



**CARDIOVASCULAR SYSTEM AND RELATED DISORDERS  
YEAR 3 COURSE 1  
September 11<sup>th</sup>, 2017 – October 27<sup>th</sup>, 2017**

**Coordinator of the Course 3.1**

Assist. Prof., İlke AKÇAY

**Coordinator of Multidisciplinary Students' LAB.**

Assist. Prof., Mümtaz GÜRAN

**Coordinator of Clinical Skill LAB.**

Instructor. Berfu Çerçi ÖNGÜN

**Coordinator of Assessment Unit**

Asist. Prof., Mümtaz GÜRAN, Assist. Prof., Mevhibe HOCAOĞLU, Asist. Prof., H. Eren SAKALLI

**Coordinator of ICS Res. LAB.**

Assist. Prof., Mevhibe HOCAOĞLU

**Year 3 Coordinators**

Assoc. Prof., Arzu İlki; Assist. Prof., Pınar Mega Tiber

**Module Coordinator**

Assoc. Prof., Özlem SARIKAYA

**Introduction to Clinician Skills (ICS) Coordinators**

Prof., Sibel SAKARYA, Assoc. Prof., Pemra ÜNALAN

**Coordinator of Multidisciplinary Students' LAB.**

Assoc. Prof., Betül KARADEMİR

**Coordinator of Assessment Unit**

Asist. Prof., Cevdet NACAR

**Vice-Chief Coordinators**

**Assessment**

Asist. Prof., Cevdet NACAR

**Students' Affairs**

Asist. Prof., Can ERZİK

**Chief Coordinator**

Assoc. Prof., Hasan YANANLI

**Coordinator of Medical Education Program  
Evaluation and Development Commission**

Prof., Berrak Ç. YEĞEN

**Educational Consultant**

Assoc. Prof., Mehmet Ali GÜLPINAR

**Dean (EMU)**

Prof., Nahide GÖKÇORA

**Dean (MU)**

Prof., Hakan Gündüz

## LEARNING OUTCOMES / COMPETENCIES

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

### PHASE-1 LEARNING OBJECTIVES

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

### PHASES – 1 THEMA/ORGAN SYSTEM-BASED COURSE PROGRAMS

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

Year 1, Course 2: Cellular Metabolism and Transport

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

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

Year 2, Course 1: Cell and Tissue Injury I

Year 2, Course 2: Cell and Tissue Injury II

Year 2, Course 3: Hematopoietic System and Related Disorders

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

Year 2, Course 5: Respiratory System and Related Disorders

### Year 3, Course 1: Cardiovascular System and Related Disorders

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

Year 3, Course 3: Nervous System and Related Disorders

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

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

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

Year 3, Course 5: 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

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

**Practical examination:** Practical exams at the end of course

**Course examination:** Written exam at the end of course

#### PROGRAM EVALUATION

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

### DEPARTMENTS PARTICIPATING IN COURSE-3.1 & MODULE-3.1

- Anatomy
- Biophysics
- Cardiology
- Cardiovascular Surgery
- Child Health and Diseases
- Family Medicine
- Histology and Embryology
- Medical Biochemistry
- Medical Genetics

- Medical Microbiology
- Nuclear Medicine
- Pathology
- Pharmacology
- Pediatric Cardiology
- Physiology
- Public Health
- Radiology

### LECTURERS / TUTORS

Ahmet AKICI, Prof., Pharmacology  
 Alper YILDIRIM, Assit. Prof., Physiology  
 Atila KARAALP, Prof., Pharmacology  
 Aydın KARAKUZU, Prof., Cardiovascular Surgery  
 Ayşe GARİP, Assoc. Prof., Biophysics  
 Berfu ÇERÇİ ÖNGÜN, Instructor, Anatomy  
 Berrak YEĞEN, Prof., Physiology  
 Beste ÖZBEN, Assoc. Prof., Cardiology  
 Betül KARADEMİR, Assoc. Prof., Medical Biochemistry  
 Bülent SEZGİN, Assit. Prof., Internal Medicine  
 Cemal GÜRKAN, Instructor, Forensic Sciences  
 Duygu GENÇALP, Instructor, Medical Biochemistry  
 Emel LÜLEÇİ, Prof., Public Health  
 Emine ÖZERİNÇ, Instructor, Turkish Language  
 Figen AKALIN, Prof., Child Health and Diseases

