UNIVERSITY of NICOSIA

ECTS Syllabus

Course title	Nutrition and Exercise in Chronic Diseases				
Course code	NUTR-516				
Course type	Required				
Level	2nd Cycle				
Year / Semester	2nd Year (Fall Semester)				
Teacher's name	Dr Dona Hileti Dr Penelopi Stavrinou				
ECTS	7.5	**Lectures / week**	1/week (3hrs)	**Laboratories / week**	0
Course purpose and objectives	The main objectives of the course are to: • The main objectives of the course are related to the role of exercise, physical activity and nutrition in patients with chronic diseases. • The course covers issues both for the prevention and the non-pharmacological management of chronic diseases through exercise, physical activity and nutrition. • Emphasis will be given also to the knowledge of the basics of the physiological mechanisms involved in the body's response to certain clinical diseases and pathological conditions and to the relationship between those mechanisms and exercise. • This course will provide the students with the required knowledge in order to be able to design and successfully deliver with safety the appropriate exercise programs in patients with chronic diseases. • Discussion will focus to the non-pharmacological management of chronic diseases such as Cardiovascular Disease, Diabetes, Cancer, 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 Parkinson' disease, 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 patients with chronic diseases using both field and laboratory-based tests.				
Learning outcomes	After completion of the course students are expected to be able to: • Recognize the important role of exercise and nutrition in the prevention and treatment of chronic diseases.				

	• Recognize how exercise and nutrition can reduce the risk of certain diseases and be aware of the major risk factors for those diseases. • Understand the challenges associated with exercise in clinical populations. • Be aware of how exercise could improve the quality of life of patients with chronic disease. • Design safe, specific and appropriate exercise rehabilitation programs for the most common chronic diseases. • Assess the physical performance and functional capacity of diseased populations using lab and field testing methodology. • Assess aspects related to quality of life of patients with chronic disease. • Develop the ability to assess basic research projects in the clinical exercise physiology area in order to implement acquired knowledge. • Develop the ability to undertake postgraduate research in the field of exercise and nutrition in chronic diseases.
Prerequisites	None **Required**
Course content	1. Introduction to exercise and chronic disease. 2. Exercise and nutrition in patients with Cardiovascular diseases. 3. Exercise, nutrition and Cancer. 4. Exercise and nutrition in patients with Chronic Kidney Disease. 5. Exercise and nutrition in patients with Pulmonary Diseases. 6. Exercise, nutrition and Parkinson's Disease. 9. Exercise and quality of life in clinical populations. 10. Design specific exercise programs in patients with chronic diseases. 11. Exercise physiology, functional capacity and quality of life assessment in patients with chronic diseases. 12. Current research in clinical exercise physiology.
Teaching methodology	Lectures, Discussions, Presentations from students, practical-lab applications
Bibliography	**Required Textbooks/ Readings**

Title	Author(s)	Publisher	Year	ISBN
Manual of Dietetic Practice (6th ed)	Ed: Joan Gandy	Wiley Blackwell	2019	9781119235927
Lecture notes	Dr Dona Hileti		2023	Lecture notes
Exercise to prevent and manage chronic diseases	Jack Feehan, Nicholas Tripodi, Vasso Apostolopoulos	Elsevier Academ Press	2022	9780323898430

	Dietary Habits, Beneficial Exercise and Chronic Diseases	Panagiota Mitrou	Nutrients science magazine	2022	978-3-0365-4992-7 (PDF) 978-3-0365-4991-0 (hardback)
	Clinical Exercise Physiology: Exercise Management for Chronic Diseases and Special Populations (Paperback)	Jonathan K. Ehrman, Paul Gordon, Paul Visich and Steven J. Keteyian	Human Kinetics	2022	9781718200449

Assessment

Midterm Exam, Final examination, Presentation

Assessment Details:

Final Exam 50%, Mid-Term 30% and Assignment/presentation 20%.

Oral Presentation – Topics (choose one topic)

1. Exercise training intervention (3 month duration) in patients with metabolic syndrome
2. Exercise training intervention (3 month duration) in patients with Parkinson disease
3. Exercise training intervention (3 month duration) in patients with Multiple Sclerosis
4. Exercise training intervention (3 month duration) in patients with Chronic Obstructive Pulmonary Disease
5. Combination between exercise and Omega 3 free fatty acids/ statins and nutritional supplements in patients with cardiovascular diseases
6. Low-glycemic diet and exercise in diabetes

<u>Make sure you address the following issues:</u>

1. A. Exercise training prescription (intensity, duration, strength training etc)
2. B. Form of exercise (walking, swimming etc)
3. C. Exercises (pictures and rationale)
4. D. Risk factors for the disease
5. Acute response to exercise
6. Potential risks, precautions

<u>Marking criteria</u>

- Presentation content- use of articles from peer-reviewed scientific journals (pubmed)
- Overall quality of the presentation/delivery of the presentation
- Understanding of the topic

	Use only scientific references/bibliography (scientific articles from peer-reviewed scientific journals, scientific books and WebPages from recognized scientific groups and organizations). Include also at least 4-key scientific articles from journals related to the topic of the presentation (original articles). Duration of each presentation: 15-20 minutes (20-25 slides)
Language	Greek/ English