



Course Specifications

Course Title:	Cardiopulmonary Block
Course Code:	CVP351
Program:	Bachelor of Medicine, Bachelor of Surgery (MBBS)
Department:	NA
College:	College of Medicine
Institution:	Alfaisal University

Table of Contents

A. Course Identification	3
6. Mode of Instruction (mark all that apply)	3
B. Course Objectives and Learning Outcomes	3
1. Course Description	3
2. Course Main Objective.....	3
3. Course Learning Outcomes	3
C. Course Content	4
D. Teaching and Assessment	5
1. Alignment of Course Learning Outcomes with Teaching Strategies and Assessment Methods	5
2. Assessment Tasks for Students	6
E. Student Academic Counseling and Support	6
F. Learning Resources and Facilities	6
1. Learning Resources	6
2. Facilities Required.....	7
G. Course Quality Evaluation	7
H. Specification Approval Data	7

A. Course Identification

1. Credit hours: 4 (3+2+0)
2. Course type
a. University <input type="checkbox"/> College <input checked="" type="checkbox"/> Department <input type="checkbox"/> Others <input type="checkbox"/>
b. Required <input checked="" type="checkbox"/> Elective <input type="checkbox"/>
3. Level/year at which this course is offered: Sem 5, Year 3
4. Pre-requisites for this course (if any): Sem 3 and 4
5. Co-requisites for this course (if any): None

6. Mode of Instruction (mark all that apply)

No	Mode of Instruction	Contact Hours	Percentage
1	Traditional classroom	60	60%
2	PBL, LGD, Labs	40	40%

7. Contact Hours (based on academic semester)

No	Activity	Contact Hours
1	Lecture	60
2	Laboratory/Studio	
3	Tutorial	40
4	Others (specify)	
	Total	100

B. Course Objectives and Learning Outcomes

1. Course Description

The Cardiopulmonary Block is directed towards the learning and understanding of pathological disorders of the heart, blood vessels, and respiratory tract and their treatment. This is an interdisciplinary course, including Physiology, Pathology, Microbiology, Pharmacology, Genetics, Radiology, and Clinical Medicine. Care has been taken to integrate the cardiovascular and respiratory systems in various themes especially breathlessness.

2. Course Main Objective

Learning and understanding of pathological disorders of the heart, blood vessels, and respiratory tract and their treatment.

3. Course Learning Outcomes

	CLOs	Aligned PLOs
1	Knowledge and Understanding	

CLOs		Aligned PLOs
1.1	Relate the normal structure and function of the cardiovascular & respiratory systems with pathophysiology of common diseases.	PLO1,9
1.2	Relate the epidemiological, environmental and genetic factors and biochemical processes of the cell with pathophysiology of common diseases of the cardiovascular and respiratory system.	PLO2,9,30
1.3	Discuss the mechanism of action, important adverse effects and pharmacological basis of drugs used in the management of common cardiovascular and respiratory conditions.	PLO6,12,16,18
1.4	Describe the clinical features, diagnostic criteria, and management of cardiovascular and pulmonary disorders.	PLO7,9,12,16,18
2	Skills :	
2.1	Perform bacterial identification, characterization and antibiotic susceptibility testing from positive blood cultures.	PLO4
2.2	Apply theoretical knowledge in how to approach a patient presenting with common cardiovascular and pulmonary symptoms like chest pain, palpitation, murmur, dyspnea, cough and hemoptysis.	PLO17,18
2.3	Interpret and relate clinical signs and symptoms, results of laboratory diagnostic tests, ECG, Echo and radiological changes, and blood reports with underlying pathogenesis and morphology of common cardiac and pulmonary diseases.	PLO5,7
3	Values:	
3.1	Adhere to the attendance policy.	
3.2	Maintain professional conduct with colleagues, faculty, and staff.	

C. Course Content

No	List of Topics – including PBL, LGD, Labs	Contact Hours
1	Regulation of blood pressure, vascular disorders (atherosclerosis, hypertension) and their management	16
2	Blood supply of heart, ischemic heart disease, cardiac remodeling and the treatment of ischemic heart disease (antiplatelets, anticoagulants & fibrinolytic drugs)	15
3	Regulation of cardiac output, cardiac failure, and its treatment	9
4	Electrical activity & conducting system of heart, cardiac arrhythmias and their treatment	11
5	Development of heart, valvular heart diseases, rheumatic heart disease, & the treatment of rheumatic fever & infective endocarditis	12
6	Pericardial diseases, congenital heart diseases and cardiac tumors	6
7	Obstructive airway diseases, interstitial lung diseases and respiratory failure	14
8	Pulmonary infections and tumors	17
Total		100

