 | Acute coronary syndrome | Dr. Osman Yeşildağ | IN CLASS |
| 15:40-16:30 | Pericarditis | Dr. Osman Yeşildağ | IN CLASS |
| 16:40-17:30 | Diseases of the aorta and the peripheral blood vessels | Dr. Osman Yeşildağ | IN CLASS |
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| Friday | 01 October | | |
| 08:40-09:30 | Systemic hypertension and hypertensive heart disease | Dr. Osman Yeşildağ | IN CLASS |
| 09:40-10:30 | Systemic hypertension and hypertensive heart disease | Dr. Osman Yeşildağ | IN CLASS |
| 10:40-11:30 | Cardiomyopathies and myocarditis | Dr. Osman Yeşildağ | IN CLASS |
| 11:40-12:30 | Cardiovascular diseases in special population | Dr. Osman Yeşildağ | IN CLASS |
| | | | |
| 13:40-14:30 | Heart failure and cardiogenic shock | Dr. Osman Yeşildağ | IN CLASS |
| 14:40-15:30 | Heart failure and cardiogenic shock | Dr. Osman Yeşildağ | IN CLASS |
| 15:40-16:30 | Pulmonary hypertension in cardiology | Dr. Osman Yeşildağ | IN CLASS |
| 16:40-17:30 | Infective endocarditis | Dr. Osman Yeşildağ | IN CLASS |
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| 5th Week (04-08 October 2021) | | | |
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| Monday | 04 October | | |
| 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-IV (Foreign Students) | Inst. Emine Özerinç | IN CLASS |
| 14:40-15:30 | Turkish For Medical Students-IV (Foreign Students) | Inst. Emine Özerinç | IN CLASS |
| 15:40-16:30 | Turkish For Medical Students-IV (Foreign Students) | Inst. Emine Özerinç | IN CLASS |
| 16:40-17:30 | Turkish For Medical Students-IV (Foreign Students) | Inst. Emine Özerinç | IN CLASS |
| | | | |
| Tuesday | 05 October | | |
| 08:40-09:30 | STUDY TIME | | |
| 09:40-10:30 | STUDY TIME | | |
| 10:40-11:30 | Viscosity, laminar and turbulent flow | Dr. Pınar Mega Tiber | MS Teams |
| 11:40-12:30 | Viscosity, laminar and turbulent flow | Dr. Pınar Mega Tiber | MS Teams |
| | | | |
| 13:40-14:30 | STUDY TIME | | |
| 14:40-15:30 | Vasculitis | Dr. Zeliha Leyla Cinel | MS Teams |
| 15:40-16:30 | Atherosclerosis & hypertensive cardiovascular events | Dr. Zeliha Leyla Cinel | MS Teams |
| 16:40-17:30 | Atherosclerosis & hypertensive cardiovascular events | Dr. Zeliha Leyla Cinel | MS Teams |
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| Wednesday | 06 October | | |
| 08:40-09:30 | Radiology of the cardiovascular system | Dr. Onur Buğdaycı | MU UZEM |
| 09:40-10:30 | Epidemiology of coronary heart disease | Dr. Nimet Emel Lüleci | MS Teams |

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| 10:40-11:30 | STUDY TIME | | |
| 11:40-12:30 | STUDY TIME | | |
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| 13:40-14:30 | ICS-3 Research: Meeting with mentor* | * Research groups are expected to meet their mentors during these hours. If the mentor's schedule is not available, another suitable time can be arranged. | |
| 14:40-15:30 | Pharmacotherapy in peripheral arterial occlusive diseases | Dr. Halil Eren Sakallı | IN CLASS |
| 15:40-16-30 | Pharmacotherapy in venous thromboembolic disease | Dr. Halil Eren Sakallı | IN CLASS |
| 16:40-17:30 | STUDY TIME | | |
| | | | |
| Thursday | 07 October | | |
| 08:40-09:30 | Ischaemic heart disease | Dr. İpek Erbarut | MS Teams |
| 09:40-10:30 | Ischaemic heart disease | Dr. İpek Erbarut | MS Teams |
| 10:40-11:30 | Valvular diseases of the heart | Dr. Hüseyin Kemal Türköz | MS Teams |
| 11:40-12:30 | Neoplastic diseases of the heart & blood vessels | Dr. Hüseyin Kemal Türköz | MS Teams |
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| 13:40-14:30 | Pathology LAB: Heart and valvular diseases | Dr. İpek Erbarut | MS Teams |
| 14:40-15:30 | Turkish For Medical Students-IV (Interactive Session for Foreign Students) | Inst. Emine Özerinç | MS Teams |
| 15:40-16-30 | Turkish For Medical Students-IV (Interactive Session for Foreign Students) | Inst. Emine Özerinç | MS Teams |
| 16:40-17:30 | Turkish For Medical Students-IV (Interactive Session for Foreign Students) | Inst. Emine Özerinç | MS Teams |
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| Friday | 08 October | | |
| 08:40-09:30 | STUDY TIME | | |
| 09:40-10:30 | Lipoprotein metabolism | Dr. Saime Batirel | MU UZEM |
| 10:40-11:30 | Lipoprotein metabolism | Dr. Saime Batirel | MU UZEM |
| 11:40-12:30 | Lipoprotein metabolism | Dr. Saime Batirel | MU UZEM |