Koray AK, Prof, Cardiovascular Surgery  
 Leyla CİNEL, Prof., Pathology  
 Masoud Afshani, Instructor, Histology and Embryology  
 Mehmet Ali SÖYLEMEZ, Instructor, Medical Genetics  
 Mehmet Kemal BERKMAN, Prof., Pharmacology  
 Mevhibe HOCAOĞLU, Assit. Prof., Public Health  
 Mümtaz GÜRAN, Assit. Prof. Medical Microbiology  
 Mustafa Kürşat TİGEN, Prof., Cardiology  
 Nahide GÖKÇORA, Prof., Nuclear Medicine  
 Nilgün ÇERİKÇİOĞLU, Prof., Medical Microbiology  
 Nurtane KARAGİL, Instructor, Arts and Crafts  
 Okan ERDOĞAN, Prof., Cardiology  
 Ömer ÖZDOĞMUŞ, Assoc. Prof., Anatomy  
 Onur BUĞDAYCI, Assit. Prof., Radiology  
 Osman YEŞİLDAĞ, Prof., Cardiology

Güner SÖYLEDİR, Prof., Medical Microbiology  
Halil Eren SAKALLI, Assist. Prof., Pharmacology  
Hasan TOPER, Assist. Prof., Pathology  
Hızır KURTEL, Prof., Physiology  
İlke AKÇAY, Assist. Prof., Biostatistics  
İnci ALİCAN, Prof., Physiology  
İpek ERBARUT, Assist. Prof., Pathology

Özgür KASIMAY ÇAKIR, Assoc. Prof., Physiology  
Özlem Tuğçe ÇİLİNGİR, Instructor, Histology and Embryology  
Pemra ÜNALAN, Prof., Family Medicine  
Pınar MEGA TİBER, Assist. Prof., Biophysics  
Saime BATIREL, Assist. Prof., Medical Biochemistry  
Umut ALTUNÇ, Instructor, Pediatrics  
Zafer GÖREN, Prof., Pharmacology

#### 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.

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<b>SUMMARY OF THE COURSE 3.1</b>			
<b>Discipline</b>	<b>Lecture &amp; Group Discussion</b>	<b>Multidisciplinary LAB. &amp; Clinical Skills LAB. Practice</b>	<b>Total</b>
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	3		3
Nuclear Medicine	1		1
Pathology	7	1	8
Pharmacology	13		13
Physiology	18	3	21
Public Health	1		1
Radiology	1		1
<b>Subtotal</b>	<b>111</b>	<b>7</b>	<b>118</b>
PBL Module		10	10
ICS-3: Basic Medical Practices, Clinical Skills LAB		17	17
ICS-3 Research: Student Research Activity		4	4
Communication in Turkish-III	16		16
Elective Courses	4		4
<b>TOTAL</b>	<b>131</b>	<b>38</b>	<b>169</b>

<b>THEORETICAL AND PRACTICAL SESSIONS</b>		<b>LECTURER/TUTOR</b>
<b>1st WEEK (11 - 15 September 2017)</b>		
<b>Monday</b>	<b>11 September</b>	
<b>08:40-09:30</b>	Communication in Turkish III	Inst. Emine Özerinç
<b>09:40-10:30</b>	Communication in Turkish III	Inst. Emine Özerinç
<b>10:40-11:30</b>	Communication in Turkish III	Inst. Emine Özerinç
<b>11:40-12:30</b>	Communication in Turkish III	Inst. Emine Özerinç
<b>13:40-14:30</b>	STUDY TIME	
<b>14:40-15:30</b>	STUDY TIME	
<b>15:40-16:30</b>	STUDY TIME	
<b>16:40-17:30</b>	STUDY TIME	

