

Jordan University of Science and Technology
Faculty of Applied Medical Sciences
Department of Allied Medical Sciences
PT in Cardiopulmonary Condition
PT 360
Semester 200
Course Syllabus

Course Information	
Course Title	PT in Cardiopulmonary Condition
Course Code	PT 360
Prerequisites	MED 212, PT 231
Course Website	
Instructors	Mahmoud Alomari, Ph.D, Saddam Kana'an, PT MSc
Office Location	M 5, level -4, # 24
Office Phone #	23775 or 23809
Office Hours	3:00-4:00 S, T, Th
E-mail	alomarijust@yahoo.com
Teaching Assistant(s)	
Course Description	
<ul style="list-style-type: none"> - Managing individuals with cardiovascular and pulmonary diseases for effective patient care. - Basic understanding of the role of rehabilitation programs in the management of individuals with cardiovascular and pulmonary diseases. - Emphasis on the etiology and pathology of common cardiovascular and pulmonary disorders. - Principles of designing specialized programs for effective patient care. - Common laboratory and diagnostic tests, including ECG for these disorders will also be discussed. - Use of valid and reliable assessment tools in the diagnosis of patient condition - Understanding of the role of physical therapist in the assessment and treatment of varied individual respiratory cases. 	

Textbook 1	
Title	Cardiac Rehabilitation, Adult Fitness, and Exercise Testing Basic electrocardiography
Author(s)	Paul S. S. Fardy & Frank G. Yanowitz Stephen Scheidt
Publisher	Lippincott Williams & Wilkins.
Year	1995
Edition	3 rd edition
Other references	----
Textbook 2	
Title	Physiotherapy for Respiratory and Cardiac Problems
Author(s)	Pryor A. P & Prasad S. A
Publisher	Churchill Livingstone.
Year	2002
Edition	3 rd edition
Other references	

Assessment		
Assessment	Expected Due Date	Percentage
First Exam	Sun, Nov 5, 2006, 9-10 am	20 %
Second Exam	Sun, Dec 4, 2006, 9-10 am	20 %
Final Exam	TBA	30 %
Assignments	Sun, Dec 17, 2006, 4pm	10%
Practical	TBA	20%

Course Objectives	Percentage
1. Understanding of the common cardiovascular/pulmonary disorders	10%
2. Identify laboratory as well as field tests utilized to evaluate and monitor of physical functions in populations with special needs	10%
3. Identify anaerobic and aerobic exercise prescription principles for special populations to achieve specific training goals.	10%
4. Identify the process involved in the phases of cardiovascular rehabilitation	15%
5. Basic understanding of ECG interpretation.	5%
6. Understanding of the common respiratory disorders.	10%
7. Ability to use valid and reliable assessment tools in the diagnosis of different respiratory cases.	5%
8. Basic understanding of interpretation of patient blood gases, spirometer, and chest radiographs.	5%
9. Clinical reasoning skills in identifying patient/s problem.	5%
10. Ability to choose effective treatment plan for patient beneficence.	15%
11. Demonstrate ability to use physical therapy mechanical and manual tools to treat respiratory conditions.	10%

Teaching & Learning Methods
Book, Power point presentations, Case presentation, Self directed study.

Learning Outcomes: Upon successful completion of this course, students will be able to		
Related Objective(s)		Reference(s)
1	Identify common cardiovascular and pulmonary disorders.	
2,3	Prescribe exercises for patients with chronic diseases. Explain phases of cardiovascular rehabilitation.	
4,5	Interpret basic ECG findings.	
6	Identify common sign and symptoms of common respiratory disorders.	
7-9	The student able to use valid and reliable assessment tools and interpret their findings.	

10	The student can choose effective treatment plan according to assessment findings.	
11	The student acquires manual and mechanical respiratory physical skills that enable him to deliver treatment plan effectively.	

Useful Resources

University library, internet

Course Content

Part1 Cardiac Rehabilitation

Week	Topics	Chapter in Textbook 1 (handouts)
1	1. Clinical exercise testing	5
2	2. Exercise prescriptions for patients with chronic diseases	6
3	3. Phases of cardiovascular rehabilitation	8,9,10
4	4. Lifestyle and health • Risk Factors	1
5	5. Chronic diseases	5
6	6. Pulmonary rehabilitation	6
7	7. Electrocardiogram	6

Part 2 Pulmonary Rehabilitation

Week	Topics	Chapter in Textbook 2 (handouts)
8	8. Respiratory assessment, Clinical reasoning & CXRs.	1-4
9	9. Techniques in respiratory physiotherapy, Oxygen therapy/humidification & nebulisers.	9,10
10	10. Tracheostomies & airway management, Ventilation & weaning.	11, 18
11	11. Cardiothoracic surgery & post-operative complications.	12
12	12. Upper Abdominal surgery & post-operative complications.	12
13	13. Chronic lung diseases.	6, 20
14	14. Pulmonary Rehabilitation	14

Additional Notes

1. Assignments for missed lab sessions will not be accepted, for each day an assignment is late, 33.33% will be deducted from the grade.
2. Make-up (including assignments) work will be granted for excused absences only.
3. Attendance will not count for points in this class, however attending the lectures and labs will greatly enhance your grade. The student is responsible for any information discussed in lecture and lab sessions.
4. Group discussions are highly recommended however it's crucial for each student to submit individual assignment, unless I indicate otherwise.