Course Specifications

Course Title:	**Respiration and Circulation (Block 1.3)**
Course Code:	**1000103**
Program:	**Bachelor of Medicine, Bachelor of Surgery (MBBS)**
Department:	**Biomedical Sciences**
College:	**Medicine**
Institution:	**King Faisal University**

Table of Contents

A. Course Identification

1. Credit hours: 6
2. Course type **a.** University ☐ College ☑ Department ☐ Others ☐ **b.** Required ☑ Elective ☐
3. Level/year at which this course is offered: First Year 2nd Semester
4. Pre-requisites for this course (if any)**:** **None**
5. Co-requisites for this course (if any)**:**

6. Mode of Instruction (mark all that apply)

No	Mode of Instruction	Contact Hours	Percentage
1	**Traditional classroom**	255	71%
2	**Blended**		
3	**E-learning**		
4	**Correspondence**		
5	**Other**		

7. Actual Learning Hours (based on academic semester)

No	Activity	Learning Hours
Contact Hours		
1	**Lecture**	100
2	**Laboratory/Studio**	50
3	**Tutorial**	36
4	**Tutor sessions**	9
5	**Workshops**	60
	Total	255 (71%)
Other Learning Hours*		
1	**Study self-directed learning**	105
2	**Assignments**	
3	**Library**	
4	**Projects/Research Essays/Theses**	
5	**Others** (specify)	
	Total	105 (29%)

***** The length of time that a learner takes to complete learning activities that lead to achievement of course learning outcomes, such as study time, homework assignments, projects, preparing presentations, library times

Commented [HMA1]: Review it and modify it according to dr Edwin presentations

B. Course Objectives and Learning Outcomes

1. Course Description

Focuses on the Physiological Process of Human body and main core relation with Clinical and Pathological conditions. Functions are correlated with Histology and Gross anatomy of Organs and systems.

2. Course Main Objective

- Describe mechanism of Respiratory system, Cardio vascular system, Endocrine and Renal systems
- Describe gross and clinical anatomy of thoracic wall, pleura, lungs, heart and mediastinum with its contents and surface anatomy of pleura, lungs and heart.
- Describe the basic histological structure of respiratory system, cardiovascular and urinary systems with correlation between their structure and function.

3. Course Learning Outcomes

	CLOs	Aligned PLOs
1	**Knowledge:**	
1.1	Describe gross and microscopic structure of respiratory system, cardiovascular system and renal system	K1
1.2	Describe functions and biomedical principles underlying respiration, circulation, endocrine regulation, hemodynamics, homeostasis, renal filtration and reabsorption	K1
2	**Skills :**	
2.1	Analyze the History taking of patients with Respiratory, Renal and Cardiovascular disorders.	S1
2.2 --- 2.3	Interpretation of ECG, Examination of respiratory system by recording Spirometry, ---------- Examination of sensory systems, Recording of Blood pressure in Normal and in abnormal subjects.	S2 ---------- S2
3	**Competence:**	
3.1	Demonstrate a professional behavior in respect to all individuals inside the course program and outside but related to the course activities.	C1
3.2	Use a learning behavior & show eagerness to extract knowledge from every possible source.	C3

C. Course Content

No	List of Topics	Contact Hours
1	Gross and microscopic structure of Respiratory system	30
2	Mechanism of alveolar ventilation and gas exchange	20
3	Ventilation / perfusion , pulmonary circulation , Regulation of Respiration & Gas transport	20
4	Gross and microscopic structure of circulatory system	20
5	Endocrine regulation, general principles and pituitary gland	10
6	Heart as a pump with rhythmic excitation , conduction and ECG along with arterial pressure and circulation	30

7	Regulation of arterial pressure , cardiac output, venous return along with applied aspect	20
8	Trans capillary transport , local control of blood flow , temperature regulation , body fluids	30
9	Structure of Kidneys , Glomerular filtration, Reabsorption and renal hemodynamics	40
10	Homeostasis	20
11	Examinations	15
Total		255