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<b>Tuesday</b>	<b>12 September</b>	
<b>08:40-09:30</b>	Introduction to the course and opening lecture	Dr. Mevhibe B. Hocaoğlu
<b>09:40-10:30</b>	Heart and pericardium	Dr. Ömer Özdoğmuş
<b>10:40-11:30</b>	Heart and pericardium	Dr. Ömer Özdoğmuş
<b>11:40-12:30</b>	Heart and pericardium	Dr. Ömer Özdoğmuş
<b>13:40-14:30</b>	Anatomy of the vessels (arterial and venous system)	Dr. Ömer Özdoğmuş
<b>14:40-15:30</b>	<b>ANATOMY LAB:</b> Heart and pericardium	Dr. Ömer Özdoğmuş Dr. Berfu Çerçi Öngün
<b>15:40-16:30</b>	<b>ANATOMY LAB:</b> Heart and pericardium	Dr. Ömer Özdoğmuş Dr. Berfu Çerçi Öngün
<b>16:40-17:30</b>	STUDY TIME	
<b>Wednesday</b>	<b>13 September</b>	
<b>08:40-09:30</b>	Physiological properties of the cardiac muscle	Dr. İnci Alican
<b>09:40-10:30</b>	Regulation of cardiac functions	Dr. İnci Alican
<b>10:40-11:30</b>	Heart sounds	Dr. İnci Alican
<b>11:40-12:30</b>	Lipoprotein metabolism	Dr. Saime Batirel
<b>13:40-14:30</b>	Lipoprotein metabolism	Dr. Saime Batirel
<b>14:40-15:30</b>	Lipoprotein metabolism	Dr. Saime Batirel
<b>15:40-16:30</b>	Vascular events	Dr. Saime Batirel
<b>16:40-17:30</b>	STUDY TIME	
<b>Thursday</b>	<b>14 September</b>	
<b>08:40-09:30</b>	Principal of hemodynamics	Dr. Hızır Kurtel
<b>09:40-10:30</b>	Principal of hemodynamics	Dr. Hızır Kurtel
<b>10:40-11:30</b>	Regulation of blood pressure	Dr. Hızır Kurtel
<b>11:40-12:30</b>	Regulation of blood pressure	Dr. Hızır Kurtel
<b>13:40-14:30</b>	Regulation of blood pressure	Dr. Hızır Kurtel
<b>14:40-15:30</b>	STUDY TIME	
<b>15:40-16:30</b>	STUDY TIME	
<b>16:40-17:30</b>	STUDY TIME	
<b>Friday</b>	<b>15 September</b>	
<b>08:40-09:30</b>	Histology of the heart	Inst. Özlem Tuğçe Çilingir
<b>09:40-10:30</b>	Histology of blood vessels	Inst. Özlem Tuğçe Çilingir
<b>10:40-11:30</b>	Histology of blood vessels	Inst. Özlem Tuğçe Çilingir
<b>11:40-12:30</b>	Development of the cardiovascular system	Inst. Özlem Tuğçe Çilingir

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<b>13:40-14:30</b>	Development of the cardiovascular system	Inst. Özlem Tuğçe Çilingir
<b>14:40-15:30</b>	<b>HISTOLOGY LAB:</b> Histology of heart, blood vessels	Inst. Özlem Tuğçe Çilingir Inst. Masoud Afshani
<b>15:40-16:30</b>	<b>HISTOLOGY LAB:</b> Histology of heart, blood vessels	Inst. Özlem Tuğçe Çilingir Inst. Masoud Afshani
<b>16:40-17:30</b>	STUDY TIME	
<b>2nd Week (18-22 September 2017)</b>		
<b>Monday</b>	<b>18 September</b>	
<b>08:40-09:30</b>	Communication in Turkish III	Inst. Emine Özerinç
<b>09:40-10:30</b>	Communication in Turkish III	Inst. Emine Özerinç
<b>10:40-11:30</b>	Communication in Turkish III	Inst. Emine Özerinç
<b>11:40-12:30</b>	Communication in Turkish III	Inst. Emine Özerinç
<b>13:40-14:30</b>	STUDY TIME	
<b>14:40-15:30</b>	STUDY TIME	
<b>15:40-16:30</b>	STUDY TIME	
<b>16:40-17:30</b>	STUDY TIME	
<b>Tuesday</b>	<b>19 September</b>	
<b>08:40-09:30</b>	STUDY TIME	
<b>09:40-10:30</b>	STUDY TIME	
<b>10:40-11:30</b>	STUDY TIME	
<b>11:40-12:30</b>	STUDY TIME	
<b>13:40-14:30</b>	STUDY TIME	
<b>14:40-15:30</b>	<b>Introduction to ICS-3</b>	Dr. Bülent Sezgin
<b>15:40-16:30</b>	<b>PBL-1</b>	Dr. Berfu Çerçi Öngün Dr. Bülent Sezgin
<b>16:40-17:30</b>	<b>PBL-1</b>	Dr. Mevhibe B. Hocaoğlu Dr. Mümtaz Güran
<b>Wednesday</b>	<b>20 September</b>	
<b>08:40-09:30</b>	<b>ICS-3:</b> Basic Clinical Skills LAB: Respiratory System	Dr. Aydın Karakuzu Dr. Bülent Sezgin Dr. Halil Eren Sakallı Dr. Umut Altunç
<b>09:40-10:30</b>	<b>ICS-3:</b> Basic Clinical Skills LAB: Respiratory System	
<b>10:40-11:30</b>	<b>ICS-3:</b> Basic Clinical Skills LAB: Respiratory System	
<b>11:40-12:30</b>	<b>ICS-3:</b> Basic Clinical Skills LAB: Respiratory System	
<b>13:40-14:30</b>	<b>ICS-3:</b> Basic Clinical Skills LAB: Respiratory System	Dr. Aydın Karakuzu Dr. Bülent Sezgin Dr. Halil Eren Sakallı Dr. Umut Altunç
<b>14:40-15:30</b>	<b>ICS-3:</b> Basic Clinical Skills LAB: Respiratory System	
<b>15:40-16:30</b>	<b>ICS-3:</b> Basic Clinical Skills LAB: Respiratory System	
<b>16:40-17:30</b>	<b>ICS-3:</b> Basic Clinical Skills LAB: Respiratory System	

