



Jordan University of Science and Technology
Faculty of Applied Medical Sciences
Department of Allied Medical sciences
2013-2014, Course Syllabus

Course Information	
Course Title	Therapeutic exercise 2
Course Code	PT 345
Prerequisites	P.T244
Course instructotrs	Dr. Hanan Khalil, Dr. Saddam Kanaan
Office Location	
Office hours	By appointment
E-mail	Dr. Hanan Khalil; Hwkhalil8@just.edu.jo Dr. Saddam Kanaan; sfkanaan@just.edu.jo
Teaching Assistant(s)	Mr Hassan Al-Khawaldeh & Ms Hiba Al-Hayek

Course Description
This course introduces students to knowledge and skills of therapeutic exercise skills related to individuals mainly with orthopedic and rehumatological conditions. Emphasis on the course will be on the obtaining skills of prescribing and applying different techniques of therapeutic exercises including aerobic training, balance training, core training and proprioceptive neuromascular facilitation.

Textbook	
Title	1. Therapeutic exercise foundation and techniques. 2. ACSM's guidelines for exercise testing and prescription
Author(s)	1. Carolyn Kisner, Lynn Allen 2. Walter R. Thompson for the ACSM
Year	1. 2007 2. 2009
Edition	1. 5 th Edition 2. 8 th edition
Other references	Hand outs & lecture notes and any additional reading provided by the instructor

Assessment Policy		
Assessment Type	Expected Due Date	Weight
First Exam		20%
Second Exam		20%
Mid term-practical examination		10%
Continous lab assessment	-----	10%
Lab final	TBA	10%
Final Exam	To be announced by the registrar office	30%

Teaching & Learning Methods
<p>Organization - Students will meet once a week in the PT labs during the morning hours unless otherwise scheduled. Students will change lab partners on a bi-weekly basis. The lab coordinator for each component will convey information regarding lab partners or groups as well as lab attire for the upcoming week.</p>

Additional Notes
<p>Attendance policy:</p> <ul style="list-style-type: none"> ▪ The philosophy of the course coordinator is that attendance at all lectures and laboratories is necessary to attain and integrate the knowledge and clinical skills being presented in this course. ▪ Attendance is mandatory. Students are expected to attend more than 90% of lectures ▪ The course coordinator reserves the right to exclude students from the course who miss more than 10% of course lectures or labs. ▪ It is the responsibility of the student to notify the course director if a lecture or lab will be missed, and to arrange to have the missed material remediated. ▪ All absences will be entered electronically into the University site <p>Expected workload: Students are expected to take every effort to ensure satisfactory learning of the material given.</p>

Course Schedule

Lectures

Week #	Date	Lecture Title	Notes
1		Introduction to the course	----
2		Principles of aerobic training	
3		Principles of aerobic training	
4		Holiday	
5		Balance training	
6		Balance training	
7		Holiday	
8		First exam	
9		Core training	Mid practical exam
10		Proprioceptive neuromuscular facilitation	
11		Mechanical diagnosis and therapy of the back: Meckenzi approach	
12		Mechanical diagnosis and therapy of the back: Meckenzi approach	
13		Second Exam	
14		Neurodynamics	
15		Manual therapy	
16		Review	
		Final practical exam period	
16		Final exam period	

Laboratories

Section 1 and 2 (Mondays)		
Week	Date	Topic
1		Orientation to lab
2		Review of range of motion exercises 1
3		Review of stretching and strengthening exercises Exercise testing and prescription for arthritis
4		Holiday
5		Review of joint mobilization exercises Exercise testing and prescription for patients with cancer
6		Aerobic training 1 Exercise testing and prescription for diabetes mellitus, dyslipidemia, hypertension
7		Balance training Exercise testing and prescription for metabolic syndrome
8		Balance training 2
9		Mid term exam
10		Core training Exercise testing and prescription for overweight and obesity
11		PNF Exercise testing and prescription for osteoporosis and renal diseases
12		Meckenzi exercises Exercise testing and prescription for peripheral artery disease and pulmonary diseases
13		Neurodynamics
14		Manual therapy
15		Review
16		Comprehensive practical exam

