

Course Unit	Education and Exercise I		Field of study	Physiotherapy	
Bachelor in	Physiotherapy		School	School of Health	
Academic Year	2023/2024	Year of study	2	Level	1-2
Type	Semestral	Semester	1	Code	9504-770-2102-00-23
Workload (hours)	162	Contact hours	T -	TP 30	PL 30
			TC -	S -	E -
			OT 20	O -	

T - Lectures; TP - Lectures and problem-solving; PL - Problem-solving, project or laboratory; TC - Fieldwork; S - Seminar; E - Placement; OT - Tutorial; O - Other

Name(s) of lecturer(s) Sara Isabel Alves Lucas

Learning outcomes and competences

At the end of the course unit the learner is expected to be able to:

1. Know the mechanisms, principles and evidence that support the use of Pain Neuroscience Education;
2. Know the factors that affect adherence and motivation to exercise;
3. Know the principles and effects of different types of exercise;
4. Define and justify the components of an Education and Exercise Program for users with neuromusculoskeletal conditions;
5. Implement an Education and Exercise program for users with different clinical conditions.

Prerequisites

Not applicable

Course contents

1. Education: Education in Physiotherapy and Neuroscience of Pain; Adherence and Motivation for Exercise; 2. Principles, effects and practical application of the various types of exercises; 3. Exercise Prescription in session and at home; 4. Education and Exercise applied to different clinical conditions.

Course contents (extended version)

1. Education:
 - Education models;
 - Physiotherapy Education;
 - Pain neuroscience education: principles, evidence and practical application;
 - Factors that affect adherence and motivation for exercise;
 - Education in pain neuroscience as a strategy to facilitate adherence to exercise.
2. AEROBIC / ANAEROBIC EXERCISES
 - Principles, evaluation, effects and determinants.
3. RESISTANCE EXERCISES
 - Principles, evaluation, effects, determinants and practical application;
 - Strength, Power and Fatigue Resistance
 - Concentric, Eccentric, Isometric, Isokinetic;
 - Open Kinetic Chair and Closed Kinetic Chair
 - Proprioceptive Neuromuscular Facilitation (PNF);
 - Plyometrics
4. FLEXIBILITY AND MOBILITY EXERCISES
 - Principles, effects, determinants and practical application.
5. PROPRIOCEPTIVE EXERCISES
 - Principles, effects, determinants and practical application.
6. BALANCE EXERCISES
 - Principles, evaluation, effects, determinants and practical application.
7. POSTURAL/CORE STABILIZATION EXERCISES
 - Principles, effects, determinants and practical application.
8. EXERCISE PRESCRIPTION IN SESSION AND AT HOME
9. EXERCISE AND EDUCATION APPLIED TO DIFFERENT CLINICAL CONDITIONS

Recommended reading

1. American College of Sports Medicine. ACSM's Guidelines for Exercise Testing and Prescription. (10th Ed.). Wolters Kluwer, 2017.
2. Kisner, K., Colby, L.A., Borstad, J. Exercícios Terapêuticos: fundamentos e técnicas. 6.edição. Barueri: Manole, 2015.

Teaching and learning methods

1. Theoretical-Practical: expository type of programmed content, using methodologies for active student participation;
2. Laboratory Practices: demonstrative type with practical application of theoretical knowledge, in groups;
3. Tutorial Guidance: guidance of students and clarification of doubts.

Assessment methods

1. Distributive Evaluation - (Regular, Student Worker) (Final)
 - Intermediate Written Test - 45% (Written test during the semester)
 - Intermediate Oral Test - 55% (Practical test during the semester - minimum note of 8,5 values)
2. Final evaluation - (Regular, Student Worker) (Supplementary)
 - Final Written Exam - 45% (Written test)
 - Laboratory Work - 55% (Practical test - minimum note of 8,5 values)
3. Final evaluation - (Regular, Student Worker) (Special)
 - Final Written Exam - 45% (Written test)
 - Laboratory Work - 55% (Practical test - minimum note of 8,5 values)

Language of instruction

1. Portuguese
2. Portuguese, with additional English support for foreign students.

Electronic validation

Sara Isabel Alves Lucas	Andre Filipe Morais Pinto Novo	Luis Migue Fernandes Nascimento	Adília Maria Pires da Silva Fernandes
08-12-2023	08-12-2023	08-12-2023	08-12-2023