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<b>Thursday</b>	<b>21 September</b>	
<b>08:40-09:30</b>	STUDY TIME	
<b>09:40-10:30</b>	STUDY TIME	
<b>10:40-11:30</b>	Electrical fields, potential at a point	Dr. Ayşe Garip
<b>11:40-12:30</b>	Electrical fields, potential at a point	Dr. Ayşe Garip
<b>13:40-14:30</b>	Cardiac injury and markers	Dr. Betül Karademir
<b>14:40-15:30</b>	Cardiac injury and markers	Dr. Betül Karademir
<b>15:40-16:30</b>	Cardiac action potentials	Dr. Ayşe Garip
<b>16:40-17:30</b>	Principles of hemodynamics	Dr. Ayşe Garip
<b>Friday</b>	<b>22 September</b>	
<b>08:40-09:30</b>	Principles of hemodynamics	Dr. Ayşe Garip
<b>09:40-10:30</b>	Principles of electrocardiography	Dr. Ayşe Garip
<b>10:40-11:30</b>	Principles of electrocardiography	Dr. Ayşe Garip
<b>11:40-12:30</b>	Principles of electrocardiography	Dr. Ayşe Garip
<b>13:40-14:30</b>	Biochemical aspects of the metabolic syndrome	Dr. Betül Karademir
<b>14:40-15:30</b>	Biochemical aspects of the metabolic syndrome	Dr. Betül Karademir
<b>15:40-16:30</b>	Hyperlipidemias and atherosclerosis	Dr. Betül Karademir
<b>16:40-17:30</b>	Hyperlipidemias and atherosclerosis	Dr. Betül Karademir
<b>3rd Week (25-29 September 2017)</b>		
<b>Monday</b>	<b>25 September</b>	
<b>08:40-09:30</b>	Communication in Turkish III	Inst. Emine Özerinç
<b>09:40-10:30</b>	Communication in Turkish III	Inst. Emine Özerinç
<b>10:40-11:30</b>	Communication in Turkish III	Inst. Emine Özerinç
<b>11:40-12:30</b>	Communication in Turkish III	Inst. Emine Özerinç
<b>13:40-14:30</b>	Cardiac cycle	Dr. Berrak Yeğen
<b>14:40-15:30</b>	Cardiac cycle	Dr. Berrak Yeğen
<b>15:40-16:30</b>	Principles of ECG	Dr. Berrak Yeğen
<b>16:40-17:30</b>	Principles of ECG	Dr. Berrak Yeğen
<b>Tuesday</b>	<b>26 September</b>	
<b>08:40-09:30</b>	STUDY TIME	
<b>09:40-10:30</b>	STUDY TIME	
<b>10:40-11:30</b>	STUDY TIME	
<b>11:40-12:30</b>	Atherosclerosis & hypertensive cardiovascular events	Dr. Leyla Cinel
<b>13:40-14:30</b>	Atherosclerosis & hypertensive cardiovascular events	Dr. Leyla Cinel
<b>14:40-15:30</b>	Vasculitis	Dr. Leyla Cinel