D. Teaching and Assessment

1. Alignment of Course Learning Outcomes with Teaching Strategies and Assessment Methods

Code	Course Learning Outcomes	Teaching Strategies	Assessment Methods
1.0	Knowledge and Understanding		
1.1	Relate the normal structure and function of the cardiovascular & respiratory systems with pathophysiology of common diseases.	Lectures, PBLs	Continuous and summative assessment
1.2	Relate the epidemiological, environmental and genetic factors and biochemical processes of the cell with pathophysiology of common diseases of the cardiovascular and respiratory system.	Lectures, PBLs	Continuous and summative assessment
1.3	Discuss the mechanism of action, important adverse effects and pharmacological basis of drugs used in the management of common cardiovascular and respiratory conditions.	Lectures, PBLs, LGDs	Continuous, formative, and summative assessment
1.4	Describe the clinical features, diagnostic criteria and management of cardiovascular and pulmonary disorders.	Lectures, PBLs	Continuous and summative assessment
2.0	Skills		
2.1	Perform bacterial identification, characterization and antibiotic susceptibility testing from positive blood cultures.	Labs	Summative assessment
2.2	Apply theoretical knowledge in how to approach a patient presenting with common cardiovascular and pulmonary symptoms like chest pain, palpitation, murmur, dyspnea, cough and hemoptysis.	Lectures, PBLs, LGDs	Continuous, formative, and summative assessment
2.3	Interpret and relate clinical signs and symptoms, results of laboratory diagnostic tests, ECG, Echo and radiological changes, and blood reports with underlying pathogenesis and morphology of common cardiac and pulmonary diseases.	Lectures, PBLs, LGDs	Continuous, formative, and summative assessment
3.0	Values		
3.1	Adhere to the attendance policy.		Continuous assessment
3.2	Maintain professional conduct with colleagues, faculty, and staff.		Continuous assessment

2. Assessment Tasks for Students

#	Assessment task*	Week Due	Percentage of Total Assessment Score
1	PBL	Weekly	10%
2	Mid-term	5	20%
3	Final Exam	7	70%

*Assessment task (i.e., written test, oral test, oral presentation, group project, essay, etc.)

E. Student Academic Counseling and Support

Arrangements for availability of faculty and teaching staff for individual student consultations and academic advice:

The CoM program established its own mentorship program that employs all full-time faculty as mentors. Through this program, every medical student in the program is assigned a mentor at the beginning of their first semester of studies. The program has a broad scope covering academic advising and counseling. The mentors handle all aspects related to academic advising, including academic planning, academic performance review, advice on course drop or withdrawal, study skills, and time management.

F. Learning Resources and Facilities

1. Learning Resources

Required Textbooks	<p>Physiology: 1. Guyton & Hall Text Book of Medical Physiology, 12th Ed</p> <p>Pathology: 1. Kumar et al: Robbins Basic Pathology, 9E (Saunders), chapter 10 & 11. 2. Kumar et al: Robbins and Cotran Pathologic Basis of Disease, 8E (Saunders)</p> <p>Genetics: 1. Robert L. Nussbaum, Roderick R. McInnes, Huntington F. Willard. Thompson & Thompson Genetics in Medicine. 7th Edition. 2007. Saunders.</p> <p>Radiology: 1. Learning Radiology: Recognizing the Basics by William Herring. Mosby; 1 Pap/Psc edition.</p> <p>Pharmacology: 1. Katzung's Basic & Clinical Pharmacology, 9th edition.</p> <p>Clinical lectures: 1. Davidson's Principles and Practice of Medicine: With STUDENT CONSULT Online Access, 21e (2010)</p> <p>Microbiology: 1. Mims <i>et al.</i> Medical Microbiology 5th edition</p>
Essential References Materials	

Electronic Materials	PowerPoint presentations uploaded on Alfaisal E-learning Portal
Other Learning Materials	

2. Facilities Required

Item	Resources
Accommodation (Classrooms, laboratories, demonstration rooms/labs, etc.)	Classrooms, Laboratories
Technology Resources (AV, data show, Smart Board, software, etc.)	AV (Audio-Visual), Smartboard, Moodle (E-learning Management)
Other Resources (Specify, e.g. if specific laboratory equipment is required, list requirements or attach a list)	

G. Course Quality Evaluation

Evaluation Areas/Issues	Evaluators	Evaluation Methods
Course and Faculty Evaluation Survey	Students	Survey

Evaluation areas (e.g., Effectiveness of teaching and assessment, Extent of achievement of course learning outcomes, Quality of learning resources, etc.)

Evaluators (Students, Faculty, Program Leaders, Peer Reviewer, Others (specify))

Assessment Methods (Direct, Indirect)

H. Specification Approval Data

Council / Committee	
Reference No.	
Date	