

Course Specification Card for (Block 1.3) Respiration & Circulation

College	College of Medicine	Department	Medical Education		
Course Name (English)	Respiration & Circulation (Block 1.3)	Course Name (Arabic)	التنفس والدورة الدموية		
Course Number	15571 , 15583	Course Code	1000103		
Credit Hrs.	6	Contact Hrs.	Theoretical	Practical	T
Teaching Language	English <input checked="" type="checkbox"/> Arabic <input type="checkbox"/>		٩٠	١٢	102
Teaching Method	<input checked="" type="checkbox"/> Face-to-Face		<input type="checkbox"/> Online		<input type="checkbox"/> Blended
Course Nature	<input checked="" type="checkbox"/> Compulsory		<input type="checkbox"/> Elective		
Course Type	<input type="checkbox"/> University Requirement		<input checked="" type="checkbox"/> College Requirement		<input type="checkbox"/> Program Requirement
Level	Year 1	Pre-Requisite(s)	None		

Course Description :

Focus on the physiological processes, histology and gross anatomy of organs and systems of human body. Functional and structural main core will be correlated with clinical and pathological conditions.

Topics

1. Overview of the Course.
2. Gross and microscopic structure of Respiratory system.
3. Mechanism of alveolar ventilation and gas exchange.
4. Ventilation / perfusion, pulmonary circulation, Regulation of Respiration & Gas transport.
5. Clinical Conditions related to respiratory system .
6. Gross and microscopic structure of circulatory system.
7. Development of Respiratory& Cardiovascular system.
8. Heart as a pump with rhythmic excitation, conduction and ECG along with arterial pressure and circulation and applied aspects.
9. Regulation of arterial pressure, cardiac output, venous return along with applied aspect.
10. Trans capillary transport, local control of blood flow, temperature regulation, body fluids.
11. Hemodynamic Disorders.
12. Homeostasis.
13. Endocrine regulation, general principles and pituitary gland and histology.
14. Structure of Kidneys, Glomerular filtration, Reabsorption and renal hemodynamics.
15. Pharmacology of Diuretics

Learning Outcomes:

1. **Knowledge and Understanding:**
 - 1.1 Describe gross and microscopic structure of respiratory system, cardiovascular system and renal system.
 - 1.2 Describe functions and biomedical principles underlying respiration, circulation, endocrine regulation, hemodynamics, homeostasis, renal filtration and reabsorption.
2. **Skills :**
 - 2.1 Analyze the History taking of patients with Respiratory, Renal and Cardiovascular disorders.
 - 2.2 Interpretation of ECG, Examination of respiratory system by recording Spirometry.
 - 2.3 Examination of sensory systems, Recording of Blood pressure in Normal and in abnormal subjects.
3. **Values:**
 - 3.1 Demonstrate a professional behavior in respect to all individuals inside the course program and outside but related to the course activities.
 - 3.2 Use a learning behavior & show eagerness to extract knowledge from every possible source.

Assessment Tools	<input checked="" type="checkbox"/> Periodic Exams	20%	<input checked="" type="checkbox"/> Short Exams	12%	<input checked="" type="checkbox"/> Final Exam	40%
	<input checked="" type="checkbox"/> Individual Assignments	6%	<input checked="" type="checkbox"/> Group Assignments	10%	<input checked="" type="checkbox"/> Oral Participations	12%
Main Reference	<ul style="list-style-type: none"> ▪ Student manual ▪ Tutor manual ▪ Tutorial manual ▪ Practical and workshop manual 					
Supporting References	<ul style="list-style-type: none"> ▪ Reader Physiology ▪ Reader Embryology 					