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15:40-16:30	PBL-2	Dr. Berfu Çerçi Öngün Dr. Bülent Sezgin
16:40-17:30	PBL-2	Dr. Mevhibe B. Hocaoğlu Dr. Mümtaz Güran
<b>Wednesday</b>	<b>27 September</b>	
08:40-09:30	Regulation of blood flow	Dr. Özgür Kasımay Çakır
09:40-10:30	ECG and its interpretation	Dr. Özgür Kasımay Çakır
10:40-11:30	Circulation through specific organs	Dr. Özgür Kasımay Çakır
11:40-12:30	Arterial pulse	Dr. Özgür Kasımay Çakır
13:40-14:30	Cardiac output	Dr. Alper Yıldırım
14:40-15:30	Coronary circulation	Dr. Alper Yıldırım
15:40-16:30	Epidemiology of hypertension and rheumatic fever	Dr. Emel Lüleci
16:40-17:30	STUDY TIME	
<b>Thursday</b>	<b>28 September</b>	
08:40-09:30	<b>PHYSIOLOGY LAB: ECG-1 (Group A)</b>	Dr. Özgür Kasımay Çakır Dr. Alper Yıldırım
09:40-10:30	<b>PHYSIOLOGY LAB: ECG-1 (Group B)</b>	Dr. Özgür Kasımay Çakır Dr. Alper Yıldırım
10:40-11:30	<b>PHYSIOLOGY LAB: ECG-1 (Group C)</b>	Dr. Özgür Kasımay Çakır Dr. Alper Yıldırım
11:40-12:30	<b>PHYSIOLOGY LAB: ECG-1 (Group D)</b>	Dr. Özgür Kasımay Çakır Dr. Alper Yıldırım
13:40-14:30	<b>PHYSIOLOGY LAB: Blood pressure, heart sounds, pulse (Groups A &amp; B)</b>	Dr. Özgür Kasımay Çakır Dr. Alper Yıldırım
14:40-15:30	<b>PHYSIOLOGY LAB: Blood pressure, heart sounds, pulse (Groups C &amp; D)</b>	Dr. Özgür Kasımay Çakır Dr. Alper Yıldırım
15:40-16:30	STUDY TIME	
16:40-17:30	STUDY TIME	
<b>Friday</b>	<b>29 September</b>	
08:40-09:30	<b>PHYSIOLOGY LAB: ECG-2 (Group A)</b>	Dr. Özgür Kasımay Çakır Dr. Alper Yıldırım
09:40-10:30	<b>PHYSIOLOGY LAB: ECG-2 (Group B)</b>	Dr. Özgür Kasımay Çakır Dr. Alper Yıldırım
10:40-11:30	<b>PHYSIOLOGY LAB: ECG-2 (Group C)</b>	Dr. Özgür Kasımay Çakır Dr. Alper Yıldırım
11:40-12:30	<b>PHYSIOLOGY LAB: ECG-2 (Group D)</b>	Dr. Özgür Kasımay Çakır Dr. Alper Yıldırım
13:40-14:30	STUDY TIME	
14:40-15:30	STUDY TIME	
15:40-16:30	STUDY TIME	

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16:40-17:30	STUDY TIME	
<b>4th Week (2-6 October 2017)</b>		
<b>Monday</b>	<b>2 October</b>	
08:40-09:30	Study time	
09:40-10:30	Approach to the patient with cardiovascular system disease	Dr. Beste Özben Sadiç
10:40-11:30	Principal symptom and general signs in cardiovascular disease	Dr. Beste Özben Sadiç
11:40-12:30	Principal symptom and general signs in cardiovascular disease	Dr. Beste Özben Sadiç
13:40-14:30	Diagnostic methods in cardiology	Dr. Beste Özben Sadiç
14:40-15:30	Diagnostic methods in cardiology	Dr. Beste Özben Sadiç
15:40-16:30	<b>PBL-3</b>	Dr. Berfu Çerçi Öngün Dr. Bülent Sezgin
16:40-17:30	<b>PBL-3</b>	Dr. Mevhibe B. Hocaoğlu Dr. Mümtaz Güran
<b>Tuesday</b>	<b>3 October</b>	
08:40-09:30	STUDY TIME	
09:40-10:30	Examination of the heart and vessels	Dr. Osman Yeşildağ
10:40-11:30	Examination of the heart and vessels	Dr. Osman Yeşildağ
11:40-12:30	Systemic hypertension and hypertensive heart disease	Dr. Osman Yeşildağ
13:40-14:30	Systemic hypertension and hypertensive heart disease	Dr. Osman Yeşildağ
14:40-15:30	Diseases of the aorta and the peripheral blood vessels	Dr. Osman Yeşildağ
15:40-16:30	Adult patient with chest pain. Primary care approach	Dr. Pemra Ünalın
16:40-17:30	Elderly patient with leg pain: Primary care approach	Dr. Pemra Ünalın
<b>Wednesday</b>	<b>4 October</b>	
08:40-09:30	Valvular heart disease	Dr. Osman Yeşildağ
09:40-10:30	Valvular heart disease	Dr. Osman Yeşildağ
10:40-11:30	Pulmonary hypertension in cardiology	Dr. Osman Yeşildağ
11:40-12:30	Infective endocarditis	Dr. Osman Yeşildağ
13:40-14:30	Pericarditis	Dr. Osman Yeşildağ
14:40-15:30	Introduction to cardiovascular pharmacology	Dr. Zafer Gören
15:40-16:30	Approach to thromboembolic disorders	Dr. Koray Ak
16:40-17:30	STUDY TIME	
<b>Thursday</b>	<b>5 October</b>	
08:40-09:30	STUDY TIME	
09:40-10:30	STUDY TIME	

