



Jordan University of Science and Technology  
 Faculty of Applied Medical Sciences  
 Department of Rehabilitation Sciences  
 Second Semester 2016-2017

Course Information	
<b>Course Title</b>	Physical Therapy in Cardiopulmonary Diseases
<b>Course Code</b>	PT 362
<b>Prerequisites</b>	MED 212, PT 207
<b>Credit Hours</b>	3 (theory)
<b>Time</b>	
<b>Place</b>	
<b>Course coordinator</b>	Mahmoud Alomari, PhD
<b>Lecturers</b>	None
<b>Office Location</b>	M 5, level -4, # 24
<b>Office Phone #</b>	7201000 ext. 25775
<b>E-mail</b>	<a href="mailto:lsualomari@gmail.com">lsualomari@gmail.com</a>
<b>Teaching Assistant(s)</b>	

Course Description
Cardiac rehabilitation aims to reverse limitations experienced by patients who have suffered the adverse pathophysiologic and psychological consequences of cardiac events.

Textbook	
<b>Title</b>	Cardiac Rehabilitation, Adult Fitness, and Exercise Testing
<b>Author(s)</b>	<b>Paul S. S. Fardy &amp; Frank G. Yanowitz</b>
<b>Publisher</b>	Lippincott Williams & Wilkins.
<b>Year</b>	1995
<b>Edition</b>	3 <sup>rd</sup>
<b>Other references</b>	<b>Stephen Scheidt &amp; Jay A. Erlebacher, Basic Electrocardiography: ECG; Taylor &amp; Francis Group</b> <b>California Collage for Respiratory Therapy, Respiratory Therapy Manual.</b>

Assessment		
Assessment	Expected Date and Location	Percentage
Exam 1		30%
Exam 2		30%
Written final exam	TBA	40%

Course Objectives	Percentage
Explaining the common cardiovascular/pulmonary disorders.	20%
Identify laboratory as well as field tests utilized to evaluate and monitor of physical functions in populations with special needs	20%
Identify anaerobic and aerobic exercise prescription principles for special populations to achieve specific training goals.	20%
Identify the process involved in the phases of cardiovascular/pulmonary rehabilitation	20%



Teaching ECG interpretation	20%
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### Teaching & Learning Methods

<ul style="list-style-type: none"> <li>• Power point presentation using a computer, data show and screen.</li> <li>• Class discussion</li> </ul> <p><b>Teaching duration:</b></p> <ul style="list-style-type: none"> <li>• Duration: 16 weeks</li> <li>• Lectures: 28 lecture, 1.5 hour each,</li> <li>• Exams: 3 theory exams</li> </ul>
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### Learning Outcomes: Upon successful completion of this course, students will be able to

	Related Objective(s)	References and Handouts
1	Understanding the common cardiovascular/pulmonary disorders.	▪ Book, notes, and lab
2	Learning laboratory as well as field tests utilized to evaluate and monitor of physical functions in populations with special needs	▪ Book, notes, and lab
3	Understanding anaerobic and aerobic exercise prescription principles for special populations to achieve specific training goals.	▪ Book, notes, and lab
4	Understanding the process involved in the phases of cardiovascular/pulmonary rehabilitation	▪ Book, notes, and lab
5	Knowing ECG interpretation	▪ Book, notes, and lab

### Additional Notes

**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 (see attendance policy), 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, inappropriate dress for labs, and sleeping during class.

**Attendance policy:**

- Students are expected to attend more than 90% of lectures If absence is more than 10% student will be banned from the course after electronic notification from the university through student e-mail..
- 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

**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 phones:** Please do not use cell phones in class or labs. 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.** Unfortunately, I have to remove the student from class in case the phone rings.



Week	Date	Title of the Lecture	Lecturer
1		Exercise prescriptions for patients with chronic diseases	Alomari
2		Electrocardiogram interpretation	Alomari
3		Electrocardiogram interpretation	Alomari
4		Electrocardiogram interpretation + CVDs	Alomari
5		Cardiovascular diseases	Alomari
6		Risk factors for cardiovascular diseases + <b>Exam 1</b>	Alomari
7		Risk factors for cardiovascular diseases	
8		Risk factors for cardiovascular diseases	Alomari
9		Cardiovascular/pulmonary rehabilitation programming	Alomari
10		Cardiovascular/pulmonary rehabilitation programming	Alomari
11		Cardiovascular/pulmonary rehabilitation programming	Alomari
12		CPR programming + <b>Exam 2</b>	Alomari
13		Chest physiotherapy	Alomari
14		Chest physiotherapy	Alomari
15		Practical exam	Alomari
16		Theoretical exam	Alomari

4 Cardiac Rehabilitation Components. Medical evaluation Prescribed exercise Cardiac risk factor modification Education & counseling. 4 Phases of Cardiac Rehabilitation. Phase 1 - during hospitalization Phase 2 & 3 - supervised ambulatory outpatient program (3-6 months) Phase 4 - lifetime maintenance phase (physical fitness & reducing risk factors; minimally supervised or unsupervised settings). Cardiac Rehabilitation Goals. Exercise Testing: Indications. Maximal and Submax Tests - determine max exercise and exercise prescription. Performance Tests - pre/post PT, outcome measure, used to write objective PT goals. 3 Types of Exercise Testing. Advanced Fitness Assessment and Exercise Prescription (chapter 4-5). 49 terms. BrianW96. Exercise Training Resistance Training Cardiac Rehabilitation Aerobic Training Exercise Prescription. These keywords were added by machine and not by the authors. This process is experimental and the keywords may be updated as the learning algorithm improves. Exercise rehabilitation for cardiac patients. A beneficial but underused therapy. Physician Sports Med 2001; 29: 69-75. Google Scholar. 16. American College of Sports Medicine. General principles of exercise prescription-exercise prescription for cardiac patients. In: ACSM's Guidelines for Exercise Testing and Prescription. 6th ed. Lippincott Williams & Wilkins, Baltimore, MD, 2000, pp. 135-199. Google Scholar. Rikli RE, Jones CJ. Senior Fitness Test Manual. Human Kinetics, Champaign, IL, 2001. Google Scholar. 43. Ix, 459 pages : 26 cm. Includes bibliographical references and index. 1. The Prevention Agenda -- 2. Anatomic and Physiologic Concepts -- 3. Cardiovascular Assessment and Treatment -- 4. Screening for Exercise Programs -- 5. Clinical Exercise Testing: Methodology, Interpretation, and Applications -- 6. The Exercise Prescription -- 7. Introduction to Program Administration -- 8. Cardiac Rehabilitation: Phase I -- 9. Cardiac Rehabilitation: Phase II -- 10. Long-term Cardiac Rehabilitation -- 11. Cardiovascular Disease Prevention Strategies -- 12. Future Perspectives: A View Toward the 21st Cen