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**		
1.1	Describe gross and microscopic structure of respiratory system, cardiovascular system and renal system	Theme lectures Patient lectures Tutorial session Tutor sessions Response session Workshops	1. Written assessment: MCQs 2. Continuous Assessment: a. Case Presentation and patient report in tutor group b. Written practical assignment evaluation c. Practical exam
1.2	Describe functions and biomedical principles underlying respiration, circulation, endocrine regulation, hemodynamics, homeostasis, renal filtration and reabsorption	-as above-	-as above-
2.0	**Skills**		
2.1	Summarize gross and microscopic structure of respiratory system, cardiovascular system and renal system	Theme lectures Patient lectures Tutorial session Tutor sessions Response session Workshops	1. Written assessment: MCQs 2. Continuous Assessment: a. Case Presentation and patient report in tutor group b. Written practical assignment evaluation c. Practical exam
2.2	Summarize functions and biomedical principles underlying respiration, circulation, endocrine regulation, hemodynamics, homeostasis, renal filtration and reabsorption	-as above-	-as above-
3.0	**Competence**		
3.1	Demonstrate a professional behaviour in respect to all individuals inside the course program and outside but related to the course activities.	Tutorial session Tutor sessions Response session Workshops	a.Case Presentation and patient report in tutor group b. Written practical assignment evaluation c. Practical exam
3.2	Use a learning behaviour & show eagerness to extract knowledge from every possible source.	-as above-	-as above-

2. Assessment Tasks for Students

#	Assessment task*	Week Due	Percentage of Total Assessment Score
1	Mid-block written exam	4th week	50% (Mid-block – 15% Final block – 35 %)
2	Final written exam	9th week	
3	Practical exam	8th week	17%
4	Oral exam	9th week	23%
5	Continuous assessment (Formative)	Throughout course	10%

***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 :

Students in need of academic accommodations may consult the faculty during office hours and are required to give reasonable notice prior to requesting an accommodation

F. Learning Resources and Facilities

1. Learning Resources

Required Textbooks	1. Guyton. Textbook of Medical Physiology.2010.13th edition. 2. Gilroy. Atlas of Anatomy.2008.8th edition. 3. Moore Keith L. Moore, Arthur, Anne. Clinically Oriented anatomy.2014.4th edition. 4. Junquiera.Basic Histology.2009.4th edition.
Essential References Materials	1. Student manual 2. Tutor manual 3. Tutorial manual 4. Practical and workshop manual 5. Reader Physiology
Electronic Materials	------
Other Learning Materials	--------

2. Facilities Required

Item	Resources
Accommodation (Classrooms, laboratories, demonstration rooms/labs, etc.)	**1. For Patient Lectures:**

Item	Resources
	Auditorium: equipped with proper seating for all students at the same time. It is equipped with computer and data show and all requirements for lecturing (Speaker, Microphone, white board etc.…). **2. For Theme lectures and response sessions:** **Auditorium:** equipped with proper seating for all students at the same time. It is equipped with computer and data show and all requirements for lecturing. **3. For Tutor group sessions:** 11 small rooms (in male section) for male students and 9 small rooms (in female section) for female students. **Each room is equipped with the following:** 1. A big table. 2. 12 chairs. 3. White board and related required material. 4. Computer and data show. 5. Internet facilities. 6. Flip chart. 7. Small table. 8. Cupboard, blank papers, pens, pencils. **4. For Tutorial sessions:** The hall of the simulation lab or Hall 10 for female students and lecture hall 37 or 42 for male students. Also the auditorium once for female and another for male on other times. They are equipped with proper seating for all students and equipped with computer and data show and all requirements for tutorial sessions. **5. For Practical and Workshops:** Labs (anatomy, histology, pharmacology and physiology) equipped with microscopes, recommended

Item	Resources
	apparatus, data show, LCDs and proper seats. The computer lab equipped with data show, white board and number of computers with internet connections. N.B.: The wireless network is available in all the previous accommodations.
Technology Resources (AV, data show, Smart Board, software, etc.)	The computer lab equipped with data show, white board and proper number of computers. The network and wireless network is available
Other Resources (Specify, e.g. if specific laboratory equipment is required, list requirements or attach a list)	Labs (anatomy, histology, pharmacology and physiology) equipped with microscopes, recommended apparatus, data show, LCDs and proper seats. All Study material (Anatomy specimens, Histological slides, physiology equipment ….etc.) is available. The wireless network is available in all labs.

G. Course Quality Evaluation

Evaluation Areas/Issues	Evaluators	Evaluation Methods
Course Objectives, Content and Learning Outcomes	Curriculum Committee	Course Review Course Report
Effectiveness of teaching	Students	Course Evaluation Survey (QMS Annex B)
Achievement of course learning outcomes	Course Faculty	Moderation (QMS Annex G and Annex H)
Assessment	Course Faculty	Verification
Learning Resources and Facilities	Students Faculty	Course Evaluation Survey Course Report
Student Academic Counseling and Support	Students	Course Evaluation Survey
Course Quality Management	Program Coordinator	Course Report Review

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	College Council
Reference No.	2

Date	September 24, 2019