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<b>10:40-11:30</b>	STUDY TIME	
<b>11:40-12:30</b>	STUDY TIME	
<b>13:40-14:30</b>	Bernouilli's equation, the role of gravity in the circulation	Dr. Pınar Mega Tiber
<b>14:40-15:30</b>	Viscosity, laminar and turbulent flow	Dr. Pınar Mega Tiber
<b>15:40-16:30</b>	Viscosity, laminar and turbulent flow	Dr. Pınar Mega Tiber
<b>16:40-17:30</b>	STUDY TIME	
<b>Friday</b>	<b>6 October</b>	
<b>08:40-09:30</b>	STUDY TIME	
<b>09:40-10:30</b>	STUDY TIME	
<b>10:40-11:30</b>	STUDY TIME	
<b>11:40-12:30</b>	STUDY TIME	
<b>13:40-14:30</b>	Pharmacotherapy of ischemic heart disease and MI	Dr. Mehmet Kemal Berkman
<b>14:40-15:30</b>	Pharmacotherapy of ischemic heart disease and MI	Dr. Mehmet Kemal Berkman
<b>15:40-16:30</b>	STUDY TIME	
<b>16:40-17:30</b>	STUDY TIME	
<b>5th Week (09-13 October 2017)</b>		
<b>Monday</b>	<b>09 October</b>	
<b>08:40-09:30</b>	Clinical electrocardiography	Dr. Okan Erdoğan
<b>09:40-10:30</b>	Clinical electrocardiography	Dr. Okan Erdoğan
<b>10:40-11:30</b>	Cardiac dysrhythmias	Dr. Okan Erdoğan
<b>11:40-12:30</b>	Cardiac dysrhythmias	Dr. Okan Erdoğan
<b>13:40-14:30</b>	Syncope and sudden cardiac death	Dr. Okan Erdoğan
<b>14:40-15:30</b>	Cardiomyopathies and myocarditis	Dr. Okan Erdoğan
<b>15:40-16:30</b>	Elective Course – III MDCN181 – Theoretical and Applied Forensic Sciences MDCN182 – Arts and Crafts for Medical Students MDCN184 – Laboratory Techniques in Medicine	Dr. Cemal Gürkan Inst. Nurtane Karagil Inst. Duygu Gençalp
<b>16:40-17:30</b>	Elective Course – III MDCN181 – Theoretical and Applied Forensic Sciences MDCN182 – Arts and Crafts for Medical Students MDCN184 – Laboratory Techniques in Medicine	Dr. Cemal Gürkan Inst. Nurtane Karagil Inst. Duygu Gençalp
<b>Tuesday</b>	<b>10 October</b>	
<b>08:40-09:30</b>	STUDY TIME	
<b>09:40-10:30</b>	STUDY TIME	
<b>10:40-11:30</b>	Acute coronary syndrome	Dr. Mustafa Kürşat Tigen

