

**Template  
for  
Course Specifications**

**Faculty :** Medicine  
**Department :**

**Course Specifications**

Programme(s) on which the course is given : Mansoura Manchester Programme for Medical Education  
Major or minor element of programmes : Cardiorespiratory Fitness Module  
Department offering the programme : All depts in Faculty of Medicine  
Department offering the course : Anatomy, Physiology, Pharma, Pathology, etc  
Academic year / level : 2<sup>nd</sup> year  
Date of specification approval : May 2016

**A- Basic information**

Title: Cardiorespiratory Fitness Code: MPPh1S3CR  
F  
Lecture: 5 Tutorial: 5 Practical 8 Total: 18 (hour/week)

**B- Professional Information**

1 - Overall Aims of Course

Semester 3 (Cardiorespiratory Fitness) is about basic anatomy and physiology of respiratory and CVS. Each PBL case contains case learning outcomes that by definition must be linked to the learning outcomes for the semester. Each case is integrated and contains cues that raise potential learning objectives relating to knowledge, skills and attitudes in all areas of biological and behavioural sciences, and certain aspects of ethics and law. The early experience programme is also designed around these objectives and it is expected that students may discuss the clinical experience they have had within the context of a PBL case.

2 – Intended Learning Outcomes of Course (ILOs)

a- Knowledge and Understanding

- a1- Identify of the functional anatomy of respiratory system & chest wall muscles & physiology of ventilation, brain stem centres & acid-base balance
- a2- Describe of functional anatomy of cardiac muscle, coronary vasculature and of physiology of cardiac muscle, CO, ABP, regional circulation & ECG

- a3- Explain of physiology of haemostasis, hematopoiesis, blood grouping, bl. transfusion & anaemias

b- Intellectual Skills

- b1- Recognise the value of helping behaviour & avoidance of apathetic attitude, its impact in health care service
- b2- Demonstrate generate strategy for enhancing adherence to treatment in health care & be aware of factors affecting adherence
- b3- Interpret the principles of health promotion using the example of tobacco control, lifestyle effect in health care

c- Professional and Practical Skills

- c1- Practice the pulmonary functions using a computed spirometer- How to interpret normal &

- abnormal features in chest X-ray
- c2- Illustrate measure ABP using the syphygmomanometer histological structure of arteries & veins,
- c3- Operate how & where to auscultate heart sounds- How to interpret normal ECG
- d-General and Transferable Skills
- d1- Pormulate information, (oral & written (SCC)formats) and communicate ideas, concepts and arguments effectively.
- d2- Practice effectively in team
- d3- Plan an awareness of the moral and ethical responsibilities involved in patient care

### 3 – Contents

Topic	No. of hours	Lecture	Tutorial/Practical
Anatomyof chest wall,intercostal spaces,pleura,lung,mediastinum	15	3	12
Anatomy of heart, coronaries,big neck vessels, nerve trunks	12	1	12
Physiology of ventilation (mechanics, airway diameter, brain stem centres, gas transport,hypoxia)	11	7	4
Physiology of ANS & Physiology cardiac ms,CO,ABP,vessels&flow,CBF,ECG,Shock,regional circulation,JVP	19	11	8
Physiology of haemostasis,hematopoiesis,blood grouping & transfusion	4	4	0
Therapy of asthma, COPD, pneumonia, TB, HF, angina, anaemias,Antithromobotics, Antihypertensives,	9	9	0
Histology of arteries & veins, histology of airways	4	0	4
Pathology of asthma, COPD,TB, anaemia, thromboembolic disorders,anaemia,IHD,athersclerosis,RF	9	9	0
Clinical aspects of pneumothorax, COPD,asthma,TB & pulmonary embolism	25	5	20
Clinical aspects of angina, HF & hypertension	11	3	8
Blood grouping & blood transfusion in blood bank	4	0	4
Writing an essay	2	2	0

### 4 – Teaching and Learning Methods

- 4.1- Lectures
- 4.2- Practicals and Early experience
- 4.3- Student's presentation
- 4.4- Problem based learning

### 5 – Student Assessment Methods

- 5.1 - MCQ mid-semester exam to assess knowledge,

5.2 - MCQ	to assess	skills knowledge, skills
5.3 - Short essay	to assess	knowledge, attitude
5.4 - OSCE	to assess	skills
5.5 - ongoing assessment (SSC, PBL)	to assess	overall performance

#### Assessment Schedule

Assessment 1	mid-semester exam	week	6
Assessment 2	MCQ	week	final exam
Assessment 3	Short essay	week	final exam
Assessment 4	OSCE	week	final exam
Assessment 5	ongoing assessment	week	/PBL, SP

#### Weighting of Assessments

Mid-Term Examination	7%
Final-Term Examination	60%
Oral Examination	0
Practical Examination	20%
Semester work	13%
Other types of assessment	0
Total	100%

Any formative only assessments

#### 6 – List of References

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|-------------------------------------|--|
| 6.1- Course Notes                   | student's case book  |
| 6.2- Essential Books (Text Books)   | Snell RS, Clinical Anatomy for Medical Students, 6th edition, 2000, Lippincott, Williams & Wilkins<br>Guyton AC, Hall JE, Textbook of Medical Physiology, 2006, Elsevier Saunders    |
| 6.3- Recommended Books              | Kumar & Clark, Clinical Medicine, 6 <sup>th</sup> edition, Fox Human Physiology  |
| 6.4- Periodicals, Web Sites, ...etc | <a href="http://en.wikipedia.org/wiki/Main_Page">http://en.wikipedia.org/wiki/Main_Page</a><br><a href="http://www.ncbi.nlm.nih.gov/pubmed/">http://www.ncbi.nlm.nih.gov/pubmed/</a> |

#### 7 – Facilities Required for Teaching and Learning

1. A theatre which can accommodate 50 students
2. Two lab rooms can accommodate at least 25 students
3. Datashow and PC with windows xp as an operating system and office 2007
4. 22 pbl rooms; each accommodates 10-12 students

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