Section 3 (Wenesdays)		
Week	Date	Topic
1		Orientation to lab
2		Review of range of motion exercises 1
3		Review of stretching and strengthening exercises Exercise testing and prescription for arthritis
4		Holiday
5		Review of joint mobilization exercises Exercise testing and prescription for patients with cancer
6		Aerobic training 1 Exercise testing and prescription for diabetes mellitus, dyslipidemia, hypertension
7		Balance training Exercise testing and prescription for metabolic syndrome
8		Balance training 2
9		Mid term exam
10		Core training Exercise testing and prescription for overweight and obesity
11		PNF Exercise testing and prescription for osteoporosis and renal diseases
12		Meckenzi exercises Neurodynamics
13		Manual therapy
14		Holiday
15		Holiday
16		Comprehensive practical exam

Lab component

Laboratory experiences and evaluation

Organization - Students will meet once a week in the PT labs during the morning hours unless otherwise scheduled. Students will change lab partners on a bi-weekly basis. The lab coordinator for each component will convey information regarding lab partners or groups as well as lab attire for the upcoming week. Students are asked to become an active participant within the interactive teaching/ learning environment of the lab session in which they will be asked to discuss each therapeutic exercise technique within their groups, identify areas of indications, contraindications and precautions and provide principles of applying different techniques. Each student is expected to understand the objective of the course and its requirements and expectation placed upon them. Students are expected to be prepared for discussion and be actively involved in the lab sessions.

Lab assessment sheet- each student will be required to record each lab skills, in a file that will be marked at the end of each lab session (See Appendix 1).

Lab assignments- Students will be divided into groups and each group will be assigned a specific task. Grades from these assignments will be averaged over the course of the semester. Please refer to assignment listed on e-learning website.

General evaluation in lab participation- This will include marking regarding commitment to the dress code, professional attitude toward colleagues and members of staff, participation in the lab skills and activities as well as quizzes and assignments. Please note that the quizzes can be either on the practical or the theory components of the course. The marks will be distributed as the following:

Quizzes	5%
Lab assessment sheet	5%

Lab component Student responsibilities

A. General Responsibilities

1. Attend all scheduled labs.
2. Arrive on time to all scheduled labs. Students who arrive after the start of the lab will not be allowed to attend that lab session.
3. Students should be dressed in proper attire at the start of lab.
4. No food or beverages are allowed in the labs.
5. After completion of a lab session, all equipment should be returned to its original location.
6. Mobile phones should be turned off during the lab session.
7. Good communication skills are required with staff members and colleagues.

B. Lab Maintenance Duty

1. All students will be required to be on "LAB DUTY" for one week during the semester.
2. The schedule and responsibilities will remain posted outside the labs.
3. Each student is responsible for maintaining the labs during their scheduled week. This responsibility includes the following:

****Each Lab Session**

Before Lab:

- Arrive 10 minutes early to every lab scheduled during your week to assist the lab instructors in set up of labs.

After Lab:

- Return plinths and all other equipment (if applicable) to proper location
- Replace pillow cases and plinth paper (if used)
- Close and lock all open windows (if required)
- Clean any equipment as requested by Lab Coordinator

Lab component

Lab 1- lab assessment sheet/ (to be marked by lab instructor)

Lab 1 (Range of motion exercises for upper limbs, cervical spine and lumbar spine)					
Task	To be ticked by lab instructor				Comments placed by lab instructor
	Position of therapist	Position of patient	Hand placements	Procedure	
Shoulder flexion/ extension					
Shoulder horizontal abduction/ adduction					
Shoulder internal/external rotation					
Scapula: elevation, depression, protraction/retraction and upward and downward rotation					
Elbow flexion/extension					
Forearm pronation/ supination					
Wrist movements					
Cervical spine flexion/extension					
Lumbar spine flexion/extension					
Lumbar spine rotation					
Total mark/ 5					