

1. Course Name:					
Therapeutic exercises					
2. Course Code:					
PHT21101					
3. Semester / Year:					
Semester					
4. Description Preparation Date:					
22/11/2025					
5. Available Attendance Forms:					
Weekly (Theory: 2 hours, Practice:4 hours)					
6. Number of Credit Hours (Total) / Number of Units (Total)					
Theory: 24 Hours Total: 24 hours Total Units: 4					
7. Course administrator's name (mention all, if more than one name)					
Assistant Prof. Dr. Abdullah Eiada Mecheser					
8. Course Objectives					
Course Objecti	General Objective: To learn the general principles used in therapeutic exercis Specific Objectives: -1 To learn the natural mechanical principles of human body movements. -2 For the student to be able to assess muscle strength according to scienti standards. -3 For the student to be able to assess the range of motion of joints according scientific standards. -4 To learn about and apply different types of therapeutic exercises.				
9. Teaching and Learning Strategies					
Strateg	1. Delivering theoretical and practical lectures on microprocessor curriculum 2. Employing discussion and question-and-answer sessions in the classroom foster dialogue. 3. Assigning homework, program writing, and discussion to students 4. Writing reports on scientific topics related to microprocessors. Daily assessment, weekly assessment, term assessment, objective question general knowledge questions, and practical exams.				
5. Course Structure					
Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
1	Th.:2 Pract:4	BASICS OF EXERCISE	Mechanical principles applied in the human body – gravity, center	Lect. & Lab.	Exam

2	Th.:2 Pract:4	Disability models	gravity, line of gravity, the base support, equilibrium, axis and planes	Lect. & Lab.	Quiz
3	Th.:2 Pract:4	JOINT MOVEMENT	– ICIDH model of disability, Nag model of disability, ICF ,model	Lect. & Lab.	Homework
4	Th.:2 Pract:4	Passive movements	effect of exercise in various systems – musculoskeletal,	Lect. & Lab.	Exam
5	Th.:2 Pract:4	Active movements	neuromuscular, cardiovascular, respiratory system	Lect. & Lab.	Quiz
6	Th.:2 Pract:4	STARTING POSITIONS	Terminology. Range of motion. axes and Planes of movement levers.	Lect. & Lab.	Homework
7	Th.:2 Pract:4	MANUAL MUSCLE	Range of motion. axes and Planes of movement levers.	Lect. & Lab.	Exam
8	Th.:2 Pract:4	GONIOMETRY	classification, indications, contraindications, advantages, limitations	Lect. & Lab.	Quiz
9	Th.:2 Pract:4	CAUSES FOR RESTRICTION OF RANGE OF MOTION	techniques - emphasize PROM upper, lower, neck and trunk muscles	Lect. & Lab.	Homework
10	Th.:2 Pract:4	Mobility aids	Fundamental starting positions. Derived positions. Muscle work - effects and uses	Lect. & Lab.	Exam
11	Th.:2 Pract:4	Mobility aids	start position, grading system ,describe the types of muscle grading	Lect. & Lab.	Quiz
12	Th.:2 Pract:4	SUSPENSION THERAPY	key to muscle grading, Technique of muscle testing - upper, lower, neck and trunk muscles.	Lect. & Lab.	Homework
13	Th.:2 Pract:4	SUSPENSION THERAPY	Normal range of various joints. Measurement of individual joint range using goniometry.	Lect. & Lab.	Exam
14	Th.:2 Pract:4	Measurement of limb length, girth	causes for restriction of range of motion.,distinguish between skin muscle, capsular contractures	Lect. & Lab.	Quiz
15	Th.:2 Pract:4	RELAXATION	Definition and concepts of suspension. Points of suspension Types of suspension. Joint range muscle power.	Lect. & Lab.	Homework

6. Course Evaluation

The grade distribution is as follows:

Assessment: theory 40 marks

Final exam: Theory 60 marks

7. Learning and Teaching Resources

Required textbooks (curricular books any)	Therapeutic Kinesiology Musculoskeletal Systems, Palpation, and Body Mechanics/2013.
Main references (sources)	Manual Muscle Testing Practice Guide/2019
Recommended books and references (scientific journals, reports...)	Measurement of Joint Structure A Guide To Goniometry/2019
Electronic References, Websites	Therapeutic Exercise Prescription/2019

Course Description Form