

GAZI UNIVERSITY FACULTY OF MEDICINE

2020-2021 EDUCATIONAL YEAR

DISTANCE (ON-LINE) EDUCATION THEORETICAL COURSES FOR YEAR II

RESPIRATORY AND CARDIOVASCULAR SYSTEMS COMMITTEE

(4-29 November 2020)

COURSES	THEORETICAL
Anatomy	23
Biophysics	12
Physiology	47
Histology and Embryology	24
Immunology	20
TOTAL	126

26.11.2020	Thursday	Mid-Term Exam
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Dean	Prof.Dr. Mustafa Necmi İLHAN
Vice Dean	Assoc. Prof. Dr. İlyas OKUR
Vice Dean	Assoc. Prof. Dr. Özlem GÜZEL TUNÇCAN
Head Coordinator	Prof. Dr. Çiğdem ÖZER
Assistant Head Coordinator	Prof.Dr. Mehmet Ali ERGÜN
Assistant Head Coordinator	Prof.Dr. Akif Muhtar ÖZTÜRK
Assistant Head Coordinator	Assoc. Prof. Dr.Özlem COŞKUN
Year II Coordinator	Assoc. Prof. Dr.Gökçe S. ÖZTÜRK FİNCAN
Assistant Year II Coordinator	Dr. Öğr.Üye. Zeynep YIĞMAN (ENG)
Assistant Year II Coordinator	Öğr. Gör. Dr. Süheyla Esra ÖZKOÇER
Assistant Year II Coordinator	Öğr. Gör. Dr. Pelin TÜRKKAN

COMMITTEE MEMBERS

ANATOMY	HISTOLOGY AND EMBRYLOGY	PHYSIOLOGY	BIOPHYSICS	IMMUNOLOGY
Dr. Meltem BAHÇELİOĞLU	Dr. Çiğdem ELMAS	Dr. Şevin GÜNEY	Dr. Elçin Özgür BÜYÜKATALAY	Dr. Vedat BULUT
Dr. Ece ALİM	Dr. Zeynep YIĞMAN	Dr. Meltem SEVGİLİ		Dr. Ümit BAĞRIAÇIK
	Dr. Duygu DAYANIR			Dr. Resul KARAKUŞ
	Dr. S. Esra ÖZKOÇER			

Elective Course Coordinator

Assoc. Prof. Dr. Ergin DİLEKÖZ

SALI GÜNLERİ

SAAT 16:00-17:00 ARALIĞINDA İNGİLİZCE DERSLERİ

SAAT 17:00-18:00 ARALIĞINDA SEÇMELİ DERSLER OLACAKTIR.

RESPIRATORY AND CIRCULATORY SYSTEMS COMMITTEE

Aim

Be able to evaluate the embryonic development, anomalies, anatomical, histological and physiological properties of blood, circulation, fetal circulation, lymphatic circulation and respiratory systems by associating them with biophysical laws.

LEARNING OUTCOMES

Knowledge Based

LO-200-2-1 to be able to describe the anatomical, histological and embryological structure of the heart, explain its functional properties

LO-200-2-2 to be able to say the contraction mechanisms of the heart muscle and may understand the regulation of heart functioning

LO-200-2-3 to be able to explain the ECG

LO-200-2-4 can describe the anomalies and malformations of the cardiovascular system

LO-200-2-5 to explain the anatomical, histological and functional properties of the structures forming the cardiovascular system

LO-200-2-6 to explain the flow of blood, blood pressure and regulation mechanisms, connection with related physics laws

LO-200-2-7 to describe fetal, pulmonary and coronary circulation

LO-200-2-8 to define the lymphoreticular system

LO-200-2-9 To be able to define the anatomical, histological and embryological structure of the respiratory system and explain its functional properties

LO-200-2-10 Describe the properties and functions of structures specific to respiratory system

LO-200-2-11 Describe the properties and functions of blood and cells

LO-200-2-12 Explain the functions of immune system organs, cells, MHC molecules, T and B cells

LO-200-2-13 To be able to interpret the types of respiratory and respiratory pathologies

Application Based (practical skills)

LO-200-2-14 to be able to use basic communication skill

LO-200-2-15 to demonstrate the ability to establish vascular access

LO-200-2-16 To be able to show the differences between the structures of cardiovascular system and the respiratory system under the microscope

LO-200-2-17 to demonstrate Hb, Htc, sedimentation, blood group studies

LO-200-2-18 to be able to show the heart's arousal systems

LO-200-2-19 to determine CO₂ in breathing air, analyze NO

LO-200-2-20 to apply respiratory function tests

LO-200-2-21 to be able to take and interpret ECG

Skills Based (intellectual and transferable skills)

LO-200-2-22 to be aware of working with a living organ or subject.

