



Course Code SPSC-340	Course Title Exercise & Chronic Diseases	ECTS 6
Department Sports Science	Semester Spring or Fall	Prerequisites SPSC-250, SPSC-315
Type of Course Elective	Field Health	Language of Instruction Greek
Level of Course 1 st Cycle	Year of Study 2 nd -4 th	Lecturer Dr Giannaki Christoforos
Mode of Delivery Face-to-face	Work Placement N/A	Co-Requisites None
Recommended Optional Programme Components: N/A		

Objectives of the Course:

This course focuses to the role of exercise in patients with chronic diseases. In addition, emphasis will be given to the knowledge of the basics of the physiological mechanisms involved in the body's response to certain clinical diseases and pathological conditions. This course will provide the students with the required knowledge in order to be able to design and successfully deliver exercise rehabilitation programs in clinical populations. Discussion will focus to the non-pharmacological management of chronic diseases such as Diabetes, Cancer, Cardiovascular Disease, Obesity, Chronic Kidney Disease and Hypertension. In addition, the students will be instructed to the basic knowledge regarding the role of exercise in other diseases such as Sleep disorders, Parkinson' disease, Osteoporosis, Pulmonary diseases etc. The course includes both theoretical and practical applications. The students will have the opportunity to learn how to assess physical performance of clinical populations using both field and laboratory-based tests and procedures.

Learning Outcomes:

- At the end of the module the students should be able to:
1. Recognize the important role of physical activity and exercise in the prevention and treatment of chronic diseases.
 2. Recognize how physical activity and exercise can reduce the risk of certain diseases
 3. Design specific and appropriate exercise rehabilitation programs for the most common chronic diseases
 4. Assess the physical performance and functional capacity of diseased populations
 5. Assess aspects related to quality of life and mental health of patients with chronic disease
 6. Develop the ability to assess basic research projects in the clinical exercise

physiology area in order to implement acquired knowledge.

Course Contents:

1. Introduction to clinical exercise physiology
2. Exercise in patients with Cardiovascular diseases
3. Exercise in Cancer patients
4. Exercise and Obesity
5. Exercise in patients with Chronic Kidney Disease
6. Exercise in patients with Sleep disorders
7. Exercise in patients with Pulmonary Diseases
8. Exercise and Osteoporosis
9. Exercise and Parkinson's Disease
10. Exercise and Metabolic syndrome
11. Exercise and Dyslipidemia
12. Design specific exercise programs in patients with chronic diseases
13. Exercise physiology assessment in patients with chronic diseases
14. Functional capacity and quality of life assessment in patients with chronic diseases

Learning Activities and Teaching Methods:

Lectures and discussions, Lab applications

Assessment Methods:

Midterm examination , Final examination , Project, Attendance & Participation.

Required Textbooks/Reading:

Authors	Title	Publisher	Year	ISBN
American College of Sports Medicine, J. Larry Durstine, Geoffrey Moore, Patricia Painter, Scott Roberts	ACSM's Exercise Management for Persons with Chronic Diseases and Disabilities-3rd Edition	Human Kinetics	2009	ISBN-13: 9780736074339

Recommended Textbooks/Reading:

Authors	Title	Publisher	Year	ISBN
Jonathan Ehrman, Paul Gordon, Paul Visich, Steven Keteyian	Clinical Exercise Physiology-2 nd Edition	Human Kinetics	2009	SBN-13: 9780736065658