

## COURSE OUTLINE

### 1. GENERAL

<b>SCHOOL</b>	PHYSICAL EDUCATION & SPORT SCIENCES		
<b>DEPARTMENT</b>	PHYSICAL EDUCATION & SPORT SCIENCES		
<b>LEVEL OF STUDIES</b>	7		
<b>COURSE CODE</b>	L104	<b>SEMESTER</b>	A
<b>COURSE TITLE</b>	TEST AND EVALUATIONS ON FUNCTIONAL TRAINING OF INJURED ATHLETES		
<b>TEACHING ACTIVITIES</b> <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>	<b>TEACHING HOURS PER WEEK</b>	<b>ECTS CREDITS</b>	
	3	7,5	
<i>Please, add lines if necessary. Teaching methods and organization of the course are described in section 4.</i>			
<b>COURSE TYPE</b> <i>Background, General Knowledge, Scientific Area, Skill Development</i>	SCIENTIFIC AREA		
<b>PREREQUISITES:</b>	NO		
<b>TEACHING &amp; EXAMINATION LANGUAGE:</b>	GREEK		
<b>COURSE OFFERED TO ERASMUS STUDENTS:</b>	NO		
<b>COURSE URL:</b>	<a href="https://eclass.duth.gr/courses/PHYED3104/">https://eclass.duth.gr/courses/PHYED3104/</a>		

### 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:

understand the process of assessing body composition, range of motion, muscle strength, agility, aerobic capacity and functional tests necessary for the evaluation of athletes and trainees.

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

- assess the athlete's body composition
- perform a series of functional tests and interpret their results
- measure the joints range of motion of the upper and lower limbs
- carry out balance and neuromuscular control tests of the lower limbs
- carry out field tests to assess the physical condition and the appropriate design of functional rehabilitation programs for athletes and trainees after injury.
- perform and interpret the 7 FMS (Functional Movement Screen) motor control tests
- perform a series of assessments (strength, mobility, functional tests) of people with Chronic Low Back Pain.
- perform an isokinetic assessment of the knee joint and be able to interpret its results, giving instructions for the design of appropriate lower extremity exercise programs
- carry out jumping ability tests for its assessment and the appropriate design of functional rehabilitation programs for athletes and trainees after injury

#### 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*

*Project design and management*

*Equity and Inclusion*

*Respect for the natural environment*

*Sustainability*

*Demonstration of social, professional and moral responsibility and*

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

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
- Sensitivity to gender issues
- Critical thinking
- Promoting free, creative and inductive reasoning

### 3. COURSE CONTENT

<ol style="list-style-type: none"> <li>1. Course Introduction - Strength and Flexibility Measurements and Assessment for Practitioners</li> <li>2. Principles of Physical Condition Assessment</li> <li>3. Principles of Anaerobic Capacity evaluation</li> <li>4. Cardiorespiratory Endurance assessment laboratory (Submaximal semi-laboratory and outdoor tests, Cooper 1.5 mile run/walk, Cooper 12 min run/walk, Rockport fitness walking Test)</li> <li>5. Maximum intensity outdoor tests (test 20 m etc.) Exercise prescription based on heart rate. (Wingate test, Margaria-Kalamen stair test)</li> <li>6. Assessment of jump ability</li> <li>7. Assessment FMS TEST – Functional assessment of movements</li> <li>8. Lower extremity isokinetic assessment</li> <li>9. Goniometer measurements of upper and lower limb joints</li> <li>10. Measurements and assessment in people with chronic low back pain</li> <li>11. Evaluation of somatometric characteristics and bundles of measurements in athletes and trainees</li> <li>12. Evaluation of body composition in athletes and trainees</li> <li>13. Applied measurements in individual and team sports</li> </ol>
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### 4. LEARNING & TEACHING METHODS - EVALUATION

<p><b>TEACHING METHOD</b></p> <p><i>Face to face, Distance learning, etc.</i></p>	<ul style="list-style-type: none"> <li>- Face to face</li> <li>- Theoretical lectures &amp; Laboratory courses</li> <li>- Distance learning</li> </ul>																
<p><b>USE OF INFORMATION &amp; COMMUNICATIONS TECHNOLOGY (ICT)</b></p> <p><i>Use of ICT in Teaching, in Laboratory Education, in Communication with students</i></p>	Utilization of new technologies in teaching, laboratory education and communication with students																
<p><b>TEACHING ORGANIZATION</b></p> <p><i>The ways and methods of teaching are described in detail.</i></p> <p><i>Lectures, Seminars, Laboratory Exercise, Field Exercise, Bibliographic research &amp; analysis, Tutoring, Internship (Placement), Clinical Exercise, Art Workshop, Interactive learning, Study visits, Study / creation, project, creation, project. Etc.</i></p> <p><i>The supervised and unsupervised workload per activity is indicated here, so that total workload per semester complies to ECTS standards.</i></p>	<table border="1"> <thead> <tr> <th><i>Activity</i></th> <th><i>Workload/semester</i></th> </tr> </thead> <tbody> <tr> <td>Lectures</td> <td>39</td> </tr> <tr> <td>Field exercise</td> <td>35</td> </tr> <tr> <td>Literature study and analysis</td> <td>32</td> </tr> <tr> <td>Project</td> <td>35,5</td> </tr> <tr> <td>Study of digital material</td> <td>43</td> </tr> <tr> <td>Examination</td> <td>3</td> </tr> <tr> <td><b>Total</b></td> <td><b>187,5</b></td> </tr> </tbody> </table>	<i>Activity</i>	<i>Workload/semester</i>	Lectures	39	Field exercise	35	Literature study and analysis	32	Project	35,5	Study of digital material	43	Examination	3	<b>Total</b>	<b>187,5</b>
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<p><b>STUDENT EVALUATION</b></p> <p><i>Description of the evaluation process</i></p>	<ol style="list-style-type: none"> <li>1. Interim evaluations</li> </ol>																

*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*

2. Individual project
3. Written exams including: multiple choice tests, short answer questions

The assessment languages are Greek

## 5. SUGGESTED BIBLIOGRAPHY

1. 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>
2. Malliou P, Gioftsidou A, Beneka A, Godolias G. (2006). Measurements and evaluations in low back pain patients. Scandinavian Journal of Medicine and Science in Sports, 16, 219-230.
3. Karatzaferi Ch. et al., (2015). Manual for the Physical Assessment of Athletes. Kallipos Publications, Greek Academic Electronic Books and Aids
4. Kleisouras V., Geladas N., Koskolou M. (2015). Ergometry. Paschalides Publ. – Broken Hill Publishers, Athens
5. Liguori G. (2021). *ACSM's Guidelines for Exercise Testing and Prescription*, Wolters Kluwer Health, United States, ISBN: 9781975150198.
6. Sakkas G., et al., (2015). Manual for Physical Assessment of Special Populations. Kallipos Publications, Greek Academic Electronic Books and Aids

## ANNEX OF THE COURSE OUTLINE

### Alternative ways of examining a course in emergency situations

<b>Teacher (full name):</b>	Helen Douda, Paraskevi Malliou, Ilias Smilios, Athanasios Chatzinikolaou
<b>Contact details:</b>	<a href="mailto:edouda@phyed.duth.gr">edouda@phyed.duth.gr</a>
<b>Supervisors: (1)</b>	Helen Douda, Paraskevi Malliou, Ilias Smilios, Athanasios Chatzinikolaou
<b>Evaluation methods: (2)</b>	Written examination with distance learning methods, via eClass. Identification and monitoring of examinees through Microsoft Teams
<b>Implementation Instructions: (3)</b>	<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.