COURSE OUTLINE EXERCISE PRESCRIPTION IN CLINICAL POPULATIONS

1. GENERAL

SCHOOL	PHYSICAL EDUCATION, SPORT SCIENCE AND OCCUPATIONAL THERAPY		
DEPARTMENT	PHYSICAL EDUCATION AND SPORT SCIENCE		
LEVEL OF STUDIES	ISCED level 6 – Bachelor's or equivalent level		
COURSE CODE	C086	**SEMESTER**	7th & 8th
COURSE TITLE	EXERCISE PRESCRIPTION IN CLINICAL POPULATIONS		

TEACHING ACTIVITIES *If the ECTS Credits are distributed in distinct parts of the course e.g. lectures, labs etc. If the ECTS Credits are awarded to the whole course, then please indicate the teaching hours per week and the corresponding ECTS Credits.*	**TEACHING HOURS PER WEEK**	**ECTS CREDITS**
	2	3
Please, add lines if necessary. Teaching methods and organization of the course are described in section 4.		

COURSE TYPE *Background, General Knowledge, Scientific Area, Skill Development*	Specific Scientific Area
PREREQUISITES:	No
TEACHING & EXAMINATION LANGUAGE:	Greek
COURSE OFFERED TO ERASMUS STUDENTS:	No
COURSE URL:	https://eclass.duth.gr

2. LEARNING OUTCOMES

Learning Outcomes

Please describe the learning outcomes of the course: Knowledge, skills and abilities acquired after the successful completion of the course.

Upon completion of the course, students will be able to:

- *Know and understand the acute and long-term physiological adaptations caused by exercise in patients with chronic diseases (heart disease, diabetes, obesity, etc)*
- *Design (prescription) secure exercise protocols in people with chronic diseases*
- *Determine the exercise intensity depending on the type of disease*
- *Personalize and supervise special exercise programs in people with chronic diseases*

General Skills

Name the desirable general skills upon successful completion of the module

Search, analysis and synthesis of data and information, ICT Use
Adaptation to new situations
Decision making
Autonomous work
Teamwork
Working in an international environment
Working in an interdisciplinary environment
Production of new research ideas
Project design and management
Equity and Inclusion
Respect for the natural environment
Sustainability
Demonstration of social, professional and moral responsibility and sensitivity to gender issues
Critical thinking
Promoting free, creative and inductive reasoning

- *Search, analysis and synthesis of data and information, ICT Use*
- *Adaptation to new situations*
- *Decision making*
- *Autonomous work*
- *Teamwork*
- *Working in an interdisciplinary environment*
- *Project design and management*
- *Equity and Inclusion*
- *Demonstration of social, professional and moral responsibility and sensitivity to gender issues*
- *Critical thinking*
- *Promoting free, creative and inductive reasoning*

3. COURSE CONTENT

Unit 1: Introduction to exercise prescription in chronic cardiometabolic diseases
Unit 2: Assessment of functional capacity in clinical populations
Unit 3: Assessment of obesity markers - Exercise prescription in obese individuals
Unit 4: Determination of lipid levels - exercise prescription
Unit 5: Assessment of blood pressure and implementation of exercise programs
Unit 6: Exercise prescription in patients with coronary artery disease
Unit 7: Glucose tolerance test (sugar curve)
Unit 8: Diabetes mellitus and exercise prescription
Unit 9: Metabolic syndrome, diagnosis of metabolic disorders and design of exercise protocols
Unit 10: Exercise-related factors in people with osteoporosis and thyroid diseases
Unit 11: Functional assessment tests in exercising elderly people
Unit 12: Exercise and pregnancy
Unit 13: Exercise and cancer

4. LEARNING & TEACHING METHODS - EVALUATION

TEACHING METHOD *Face to face, Distance learning, etc.*	Lectures face to face (with the possibility of using distance learning tools) Practical application of exercise programs. Note: In the case of distance learning, for the practical application modules it is possible to record and send through e-class specialized exercise programs by the students in case or non-case reports of trainees and dynamic interaction through annotation and group sessions on how to plan, guide and of the exercise program in simulation conditions.
USE OF INFORMATION & COMMUNICATIONS TECHNOLOGY (ICT) *Use of ICT in Teaching, in Laboratory*	Use of ICT in Teaching

Education, in Communication with students	
TEACHING ORGANIZATION *The ways and methods of teaching are described in detail.* *Lectures, Seminars, Laboratory Exercise, Field Exercise, Bibliographic research & analysis, Tutoring, Internship (Placement), Clinical Exercise, Art Workshop, Interactive learning, Study visits, Study / creation, project, creation, project. Etc.* *The supervised and unsupervised workload per activity is indicated here, so that total workload per semester complies to ECTS standards.*	
STUDENT EVALUATION *Description of the evaluation process* *Assessment Language, Assessment Methods, Formative or Concluding, Multiple Choice Test, Short Answer Questions, Essay Development Questions, Problem Solving, Written Assignment, Essay / Report, Oral Exam, Presentation in audience, Laboratory Report,Clinical examination of a patient,Artistic interpretation, Other/Others* *Please indicate all relevant information about the course assessment and how students are informed*	• Written examination (80%) • Evaluation of practical application - Implementation of an exercise program (20%)

Activity	*Workload/semester*
Lectures	26
Field Exercise	20
Literature study and analysis	24
Designing exercise program plans	2
Exams	3
Total	**75**

5. SUGGESTED BIBLIOGRAPHY

1. *Ehrman JK, Gordon PM, Visich PS. & Keteyian P.S. (2023). Clinical Exercise Physiology. University Studio Press, Thessaloniki.*
2. *Tokmakidis Savvas (2003). Exercise & Chronic Diseases. Broken Hill Published LTD, Athens.*
3. *Deligiannis A, Kouidi E, (2019). Exercise as Therapy. Publications: University Studio Press. Thessaloniki.*

ANNEX OF THE COURSE OUTLINE

Alternative ways of examining a course in emergency situations

Teacher (full name):	Apostolos Spassis, Special Teaching Staff
Contact details:	aspassis@phyed.duth.gr
Supervisors: (1)	NO
Evaluation methods: (2)	Written examination with distance learning methods
Implementation Instructions: (3)	The examination in the course will be carried out in subgroups of users in the e-class, depending on the number of participants in the course, on the day according to the examination program announced by the Secretariat. The exam will be conducted through Teams. The link will be sent to students via e-class exclusively to the institutional accounts of those who have registered for the course and have learned the terms of distance

	methods. Students will have to log in to the examination room through their institutional account, otherwise they will not be able to participate. They will also take part in the examination with a camera, which they will have open during the examination. Before the start of the exam, students will show their identity to the camera, so that they can be identified. Each student should answer multiple choice questions, free text development, critical thinking. Each of the questions is graded from 0.2 to 2.0 points depending on the question category.