LO-200-2-23 to recognize the responsibility to behave in a way that does not cause damage during operations

LO-200-2-24 to be aware of cadaver and microscope studies

1 st Week			04.11.2020 Wednesday	05.11.2020 Thursday	06.11.2020 Friday
10:00-10:30 10:30-11:00			Thoracic wall, Anatomy of the heart Dr. BAHÇELIOĞLU Thoracic wall, Anatomy of the heart Dr. BAHÇELIOĞLU	Anatomy of the heart Dr. BAHÇELIOĞLU Fetal circulation Dr. BAHÇELIOĞLU	Vessels of the head and neck Dr. ALIM Lymphatic system Dr. ALIM
11:00-11:30 11:30-12:00			Mediastinum Dr. BAHÇELIOĞLU Anatomy of the heart Dr. BAHÇELIOĞLU	Vessels of the head and neck Dr. ALIM Vessels of the head and neck Dr. ALIM	Hematopoiesis Dr. DAYANIR Erythropoiesis Dr. DAYANIR
14:00-14:30 14:30-15:00			Circulatory system embryology Dr. ÖZKOÇER Circulatory system embryology Dr. ÖZKOÇER	Circulatory system histology Dr. ELMAS (3saat)	Functions of blood, physical and chemical properties Dr. SEVGİLİ Functions of blood, physical and chemical properties Dr. SEVGİLİ
15:00-15:30 15:30-16:00			Circulatory system embryology Dr. ÖZKOÇER Circulatory system embryology Dr. ÖZKOÇER	Blood Dr. DAYANIR Blood Dr. DAYANIR	Regulation of Hemopoiesis Dr. SEVGİLİ Regulation of Hemopoiesis Dr. SEVGİLİ

2 nd Week	09.11.2020 Monday	10.11.2020 Tuesday	11.11.2020 Wednesday	12.11.2020 Thursday	13.11.2020 Friday
10:00-10:30 10:30-11:00	Cells of Lymphoid tissue Dr. ÖZKOÇER Cells of Lymphoid tissue Dr. ÖZKOÇER	Basic principles of cardiac electrophysiology and myocardial contraction Dr. GÜNEY Basic principles of cardiac electrophysiology and myocardial contraction Dr. GÜNEY	Lymphocytes Dr. KARAKUŞ Lymphocytes Dr. KARAKUŞ	Spleen and Thymus Dr. YIĞMAN Spleen and Thymus Dr. YIĞMAN	Cells other than lymphocytes involved in immune response Dr. KARAKUŞ Cells other than lymphocytes involved in immune response Dr. KARAKUŞ
11:00-11:30 11:30-12:00	Functions of Erythrocytes Dr. SEVGİLİ Functions of Erythrocytes Dr. SEVGİLİ	Basic principles of cardiac electrophysiology and myocardial contraction Dr. GÜNEY The cardiac cycle and pressure changes DR. GÜNEY	Leucocyte functions Dr. SEVGİLİ Leucocyte functions Dr. SEVGİLİ	Regulation of heart functions DR. GÜNEY Regulation of heart functions DR. GÜNEY	ECG DR. GÜNEY ECG DR. GÜNEY
14:00-14:30 14:30-15:00	Destruction of Erythrocytes. Anemia-Politemia Dr. SEVGİLİ Blood groups, transfusion. Determination of blood volume Dr. SEVGİLİ	Forces on active erythrocytes:Stoke's Law Dr. BÜYÜKATALAY Forces on active erythrocytes:Stoke's Law Dr. BÜYÜKATALAY	The cardiac cycle and pressure changes Dr. GÜNEY Heart valves and heart sounds Dr. GÜNEY	Lymphocyte subgroups Dr. KARAKUŞ Lymphocyte subgroups Dr. KARAKUŞ	Larynx Dr. BAHÇELİOĞLU Larynx Dr. BAHÇELİOĞLU
15:00-15:30 15:30-16:00	Lymphatic system Dr. ALIM Lymphatic system Dr. ALIM	Tonsil and Lymph node Dr. ÖZKOÇER Tonsil and Lymph node Dr. ÖZKOÇER	Nose Anatomy Dr. ALIM Nose Anatomy Dr. ALIM	Phagocytosis Dr. SEVGİLİ Platelet functions Dr. SEVGİLİ	Respiratory system embryology DR. ELMAS Respiratory system embryology DR. ELMAS