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<b>11:40-12:30</b>	Acute coronary syndrome	Dr. Mustafa Kürşat Tigen
<b>13:40-14:30</b>	Heart failure and cardiogenic shock	Dr. Mustafa Kürşat Tigen
<b>14:40-15:30</b>	Heart failure and cardiogenic shock	Dr. Mustafa Kürşat Tigen
<b>15:40-16:30</b>	<b>PBL-4</b>	Dr. Berfu Çerçi Öngün Dr. Bülent Sezgin
<b>16:40-17:30</b>	<b>PBL-4</b>	Dr. Mevhibe B. Hocaoğlu Dr. Mümtaz Güran
<b>Wednesday</b>	<b>11 October</b>	
<b>08:40-09:30</b>	STUDY TIME	
<b>09:40-10:30</b>	Coronary artery disease	Dr. Mustafa Kürşat Tigen
<b>10:40-11:30</b>	Coronary artery disease	Dr. Mustafa Kürşat Tigen
<b>11:40-12:30</b>	Cardiovascular diseases in special population	Dr. Mustafa Kürşat Tigen
<b>13:40-14:30</b>	<b>ICS-3 Research:</b> Student Research Activity	Dr. İlke Akçay Dr. Mevhibe B. Hocaoğlu
<b>14:40-15:30</b>	<b>ICS-3 Research:</b> Student Research Activity	Dr. İlke Akçay Dr. Mevhibe B. Hocaoğlu
<b>15:40-16:30</b>	STUDY TIME	
<b>16:40-17:30</b>	STUDY TIME	
<b>Thursday</b>	<b>12 October</b>	
<b>08:40-09:30</b>	STUDY TIME	
<b>09:40-10:30</b>	Myocardial scintigraphy and radionuclide ventriculography	Dr. Nahide Gökçora
<b>10:40-11:30</b>	Pharmacotherapy of heart failure	Dr. Atila Karaalp
<b>11:40-12:30</b>	Pharmacotherapy of heart failure	Dr. Atila Karaalp
<b>13:40-14:30</b>	Pharmacotherapy of cardiac dysrhythmias	Dr. Atila Karaalp
<b>14:40-15:30</b>	Pharmacotherapy of cardiac dysrhythmias	Dr. Atila Karaalp
<b>15:40-16:30</b>	Pharmacotherapy of hyperlipidemias	Dr. Atila Karaalp
<b>16:40-17:30</b>	STUDY TIME	
<b>Friday</b>	<b>13 October</b>	
<b>08:40-09:30</b>	Congenital acyanotic heart disease with left to right shunt	Dr. Figen Akalın
<b>09:40-10:30</b>	Congenital heart disease with valvular obstruction or stenosis	Dr. Figen Akalın
<b>10:40-11:30</b>	Acute rheumatic fever	Dr. Figen Akalın
<b>11:40-12:30</b>	Acute rheumatic fever	Dr. Figen Akalın
<b>13:40-14:30</b>	Congenital cyanotic heart disease	Dr. Figen Akalın
<b>14:40-15:30</b>	<b>PBL-5</b>	Dr. Berfu Çerçi Öngün

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15:40-16:30	PBL-5	Dr. Bülent Sezgin Dr. Mevhibe B. Hocaoğlu Dr. Mümtaz Güran
16:40-17:30	STUDY TIME	
<b>6th Week (16-20 October, 2017)</b>		
<b>Monday</b>	<b>16 October</b>	
08:40-09:30	Communication in Turkish III	Inst. Emine Özerinç
09:40-10:30	Communication in Turkish III	Inst. Emine Özerinç
10:40-11:30	Communication in Turkish III	Inst. Emine Özerinç
11:40-12:30	Communication in Turkish III	Inst. Emine Özerinç
13:40-14:30	Elective Course – III MDCN181 – Theoretical and Applied Forensic Sciences MDCN182 – Arts and Crafts for Medical Students MDCN184 – Laboratory Techniques in Medicine	Dr. Cemal Gürkan Inst. Nurtane Karagil Inst. Duygu Gençalp
14:40-15:30	Elective Course – III MDCN181 – Theoretical and Applied Forensic Sciences MDCN182 – Arts and Crafts for Medical Students MDCN184 – Laboratory Techniques in Medicine	Dr. Cemal Gürkan Inst. Nurtane Karagil Inst. Duygu Gençalp
15:40-16:30	STUDY TIME	
16:40-17:30	STUDY TIME	
<b>Tuesday</b>	<b>17 October</b>	
08:40-09:30	Valvular diseases of the heart	Dr. İpek Erbarut
09:40-10:30	Neoplastic diseases of the heart & blood vessels	Dr. İpek Erbarut
10:40-11:30	<b>PATHOLOGY LAB:</b> Heart and valvular diseases-Group A	Dr. İpek Erbarut Dr. Hasan Toper
11:40-12:30	<b>PATHOLOGY LAB:</b> Heart and valvular diseases-Group B	Dr. İpek Erbarut Dr. Hasan Toper
13:40-14:30	Ischaemic heart disease	Dr. İpek Erbarut
14:40-15:30	Ischaemic heart disease	Dr. İpek Erbarut
15:40-16:30	STUDY TIME	
16:40-17:30	STUDY TIME	
<b>Wednesday</b>	<b>18 October</b>	
08:40-09:30	Nosocomial fungal infections	Dr. Nilgün Çerikçioğlu
09:40-10:30	Microbiological approach to cardiovascular infections	Dr. Güner Söyledir
10:40-11:30	Microbiological approach to cardiovascular infections	Dr. Güner Söyledir
11:40-12:30	Genetic basis of the cardiovascular diseases	Dr. Mehmet Ali Söylemez
13:40-14:30	Radiology of the cardiovascular system ( <b>Remote Session</b> )	Dr. Onur Buğdaycı
14:40-15:30	STUDY TIME	
15:40-16:30	STUDY TIME	

