



Course Syllabus

<u>Course title:</u>	Therapeutic exercises	<u>Course No:</u>	1201218
<u>Course level:</u>	Second year	<u>Course prerequisite (s) and/or co-requisite (s):</u>	1201105 1201212/Obligatory
<u>Lecture time:</u>	T/W (12:00-13:00)	<u>Credit hours:</u>	2 Hours

Academic Staff Specifics

<u>Name</u>	<u>Rank</u>	<u>Location</u>	<u>Email address</u>
Prof.Dr.Samah Hosney Nagib	Professor	Physical Therapy Department	Samahnagib@ymail.com

Course Description

This course provide introduction for therapeutic exercises and methods of use and application in physical therapy, include the different types of passive and active movements, the types of muscle effort and ways of strengthening the muscle groups or individually, and flexibility exercises, in addition to the practical training of students to apply different types of exercises.

Course Objectives

This course introduces the students with therapeutic exercise as a main tool for physical therapy rehabilitation. On successful completion of the course the students should be able to apply different range of motion (ROM) movements and strengthening exercises to the upper and lower extremities and to neck and trunk.



Learning Outcome

Knowledge and understanding, by the end of this course, students should be able to:

- 1) Define therapeutic exercise in the context of physical therapy care and service.
- 2) Describe the comprehensive outcomes-oriented model of patient management.
- 3) Describe the benefits and procedures for use of continuous passive motion (CPM) equipment.
- 4) Describe common goals, indications, precautions and contraindications for resistance exercise.
- 5) Differentiate among types of ROM exercises, their limitations and benefits, and their indications and contraindications.
- 6) Differentiate between the key elements of muscle performance: strength, power, and endurance.
- 7) Explain the principles of specificity of exercise and reversibility as they relate to resistance exercise.
- 8) Explain the relationships among muscle fatigue, recovery from exercise, and overtraining.
- 9) Discriminate the similarities and differences among isometric, dynamic exercise against constant and variable loads, isokinetic exercise, and open and closed chain exercises.
- 10) Decide about the type of therapeutic exercise that meets the patient's health needs.

Cognitive skills (thinking and analysis):

Interactive learning by participating the student into the lectures content.

Communication skills (personal and academic):

Review concept at office hours

Practical and subject specific skills (Transferable Skills):

Doing homework and simple reports.



Course Outline and Time schedule

Week	Course Outline
First week	Therapeutic Exercise Foundational Concepts
2 nd week	Passive range of motion exercise
3 rd week	Active Assisted exercises
4 th week	Active free ROM exercise.
5 th week	Resistive exercises
6 th week	Endurances exercises
7 th week	Stretching exercises
8 th week	Relaxation exercise
9 th week	Back and abdominal exercise
10 th week	Posture correction
11 th week	Balance exercises
12 th week	Gait retraining

Presentation methods and techniques

Methods of teaching varied according to the type of text, student and situation. The following techniques are usually used:

- ❖ Interactive Live Lectures (blended education)
- ❖ Cooperative learning.
- ❖ Discussion.
- ❖ Learning by activities.
- ❖ Connecting students with different sources of information

Sources of information and Instructional Aids

- ❖ Computer ... power point ...etc.
- ❖ Transparencies
- ❖ Distance learning
- ❖ Library sources



Assessment Strategy and its tools

The assigned syllabus is assessed and evaluated through: feedback and the skills that are acquired by the students

The tools:

- 1- Diagnostic tests to identify the student's level and areas of weakness
- 2- Formal (stage) evaluation
 - a) Mid-term exam
 - b) Class Participation
 - c) Activity file
 - d) Final exam

Tool & Evaluation

The following table clarifies the organization of the assessment schedule:

Test	Grade
Mid-term Exam	25
Activities & Participation	25
Final Exam	50
Total	100

Activities and Instructional Assignment

Practical assignments to achieve the syllabus objectives.

Regulations to maintain the teaching-Learning Process in the Lecture:

- 1- Regular attendance online live lectures.
- 2- Respect of commencement and ending of the lecture time.
- 3- Positive relationship between student and teacher.
- 4- Commitment to present assignments on time.
- 5- High commitment during the lecture to avoid any kind of disturbance and distortion.
- 6- High sense of trust and sincerity when referring to any piece of information and to mention the source.
- 7- The student who absents himself should submit an accepted excuse.
- 8- University relevant regulations should be applied in case the student's behavior is not accepted.
- 9- Allowed Absence percentages are (not exceed 15 %).



References

- ❖ ACSM's Guidelines for Exercise Testing and Prescription, 10th Ed., 2017
- ❖ Carolyn Kisner and Lynn Allen. Therapeutic Exercise "Foundations and Techniques", 6th Ed. F. A. Davis Company. Library of Congress Cataloging. 2012.
- ❖ Exercise Physiology: Nutrition, Energy, and Human Performance, 8th Ed, 2015.
- ❖ Therapeutic Exercise: Foundations and Techniques, 7th Ed., 2017.