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| 13:40-14:30 | Turkish For Medical Students-IV (Interactive Session for Foreign Students) | Inst. Emine Özerinç | MS Teams |
| 14:40-15:30 | Pharmacotherapy of hypertension | Dr. Ahmet Akıcı | MU UZEM |
| 15:40-16-30 | Pharmacotherapy of hypertension | Dr. Ahmet Akıcı | MU UZEM |
| 16:40-17:30 | Pharmacotherapy of hypertension | Dr. Ahmet Akıcı | MU UZEM |
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| 6th Week (11-15 October, 2021) | | | |
| Monday | 11 October | | |
| 08:40-09:30 | STUDY TIME | | |
| 09:40-10:30 | STUDY TIME | | |
| 10:40-11:30 | Pharmacotherapy of hyperlipidemias | Dr. Halil Eren Sakallı | IN CLASS (MED101) |
| 11:40-12:30 | Myocardial scintigraphy and radionuclide ventriculography | Dr. Nahide Gökçora | IN CLASS (MED101) |
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| 13:40-14:30 | Turkish For Medical Students-IV (Foreign Students) | Inst. Emine Özerinç | IN CLASS (MED103) |
| 14:40-15:30 | Turkish For Medical Students-IV (Foreign Students) | Inst. Emine Özerinç | IN CLASS (MED103) |
| 15:40-16-30 | Adult patient with chest pain. Primary care approach | Dr. Arzu Uzuner | MU UZEM |
| 16:40-17:30 | Elderly patient with leg pain: Primary care approach | Dr. Gülru Pemra Ünalın | MU UZEM |
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| Tuesday | 12 October | | |
| 08:40-09:30 | Introduction to cardiovascular pharmacology | Dr. Zafer Gören | MU UZEM |
| 09:40-10:30 | STUDY TIME | | |
| 10:40-11:30 | Pharmacotherapy of ischemic heart disease and MI | Dr. Ahmet Akıcı | MU UZEM |
| 11:40-12:30 | Pharmacotherapy of ischemic heart disease and MI | Dr. Ahmet Akıcı | MU UZEM |

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| 13:40-14:30 | Congenital acyanotic heart disease with left to right shunt | Dr. Figen Akalın | MU UZEM |
| 14:40-15:30 | Congenital heart disease with valvular obstruction or stenosis | Dr. Figen Akalın | MU UZEM |
| 15:40-16:30 | Pharmacotherapy of heart failure | Dr. Mert Kaşkal | MU UZEM |
| 16:40-17:30 | Pharmacotherapy of heart failure | Dr. Mert Kaşkal | MU UZEM |
| | | | |
| Wednesday | 13 October | | |
| 08:40-09:30 | PBL-5 | Dr. Amber Eker Dr. Bülent Sezgin Dr. Halil Eren Sakallı Dr. Nilüfer Güzoğlu | MS Teams |
| 09:40-10:30 | Acute rheumatic fever | Dr. Figen Akalın | MS Teams |
| 10:40-11:30 | Acute rheumatic fever | Dr. Figen Akalın | MS Teams |
| 11:40-12:30 | Bernouilli's equation, the role of gravity in the circulation | Dr. Pınar Mega Tiber | MS Teams |
| | | | |
| 13:40-14:30 | Turkish For Medical Students-IV (Interactive Session for Foreign Students) | Inst. Emine Özerinç | MS Teams |
| 14:40-15:30 | Nosocomial fungal infections | Dr. Zeynep Arzu İlki | MS Teams |
| 15:40-16:30 | Turkish For Medical Students-IV (Interactive Session for Foreign Students) | Inst. Emine Özerinç | MS Teams |
| 16:40-17:30 | Turkish For Medical Students-IV (Interactive Session for Foreign Students) | Inst. Emine Özerinç | MS Teams |
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| Thursday | 14 October | | |
| 08:40-09:30 | STUDY TIME | | |
| 09:40-10:30 | STUDY TIME | | |
| 10:40-11:30 | STUDY TIME | | |
| 11:40-12:30 | Turkish For Medical Students-IV (Interactive Session for Foreign Students) | Inst. Emine Özerinç | MS Teams |
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| 13:40-14:30 | Turkish For Medical Students-IV (Interactive Session for Foreign Students) | Inst. Emine Özerinç | MS Teams |

