course plan

Number of Students: 25	Semester: First, Second *	Academic Year 1403-1404					
Representative's Name and Mobile Number:	Basic Sciences * Physiopathology	Field: Medicine					
Office Address: Faculty of Medicine - Third	Course Name: Cardiac Physiology -	Department: Physiology					
Floor - Department of Physiology							
Contact Hours and Days: Mondays 14-12	Course Number:1294079	Name of Course Responsible:					
		Dr.Pourshanazari					
Phone: 03137929184	Venue: Tadbir	Days and Hours: Sundays 10-12					
E-mail: aapoursha@gmail.com	Practical Prerequisite Courses: Cell	Course Type:					
		Theoretical *					
General Objective of the Course: Learn cardiac physiology							

Detail l Objective of the Course

The student is expected to understand the concepts, principles and learn the physiological mechanisms related to the work of the heart in each of the following cases and be able to identify them in normal and altered physiological processes. Specific objectives: Heart, its chambers and layers - Cardiac muscle, cardiac action potential, cardiac muscle cell contraction - Cardiac cycle and its stages - Control of cardiac activity - Electrocardiogram curve - Path of blood movement in the heart in a cardiac cycle - Physiological characteristics of cardiac muscle and its similarities and differences with skeletal muscle - Stages and mechanism of cardiac excitation - Cardiac muscle cell action potential and its stages - Concepts of cardiac output, end-systolic volume, end-diastolic volume and stroke volume - Preload, afterload and its effect on cardiac output - Sympathetic and parasympathetic systems in controlling cardiac function - Electrocardiogram curve and its components - Cardiac leads and how electrodes are connected - How waves are created P, QRS and T Electrocardiogram

Main course sources (title of book or textbook, author's name, year and place of publication, publisher's name, number of chapters or pages in this course - if studying the entire book or all its volumes is not necessary as a source)

Guyton's Physiology Book and Ganong's Physiology

Student evaluation method and the weight of each evaluationWeight: 4A) Formative (evaluation during the course including quizzes, assignments, midterm exams, etc.): Intensive exams

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Weight: 16	B) Cumulative (end-of-course evaluation): End-of-course exam										
Student duties:	1										
Study the lessons of	previous s	essions and	d attend class	with prior pre	paration						
The course's responsi	ble policy re	egarding di	scipline and in	plementation	of educati	onal rules	during the course:				
End-term exam date: As announced by the Faculty of Medicine Education Area					Mid-term exam date: None.						
Other important note	s for studer	nts: Given i	n the first sess	ion							
Virtual or in person	منبع این سرفصل			Theoretical or practical	taashar		Title	4 :	data		
	Pages	Chapter	Source name	lesson	teacher			time	date	Row	
in person		١	Guyton's Physiology	Theoretical	Dr.Pourshanazari		Physiological description of the heart muscle	۱۰- ۱۲	1403/11/29	١	
in person		۴	Guyton's Physiology	Theoretical	Dr.Pourshanazari		Action potential in the heart muscle	۱۰- ۱۲	1403/12/6	۲	
in person		۵	Guyton's Physiology	Theoretical	Dr.Pours	shanazari	Mechanism of contraction in the heart muscle and the role of calcium ions	۱۰- ۱۲	1403/12/13	٣	
in person		۵	Guyton's Physiology	Theoretical	Dr.Pours	shanazari	Cardiac cycle and its stages	۱۰- ۱۲	1403/12/20	۴	
in person		۶	Guyton's Physiology	Theoretical	Dr.Pours	shanazari	Relationship between electrocardiogram and heart sounds with the cardiac cycle Cardiac output and its regulation, volume-pressure curve Cardiac excitation-conduction system and cardiac signal transmission	1	1403/12/27	۵	
in person		Y	Guyton's Physiology	Theoretical	Dr.Pours	shanazari	Rhythmicity of the sinus-atrial node and its mechanism Normal electrocardiogram and its waves	۱۰- ۱۲	1404/1/18	۶	

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in person	٨	Guyton's Physiology	Theoretical	Dr.Pourshanazari	Relationship between the cardiac cycle and the electrocardiogram and the formation of waves	۱۰- ۱۲	1404/١/٢٥	٧
in person		Guyton's Physiology	Theoretical	Dr.Pourshanazari	Principles of Vector Analysis of Electrocardiogram and Heart Axis	۱۰- ۱۲	1404/۲/۱	8
		مجموع صفحات:	5					