

Course title	<b>Personal Training-Resistance Training</b>				
Course code	<b>TRAN106</b>				
Course type	<b>Theoretical and Practical</b>				
Level	<b>Diploma</b>				
Year / Semester	<b>1<sup>st</sup> Year / 1<sup>st</sup> Semester</b>				
Teacher's name	<b>Costa- Ioannou Froso</b>				
ECTS	6	<b>Lectures / week</b>	1	<b>Laboratories / week</b>	2
Course purpose and objectives	The purpose of the course is for students to understand the basic principles of designing a resistance training programme, to consolidate the basic techniques of resistance exercises, and to adopt ways to motivate the trainees to stay motivated and achieve their fitness goals .				
Learning outcomes	<p>Upon the completion of the course, the students are expected to:</p> <p><b>Knowledge</b></p> <ol style="list-style-type: none"> <li>1. <b>Recognise</b> the basic resistance equipment as well as the correct technical execution of the exercises using resistance machines.</li> <li>2. <b>Recognise</b> the types of muscle contraction as well as the types of strength training</li> <li>3. <b>Recognise</b> what information requires further analysis when it comes to the <b>development</b> of a training programme</li> <li>4. <b>Have a basic knowledge</b> on space organisation and safety</li> <li>5. <b>Define</b> the training load and the training method</li> </ol> <p><b>Skills</b></p> <ol style="list-style-type: none"> <li>6. <b>Perform</b> the basic exercises with machines and resistance dumbbells with correct technique</li> <li>7. <b>Identify</b> poor posture and incorrect execution of the exercise to minimize the chances for an injury.</li> <li>8. <b>Apply</b> various tests and somatometric evaluation measurements, in order to record the real needs and goal-setting.</li> <li>9. <b>Implement</b> behaviour change strategies that will empower trainees to remain motivated towards lifelong fitness</li> </ol> <p><b>Competences</b></p> <ol style="list-style-type: none"> <li>10. <b>Evaluate</b> the readiness of the trainees with the use of interviews and questionnaires.</li> </ol>				

Prerequisites	Required	
<p><b>Course content</b></p>	<ul style="list-style-type: none"> <li>• Introduction to Personal Training – role and responsibilities of a personal trainer</li> <li>• Medical History, anthropometric assessment, readiness interview and goal setting.</li> <li>• Mechanics of resistance training: Strength, types of muscle contraction and types of strength training.</li> <li>• The methodology of teaching exercises with weights</li> <li>• The Theory of physical fitness and its evaluation</li> <li>• Introduction to the principles of exercise (individual differences, specialisation, burden, progressivity, adaptation, reversibility, etc.)</li> <li>• Introduction to the principles of strength training (Load, intensity, duration, withdrawal, etc.)</li> <li>• Equipment and safety principles (warm-up, recovery, breathing, equipment maintenance, aids, etc.)</li> <li>• Details of the technical execution of the exercises (grips, rate of execution of repetitions, breathing, common errors of execution of exercises, etc.)</li> <li>• Technical analysis and practical application of an exercise program with resistance machines, free weights, and cardiorespiratory machines.</li> <li>• Advantages and disadvantages of machines and Free weights</li> <li>• Major and minor muscle groups involved in each exercise</li> <li>• Introduction to training programme design</li> <li>• Strategies for adherence to exercise</li> </ul>	
<p><b>Teaching methodology</b></p>	<p>The content of the course is taught through lectures with the help of a computer, video projector, electronic presentations and multimedia and the use of a whiteboard. Active student participation is ensured through guided discussions. The practical part of the course is carried out in an accredited gym centre.</p>	
<p><b>Bibliography</b></p>	<p><b>Greek Bibliography</b></p> <ul style="list-style-type: none"> <li>• Τερζής, Γ. (2022). <i>Μυϊκή Ενδυνάμωση [Muscle strengthening]</i>. Kallipos, Open Academic Editions. Ανακτήθηκε από <a href="https://dx.doi.org/10.57713/kallipos-26">https://dx.doi.org/10.57713/kallipos-26</a></li> <li>• American College of Sports Medicine (2008). <i>Το εγχειρίδιο του προσωπικού γυμναστή [The manual of the personal trainer]</i>, Αθλότυπο, ISBN 978-960-7378-82-8.</li> <li>• Αντωνιάδης, Κ. (2009). <i>Εισαγωγή στην άσκηση με βάρη [Introduction to weight exercise]</i>, Τελέθριον, ISBN 978-960-8410-54-1</li> <li>• Φατούρος, Γ.Ι. &amp; Χατζηνικολάου, Θ. (2012). <i>Προπόνηση με βάρη, διδασκαλία, ασφάλεια και οργάνωση ασκήσεων [Weight training, teaching safety and exercise management]</i>, ISBN 978-960-8410-97-8</li> </ul>	

	<ul style="list-style-type: none"> <li>• Delavier, F. (2012). <i>Προπόνηση για αύξηση της μυϊκής δύναμης : Λειτουργική ανατομική των μυών</i>. Εκδόσεις Π. Χ. Πασχαλίδης. 3<sup>η</sup> Έκδοση. ISBN: 9789963744107</li> </ul> <p><b>English Bibliography</b></p> <ul style="list-style-type: none"> <li>• Bryant, C. X., and Green, D. J. (2010). <i>ACE Personal trainer manual: The ultimate resource for fitness professionals</i>. 4<sup>th</sup> Edition. American Council on Exercise. ISBN: 9781890720292</li> <li>• American College of Sports Medicine (2018). <i>ACSM's Resources for the Personal Trainer</i>. 5<sup>th</sup> Edition. ISBN: 978-1496322890.</li> </ul>
<b>Assessment</b>	<ul style="list-style-type: none"> <li>• Attendance and class participation: 10%</li> <li>• Intermediary practical examination: 20%</li> <li>• Final practical examination: 30%</li> <li>• Final written examination: 40%</li> </ul>
<b>Language</b>	Greek or English