3 rd Week	16.11.2020 Monday	17.11.2020 Tuesday	18.11.2020 Wednesday	19.11.2020 Thursday	20.11.2020 Friday
10:00-10:30 10:30-11:00	Trachea, lungs and diaphragm Dr. ALIM Trachea, lungs and diaphragm Dr. ALIM	MHC molecules: structure and function Dr. BULUT Antigen processing and presentation Dr. BULUT	Conducting portion of respiratory system Dr. ELMAS Conducting portion of respiratory system Dr. ELMAS	Pressure in Circulation System: Bernoulli Law, Velocity and Flow in internal frictional flowing: Poiseuille law Dr. BÜYÜKATALAY Pressure in Circulation System: Bernoulli Law, Velocity and Flow in internal frictional flowing: Poiseuille law Dr. BÜYÜKATALAY	Coronary circulation Dr. SEVGİLİ The functions of the respiratory system Dr. SEVGİLİ
11:00-11:30 11:30-12:00	Immun systems organs Dr. BAĞRIAÇIK MHC molecules: structure and function Dr. BULUT	Clinical Anatomy Dr. BAHÇELİOĞLU Clinical Anatomy Dr. BAHÇELİOĞLU	The factors affecting blood pressure Dr. SEVGİLİ The factors affecting blood pressure Dr. SEVGİLİ	Fetal circulation Dr. SEVGİLİ Fetal circulation Dr. SEVGİLİ	Adhesion molecules structure and function Dr. BAĞRIAÇIK Chemokines and their receptors Dr. BAĞRIAÇIK
14:00-14:30 14:30-15:00	Mechanism of coagulation Dr. SEVGİLİ Mechanism of coagulation Dr. SEVGİLİ	Functional organization of blood vessels Dr. SEVGİLİ Functional organization of blood vessels Dr. SEVGİLİ	Principles of Hemodynamic Dr. SEVGİLİ Principles of Hemodynamic Dr. SEVGİLİ	Cytokines Dr. BULUT Cytokines Dr. BULUT	Training, changes in pressure-velocity and kinetic energy due to pathological cont of arteries Dr. BÜYÜKATALAY Training, changes in pressure-velocity and kinetic energy due to pathological cont of arteries Dr. BÜYÜKATALAY
15:00-15:30 15:30-16:00	Respiratory system embryology Dr. ELMAS ECG Dr. GÜNEY	Autoregulation and capillary dynamics Dr. SEVGİLİ Autoregulation and capillary dynamics Dr. SEVGİLİ	T and B cells repertoire mechanisms Dr. BAĞRIAÇIK T and B cells repertoire mechanisms Dr. BAĞRIAÇIK	Respiratory portion of respiratory system Dr. ELMAS Respiratory portion of respiratory system Dr. ELMAS	Physiological mechanisms in some cardiovascular diseases (cardiac failure, circulatory shock) Dr. GÜNEY Physiological mechanisms in some cardiovascular diseases (cardiac failure, circulatory shock) Dr. GÜNEY

4 th Week	23.11.2020 Monday	24.11.2020 Tuesday	25.11.2020 Wednesday	26.11.2020 Thursday	
10:00-10:30 10:30-11:00	Complement system Dr. BAĞRIAÇIK Complement system Dr. BAĞRIAÇIK	Laplace law and autoregulation of pressure Dr. BÜYÜKATALAY Laplace law and autoregulation of pressure Dr. BÜYÜKATALAY	Cellular and Humoral immune response Dr. KARAKUŞ Cellular and Humoral immune response Dr. KARAKUŞ	Mid-Term Exam	
11:00-11:30 11:30-12:00	Mechanics of breathing and physical principles Dr. SEVGİLİ Quantitative relations of respiration Dr. SEVGİLİ	Diffusion of gases through the respiratory membrane Dr. SEVGİLİ O ₂ , CO ₂ Transport by the Blood Dr. SEVGİLİ	Regulation of Respiration Dr. SEVGİLİ Respiratory System under Stress Dr. SEVGİLİ		
14:00-14:30 14:30-15:00	Clinical Anatomy Dr. BAHÇELİOĞLU Clinical Anatomy Dr. BAHÇELİOĞLU	Hb-O ₂ Binding and Dissociation Curve Dr. SEVGİLİ Regulation of Respiration Dr. SEVGİLİ	Surface tension and alveolus mechanics Compliance in lung and breast Dr. BÜYÜKATALAY Surface tension and alveolus mechanics Compliance in lung and breast Dr. BÜYÜKATALAY		
15:00-15:30 15:30-16:00	Clinical Anatomy Dr. BAHÇELİOĞLU	Respiration system and its dynamic properties. Gas laws related with respiration, application of Poiseulle and Laplace Laws in respiratory system Dr. BÜYÜKATALAY Respiration system and its dynamic properties. Gas laws related with respiration, application of Poiseulle and Laplace Laws in respiratory system Dr. BÜYÜKATALAY			