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<b>16:40-17:30</b>	STUDY TIME	
<b>Thursday</b>	<b>19 October</b>	
<b>08:40-09:30</b>	STUDY TIME	
<b>09:40-10:30</b>	Pharmacotherapy of hypertension	Dr. Ahmet Akıcı
<b>10:40-11:30</b>	Pharmacotherapy of hypertension	Dr. Ahmet Akıcı
<b>11:40-12:30</b>	Pharmacotherapy of hypertension	Dr. Ahmet Akıcı
<b>13:40-14:30</b>	Pharmacotherapy in peripheral arterial occlusive diseases	Dr. Halil Eren Sakallı
<b>14:40-15:30</b>	Pharmacotherapy in venous thromboembolic disease	Dr. Halil Eren Sakallı
<b>15:40-16:30</b>	STUDY TIME	
<b>16:40-17:30</b>	STUDY TIME	
<b>Friday</b>	<b>20 October</b>	
<b>08:40-09:30</b>	ICS-3:Basic Clinical Skills LAB: Cardiovascular System	Dr. Aydın Karakuzu Dr. Berfu Çerçi Öngün
<b>09:40-10:30</b>	ICS-3:Basic Clinical Skills LAB: Cardiovascular System	Dr. Bülent Sezgin Dr. Eren Sakallı
<b>10:40-11:30</b>	ICS-3:Basic Clinical Skills LAB: Cardiovascular System	Dr. Hasan Topper Dr. Umut Altunç
<b>11:40-12:30</b>	ICS-3:Basic Clinical Skills LAB: Cardiovascular System	
<b>13:40-14:30</b>	ICS-3:Basic Clinical Skills LAB: Cardiovascular System	Dr. Aydın Karakuzu Dr. Berfu Çerçi Öngün
<b>14:40-15:30</b>	ICS-3:Basic Clinical Skills LAB: Cardiovascular System	Dr. Bülent Sezgin Dr. Eren Sakallı
<b>15:40-16:30</b>	ICS-3:Basic Clinical Skills LAB: Cardiovascular System	Dr. Hasan Topper Dr. Umut Altunç
<b>16:40-17:30</b>	ICS-3:Basic Clinical Skills LAB: Cardiovascular System	
<b>7th Week (23-27 October 2017)</b>		
<b>Monday</b>	<b>23 October</b>	
<b>08:40-09:30</b>	<b>PRACTICAL EXAM</b>	
<b>09:40-10:30</b>		
<b>10:40-11:30</b>		
<b>11:40-12:30</b>		
<b>13:40-14:30</b>		
<b>14:40-15:30</b>		
<b>15:40-16:30</b>		
<b>16:40-17:30</b>		
<b>Tuesday</b>	<b>24 October</b>	
<b>08:40-09:30</b>	<b>PRACTICAL EXAM</b>	
<b>09:40-10:30</b>		
<b>10:40-11:30</b>		

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<b>11:40-12:30</b>		
<b>13:40-14:30</b>		
<b>14:40-15:30</b>		
<b>15:40-16:30</b>		
<b>16:40-17:30</b>		
<b>Wednesday</b>	<b>25 October</b>	
<b>08:40-09:30</b>	STUDY TIME	
<b>09:40-10:30</b>	STUDY TIME	
<b>10:40-11:30</b>	STUDY TIME	
<b>11:40-12:30</b>	STUDY TIME	
<b>13:40-14:30</b>	STUDY TIME	
<b>14:40-15:30</b>	STUDY TIME	
<b>15:40-16:30</b>	STUDY TIME	
<b>16:40-17:30</b>	STUDY TIME	
<b>Thursday</b>	<b>26 October</b>	
<b>08:40-09:30</b>	STUDY TIME	
<b>09:40-10:30</b>	STUDY TIME	
<b>10:40-11:30</b>	STUDY TIME	
<b>11:40-12:30</b>	STUDY TIME	
<b>13:40-14:30</b>	STUDY TIME	
<b>14:40-15:30</b>	STUDY TIME	
<b>15:40-16:30</b>	STUDY TIME	
<b>16:40-17:30</b>	STUDY TIME	
<b>Friday</b>	<b>27 October</b>	
<b>08:40-09:30</b>		
<b>09:40-10:30</b>	<b>Y3C1 THEORETICAL EXAM (starts at 9:30)</b>	
<b>10:40-11:30</b>		
<b>11:40-12:30</b>		
<b>13:40-14:30</b>		
<b>14:40-15:30</b>		
<b>15:40-16:30</b>		
<b>16:40-17:30</b>		