COURSE OUTLINE PHYSICAL FITNESS TRAINING IN NEUROLOGICAL DISEASES

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	C662	**SEMESTER**	**5th**
COURSE TITLE	PHYSICAL FITNESS TRAINING IN NEUROLOGICAL DISEASES		

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**
	3	6

COURSE TYPE *Background, General Knowledge, Scientific Area, Skill Development*	Scientific Area
PREREQUISITES:	NO
TEACHING & EXAMINATION LANGUAGE:	Hellenic (Greek) English for Erasmus+ students
COURSE OFFERED TO ERASMUS STUDENTS:	YES
COURSE URL:	

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 successful completion of the course students will be able to:

- *assess the level of health-related physical fitness in people with neurological diseases*
- *design training (intensive exercise) protocols aimed at improving fitness for people with neurological diseases, depending on their initial level of fitness*
- *organize and implement individualized and group exercise programs to improve the physical condition of people with neurological diseases*
- *evaluate and develop fitness training programs for people with neurological diseases*
- *The course aims to familiarize the students with the design, organization and implementation of exercise programs to improve physical fitness in people with neurological diseases.*

General Skills

Name the desirable general skills upon successful completion of the module

Search, analysis and synthesis of data and information,	*Project design and management*
ICT Use	*Equity and Inclusion*
Adaptation to new situations	*Respect for the natural environment*
Decision making	*Sustainability*
Autonomous work	*Demonstration of social, professional and moral responsibility*

Teamwork *Working in an international environment* *Working in an interdisciplinary environment* *Production of new research ideas*	*and sensitivity to gender issues* *Critical thinking* *Promoting free, creative and inductive reasoning*

The general skills that are supported involve:

Search, analysis and synthesis of data and information, using appropriate ICT
Decision making
Autonomous work
Teamwork
Working in an interdisciplinary environment
Production of new research ideas
Practice of criticism and self-criticism
Promoting free, creative and inductive reasoning

3. COURSE CONTENT

1. *Fitness factors of people with neurological diseases*
2. *Fitness assessment of people with neurological disorders*
3. *Muscle strength training in people with stroke*
4. *Aerobic exercise and flexibility programmes in people with stroke*
5. *Muscle strength training in people with cerebral palsy*
6. *Aerobic exercise and flexibility programmes in people with cerebral palsy*
7. *Muscle strength training for people with Parkinson's disease*
8. *Aerobic exercise and flexibility programmes in people with Parkinson's disease*
9. *Muscle strength training in people with multiple sclerosis*
10. *Aerobic exercise and flexibility programmes in people with multiple sclerosis*
11. *Muscle strength training for people with dementia*
12. *Aerobic exercise and flexibility programmes in people with dementia*
13. *Safety in fitness training for people with neurological diseases*

4. LEARNING & TEACHING METHODS - EVALUATION

TEACHING METHOD *Face to face, Distance learning, etc.*	Face to face Theoretical lectures Laboratory courses Distance learning
USE OF INFORMATION & COMMUNICATIONS TECHNOLOGY (ICT) *Use of ICT in Teaching, in Laboratory Education, in Communication with students*	Use of ICT in teaching and communication with students: digital slides videos MsTeams/ e-class, webmail
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,*	

Activity	Workload/semester
Lectures	39
Field exercise	30
Study and analysis of the	78

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.*	literature: Examinations: 3 Total Course: **150**
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*	Interim evaluations (40%) Written exams including: multiple choice tests, short answer questions and development questions designed to solve problems (60%) The assessment languages are Greek and English for Erasmus students

5. SUGGESTED BIBLIOGRAPHY

1. *NICHOLS_LARSEN D. ET AL (2017). NEUROLOGICAL REHABILITATION. ATHENS: KONSTANTARAS, MEDICAL PUBLICATIONS*
2. *CARR J. & SHEPHERD R. (2017). NEUROLOGICAL REHABILITATION (2ND EDITION). ATHENS: PARISIANOU, ANONYMOUS PUBLISHING IMPORT TRADING COMPANY OF SCIENTIFIC BOOKS*
3. *ACSM (2018). ACSM'S GUIDELINES FOR EXERCISE TESTING AND PRESCRIPTION. TENTH EDITION.WOLTER KLUWER*

ANNEX OF THE COURSE OUTLINE

Alternative ways of examining a course in emergency situations

Teacher (full name):	Erasmia Giannakou
Contact details:	egiannak@phyed.duth.gr
Supervisors:	Yes
Evaluation methods:	Written or oral examination with distance learning methods, via eClass. Identification and monitoring of examinees through Microsoft Teams
Implementation Instructions:	The examination in the course will be done in randomly created groups of users (examinees). The compositions of the user groups will be announced in time. The total examination duration of each group will be 1 hour. In the first twenty minutes of each examination period, the examinees will be identified through the MS Teams app. For this purpose, there must be a camera, microphone and headphones connected to their terminal device

	(PC or smartphone). The relevant link will be sent via eClass, exclusively to the institutional accounts of those who have registered for the course and have accepted the terms of distance examination. For identification, students will display their student ID on camera when requested. The main examination will be carried out through the "Exercises" application of eClass. In particular, at the beginning of the second twenty minutes of each examination period, an exercise entitled "Examination - Group X (where X = 1 to n)" will be activated in the eClass, which will include 20 questions. The time limit for answering the 20 questions will be 30 minutes. During this period, all questions should be answered and finalized. Each of the questions will be graded with 0.5 points. Students should log in to the eClass platform through their institutional account. Also during the exam the camera and microphone of the examinees have to be continuously activated and the MS Teams application should be open.