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| 14:40-15:30 | Congenital cyanotic heart disease | Dr. Figen Akalın | MU UZEM |
| 15:40-16:30 | Pharmacotherapy of cardiac dysrhythmias | Dr. Rezzan Gülhan | MU UZEM |
| 16:40-17:30 | Pharmacotherapy of cardiac dysrhythmias | Dr. Rezzan Gülhan | MU UZEM |
| 17:40-18:30 | STUDY TIME | | |
| 18:40-19:30 | STUDY TIME | | |
| 20:00-20:50 | Approach to thromboembolic disorders | Dr. Koray Ak | MS Teams |
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| Friday | 15 October | | |
| 08:40-09:30 | Anatomy LAB: Heart and pericardium- GROUP A | Dr. Berfu Çerçi Öngün | Anatomy Lab. |
| 09:40-10:30 | Anatomy LAB: Heart and pericardium- GROUP B | Dr. Berfu Çerçi Öngün | Anatomy Lab. |
| 10:40-11:30 | Genetic basis of the cardiovascular diseases | Dr. Mehmet Ali Söylemez | MU UZEM |
| 11:40-12:30 | Microbiological approach to cardiovascular infections | Dr. Nurver Ülger | MU UZEM |
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| 13:40-14:30 | Anatomy LAB: Heart and pericardium- GROUP C | Dr. Berfu Çerçi Öngün | Anatomy Lab. |
| 14:40-15:30 | Epidemiology of hypertension and rheumatic fever | Dr. Nimet Emel Lüleci | MU UZEM |
| 15:40-16:30 | STUDY TIME | | |
| 16:40-17:30 | STUDY TIME | | |
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| 7th Week (18-22 October 2021) | | | |
| Monday | 18 October | | |
| 08:40-09:30 | STUDY TIME | | |
| 09:40-10:30 | STUDY TIME | | |
| 10:40-11:30 | STUDY TIME | | |
| 11:40-12:30 | STUDY TIME | | |
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| 13:40-14:30 | STUDY TIME | | |

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| 14:40-15:30 | STUDY TIME | | |
| 15:40-16-30 | STUDY TIME | | |
| 16:40-17:30 | STUDY TIME | | |
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| Tuesday | 19 October | | |
| 08:40-09:30 | STUDY TIME | | |
| 09:40-10:30 | STUDY TIME | | |
| 10:40-11:30 | STUDY TIME | | |
| 11:40-12:30 | STUDY TIME | | |
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| 13:40-14:30 | STUDY TIME | | |
| 14:40-15:30 | STUDY TIME | | |
| 15:40-16-30 | STUDY TIME | | |
| 16:40-17:30 | STUDY TIME | | |
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| Wednesday | 20 October | | |
| 08:40-09:30 | STUDY TIME | | |
| 09:40-10:30 | STUDY TIME | | |
| 10:40-11:30 | STUDY TIME | | |
| 11:40-12:30 | STUDY TIME | | |
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| 13:40-14:30 | STUDY TIME | | |
| 14:40-15:30 | STUDY TIME | | |
| 15:40-16-30 | STUDY TIME | | |
| 16:40-17:30 | STUDY TIME | | |
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| Thursday | 21 October | | |
| 08:40-09:30 | Y3C1 THEORETICAL EXAM | Maryam NOROUZBAHARI | IN CLASS |

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| 09:40-10:30 | | Farzin ASHGharpour | |
| 10:40-11:30 | | Bülent SEZGİN | |
| 11:40-12:30 | | İlke ÇETİN AKÇAY | |
| | | Mümtaz GÜRAN | |
| | | Kadir ÇAKIREL | |
| | | | |
| 13:40-14:30 | Committee Exam Feedback Session | Dr. Amber Eker Bakkaloğlu | |
| 14:40-15:30 | | Dr. Halil Eren sakallı | |
| 15:40-16:30 | | | |
| 16:40-17:30 | | | |