Jordan University of Science and Technology
Faculty of Applied Medical Sciences
Department of Allied Medical Sciences
Paramedic Program

Course Syllabus

Course Information	
Course Title	Anatomy and Physiology of pulmonary and Cardiovascular Systems
Course code	Para 202
Credit Hours	3 credit hours (2 hours theory, 1 hour practicum)
Prerequisites	MED 218 MED 230a
Instructor	Eihab Khasawneh
Office Location	Faculty of Applied Medical Sciences L2
Office Phone	0777323445
E-mail	Eakhasawneh1@just.edu.jo
Teaching Assistant	Omyma Gharibeh

Course Description

This course provides the student with necessary knowledge and skills to conduct a complete health history and systematic health assessment for the pulmonary and cardiovascular systems. A systematic approach to assessment of physiological, psychological, and developmental aspects is utilized taking into consideration the individual's sociocultural context. Students are expected to recognize normal physical findings and variations in health, as well as common relevant laboratory and diagnostic tests, and common drugs. Students will have the opportunity to learn and practice these health history and systematic physical assessment skills in the laboratory setting. Moreover, this course will overview the regulatory mechanisms involved in controlling the cardiopulmonary system.

Text Book	
Title(1)	Essentials of paramedic care
Author(s)	Bledsoe, B. E; Porter, R. S; Cherry, R. A
Publisher	Alexander, J. L.
Year	2007
Edition	2nd ed
References	Bates' guide to physical examination and history taking 9th ed. Bickley L. S. & Szilagyi R. A. Lippincott Company (2007).
Title(2)	Essential of Anatomy and Physiology
Author(s)	Eleane N Mareb

Publisher	Pearson
Year	2009
Edition	8th

Assessment Type	Weight
Midterm Exam	40%
Lab evaluation	20%
Final theory exam	27%
Practical final exam	13%
Total	100%

Course Objectives

- To describe cardiac and pulmonary anatomy.
- To define and describe the technique of inspection, palpation, percussion, and auscultation of the pulmonary system
- To evaluate the importance of general survey of the cardiac and pulmonary diseases
- To define the significance of the abnormal findings and their relations to heart and lungs.
- This course will describe the assessment of cardiac parameters.
- To describe the special examination techniques of the pulmonary system.
- To distinguish between normal and abnormal auscultation finding of the chest, heart, and abdomen and explain their significance.
- To describe special techniques of the cardiovascular examination
- To describe the ECG technique.

Teaching & Learning Methods

Textbooks, handouts, audio-video presentation, power point presentations, and practical demonstrations will be used to accomplish the objectives as well as the expected outcomes.

Teaching duration:

- Duration: 14 weeks
- Lectures: 25 lectures, 1 hour each.

Laboratory: 2 hours, 1 lab each week

Useful Resources

- JUST university Library.
- lecture notes
- Other resources will be provided to the students including websites, articles, power point presentations, and other study materials

Additional Notes

Attendance policy:

- Students are expected to attend more than 90% of lectures.
- Each student is expected to sit in his numbered seat
- Empty seat will be counted as absent
- All absences will be entered electronically into the University site
- If absence is more than 10% student will be banned from the course after electronic notification from the university through student e-mail.

Cheating

- The instructor will follow JUST's roles and regulation

Expected workload:

Students are expected to take every effort to ensure satisfactory learning of the material given.

Feedback:

Concerns or complaints should be expressed in the first instance to the course instructor. If no resolution is forthcoming then the issue should be brought to the attention of the Department Chair and if still unresolved to the Dean.

Lecture #	Title of the Lecture	Lecturer
1.	Orientation	Eihab Khasawneh
2.	Heart anatomy 1	Eihab Khasawneh
3.	Heart anatomy 2	Eihab Khasawneh
4.	Systemic circulation	Eihab Khasawneh
5.	Coronary circulation	Eihab Khasawneh
6.	Cardiac output	Eihab Khasawneh
7.	Heart innervation	Eihab Khasawneh
8.	Structure and functions of the vascular system	Eihab Khasawneh

9.	Blood pressure and ECG	Eihab Khasawneh
10.	ANATOMY OF THE RESPIRATORY SYSTEM	Eihab Khasawneh
11.	GAS EXCHANGE 1	Eihab Khasawneh
12.	Gas exchange 2	Eihab Khasawneh
13.	Acid base balance	Eihab Khasawneh
14.	Acid base balance 2	Eihab Khasawneh
15.	MIDTERM EXAM	
16.	The nervous control of respiration	Eihab Khasawneh
17.	The nervous control of respiration	Eihab Khasawneh
18.	HEMOGLOBIN STRUCTURE	Eihab Khasawneh
19.	Breast and Axillae assessment	Eihab Khasawneh
20.	Vital signs 1	Eihab Khasawneh
21.	Vital signs 2	Eihab Khasawneh
23.	ECG 1	Eihab Khasawneh
24.	ECG2	Eihab Khasawneh
25.	ARTICLE DISCUSSION	Eihab Khasawneh
26.	ARTICLE DISCUSSION	Eihab Khasawneh
27.	ARTICLE DISCUSSION	Eihab Khasawneh
28.	ARTICLE DISCUSSION	Eihab Khasawneh
29.	PUTTING ALL TOGETHER	Eihab Khasawneh

Lab schedule

Week	Topic
LAB SHEDULE	
1	Heart anatomy
2	Systemic circulation
3	Cardiac circulation
4	Major arteries and veins 1
5	Major arteries and veins 2
6	Blood pressure
7	Vital signs
8	Anatomy of the upper airway
9	Anatomy of the lower airway
10	Anatomy of the rib cage and accessory muscles
11	Anatomy of the rib cage and accessory muscles
12	ECG 1
13	ECG 2
14	REVISION
15	Final exams

The instructor reserves the right to make changes in the above syllabus at any time. The student has the right to be informed of any changes.

Statement of Acceptance of Syllabus: Any student who does not understand or accept the contents and terms of this syllabus must notify the instructor in writing within one week of receiving the syllabus. The syllabus is subject to change based on needs assessment at any time.

Statement on Professionalism: Professional behavior is expected of students at all times. Attitude and professional behavior are a minimum criterion for passing this class. Repeated lack of professional behavior will result in failure of the course. Examples of unprofessional behavior include but are not limited to: missing classes, tardiness, lack of attention for a speaker, talking to others during lecture passing food during lecture, leaving a lecture prior to its completion without prior authorization of the instructor, working on other class material during class, and sleeping during class.

Communication with instructor: Electronic-mail is the best way to reach me as I consistently check it. However students still can use the above listed phone numbers.

Cell phone and pagers: Please do not use cell phones or pagers in class. If you are depended upon for anticipated emergencies please put cell phones on vibration and answer the phone outside the classroom. I WILL KEEP MY CELL PHONE IN MY OFFICE OR ON VIBRATION MODE DURING CLASS TIME.