

COURSE OUTLINE

1. GENERAL

SCHOOL	PHYSICAL EDUCATION & SPORT SCIENCES		
DEPARTMENT	PHYSICAL EDUCATION & SPORT SCIENCES		
LEVEL OF STUDIES	7		
COURSE CODE	K104	SEMESTER	A'
COURSE TITLE	DESIGN AQUATIC THERAPEUTIC EXERCISE PROGRAMS		
TEACHING ACTIVITIES <i>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.</i>	TEACHING HOURS PER WEEK	ECTS CREDITS	
	3	7,5	
<i>Please, add lines if necessary. Teaching methods and organization of the course are described in section 4.</i>			
COURSE TYPE <i>Background, General Knowledge, Scientific Area, Skill Development</i>	SCIENTIFIC AREA		
PREREQUISITES:	NO		
TEACHING & EXAMINATION LANGUAGE:	GREEK		
COURSE OFFERED TO ERASMUS STUDENTS:	NO		
COURSE URL:	https://eclass.duth.gr/courses/PHYED4103/		

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.

Course objectives include:

understanding the specifics of the aquatic environment, and the options available for implementing a specialized exercise program (pool depth, use of equipment)
understanding the exercise limitations of people who have musculoskeletal or neurological diseases as well as injured people who are in the acute phase of the injury

Upon successful completion of this course students will be able to:

- Know and understand the peculiarities of the aquatic environment
- Know and understand the use of appropriate exercise equipment in the water
- know the correct technical execution of specialized exercises
- Know and understand the specifics of people who need therapeutic exercise in water and face chronic musculoskeletal problems, such as chronic back pain, osteoarthritis
- Know and understand the specifics of people who need therapeutic exercise in water and face neurological problems, such as multiple sclerosis and Parkinson's
- Plan and implement therapeutic exercise programs in water in a shallow or deep pool
- Know and understand the beneficial role of water exercise in the acute rehabilitation phase after an injury, in regaining range of motion and muscle strength

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

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

*Working in an interdisciplinary environment
Production of new research ideas*

Promoting free, creative and inductive reasoning

The general skills that are supported involve:

- Search, analysis and synthesis of data and information, using appropriate ICT
- Adaptation to new situations
- Decision making
- Autonomous work
- Teamwork
- Working in an interdisciplinary environment
- Production of new research ideas
- Project design and management
- Critical thinking
- Promoting free, creative and inductive reasoning

3. COURSE CONTENT

1. Peculiarities of the aquatic environment
2. Use of specialized equipment - Categories of water exercises I
3. Use of specialized equipment - Categories of water exercises II
4. Ankle sprain – Design an exercise program in the water
5. ACL Rupture - Design an exercise program in the water
6. Knee and hip osteoarthritis
7. Osteoarthritis of the knee and hip- Design an exercise program in the water
8. Scoliosis - Design an exercise program in the water
9. Chronic low back pain
10. Chronic low back pain - Design a water exercise program
11. Multiple Sclerosis - Design a water exercise program
12. Parkinson's - Design an exercise program in the water
13. Projects presentation

4. LEARNING & TEACHING METHODS - EVALUATION

TEACHING METHOD <i>Face to face, Distance learning, etc.</i>	<ul style="list-style-type: none"> - Face to face - Theoretical lectures & courses in swimming pool - Distance learning 	
USE OF INFORMATION & COMMUNICATIONS TECHNOLOGY (ICT) <i>Use of ICT in Teaching, in Laboratory Education, in Communication with students</i>	Utilization of new technologies in teaching, laboratory education and communication with students	
TEACHING ORGANIZATION <i>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.</i>	Activity	Workload/semester
	Lectures	39
	Literature study and analysis	28
	Project	47
	Home study	50
	Practical training in pool	23,5
	Total	187,5
STUDENT EVALUATION <i>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</i>	<ol style="list-style-type: none"> 1. Interim evaluations 2. Individual project 3. Written exams including: multiple choice tests, short answer questions <p>The assessment languages are Greek</p>	

Please indicate all relevant information about the course assessment and how students are informed

5. SUGGESTED BIBLIOGRAPHY

1. Bates A., Hanson N. (1996). Aquatic Exercise Therapy. W.B. Saunders Company, Philadelphia, Pennsylvania 19106.
2. Becker B.E., Cole, A.J. (eds) (1997). Comprehensive Aquatic Therapy. Butterworth-Heinemann, London.
3. Beneka A., Malliou P., Pafis G., Koutra Ch. Malliou V. (2015). Therapeutic Exercise. Kallipos Publications, Greek Academic Electronic Books and Aids, ISBN 978-960-603-034-5 <http://hdl.handle.net/11419/372>
4. Aquatic fitness professional manual/Aquatic Exercise Association (AEA) (2010). 6th ed. Human Kinetics, Champaign, IL
5. Foley A., Halbert J., Hewitt T., Crotty M. (2003). Does hydrotherapy improve strength and physical function in patients with osteoarthritis—a randomised controlled trial comparing a gym based and a hydrotherapy based strengthening programme. Ann Rheum, 62, 1162-1167.
6. Gioftsidou A, Malliou P, Sofokleous P, Beneka A, Tsapralis K, Kofotolis N, Godolias G. (2013) Aquatic training for ankle instability. Foot and Ankle Specialist, 6, 346-351.

ANNEX OF THE COURSE OUTLINE

Alternative ways of examining a course in emergency situations

Teacher (full name):	Asimena Gioftsidou, Professor
Contact details:	agioftsi@phyed.duth.gr
Supervisors: (1)	no
Evaluation methods: (2)	Written examination with distance learning methods, via eClass. Identification and monitoring of examinees through Microsoft Teams
Implementation Instructions: (3)	<p>The examination in the course will take place in subgroups of users in the e-class, depending on the number of participants in the course, on the day of the examination of the course according to the examination schedule announced by the Secretariat. The exam will take place via Teams.</p> <p>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 been informed of the distance education terms.</p> <p>Students must log in to the exam room through their institutional account, otherwise they will not be able to participate. They will also participate in the examination with a camera which they will have open during the examination. Before the start of the exam, students will show their ID to the camera so that they can be identified.</p> <p>Each student should answer multiple choice tests and short answer questions. Each of the questions is scored from 0.5 to 2.0 points depending on the question category.</p>

(1) Please write YES or NO

(2) Note down the evaluation methods used by the teacher, e.g.

- *written assignment* or/and exercises
- written or oral examination with distance learning methods, provided that the integrity and reliability of the examination are ensured.

(3) In the **Implementation Instructions** section, the teacher notes down clear instructions to the students:

a) in case of **written assignment and / or exercises**: the deadline (e.g. the last week of the semester), the means of submission, the grading system, the grade percentage of the assignment in the final grade and **any other necessary information**.

b) in case of **oral examination with distance learning methods**: the instructions for conducting the examination (e.g. in groups of X people), the way of administration of the questions to be answered, the distance learning platforms to be used, the technical means for the implementation of the examination (microphone, camera, word processor, internet connection, communication platform), the hyperlinks for the examination, the duration of the exam, the grading system, the percentage of the oral exam in the final grade, the ways in which the inviolability and reliability of the exam are ensured and any other necessary information.

c) in case of **written examination with distance learning methods**: the way of administration of the questions to be answered, the way of submitting the answers, the duration of the exam, the grading system, the percentage of the written exam of the exam in the final grade, the ways in which the integrity and reliability of the exam are ensured and any other necessary information.

There should be an attached list with the Student Registration Numbers only of students eligible to participate in the examination.