Course title	**Exercise for Special Population – Guidelines for exercise adjustment**				
Course code	**TRAN208**				
Course type	**Lectures**				
Level	**Diploma**				
Year / Semester	**2nd Year / 3rd Semester**				
Teacher's name	**Assos Charalambos**				
ECTS	6	**Lectures / week**	3	**Laboratories / week**	
Course purpose and objectives	The purpose of the course is to provide students with a theoretical foundation on the pathophysiology of chronic diseases (coronary artery disease, hypertension, obesity, cancer, thyroid disorders, etc.). Additionally, during the course, specific protocols are presented based on guidelines from national organisations to ensure effective and safe exercise for the trainees.				
Learning outcomes	Upon the completion of the course, the students are expected to: **Knowledge** 1. **Recognise** the immediate and long-term physiological effect of exercise on people with chronic illnesses (heart patients, diabetics, obese, etc.) 2. **Explain** how specific chronic conditions affect physical function and exercise capacity 3. **Explain** the guidelines for adapting exercise for special populations, including individuals with chronic conditions, the elderly, pregnant women, and others. **Skills** 4. **Design** and **implement** safe training programmes to improve the functionality and physical condition of the trainees. **Competences** 5. **Determine** the intensity of the exercise depending on the type of the chronic condition.				

Prerequisites		**Required**	
Course content	• Evaluation and medical history of people with chronic illnesses • Exercise & Hypertension • Exercise and Obese people • Exercise and Cancer • Metabolic syndrome and exercise • Exercise and diabetes • Exercise and thyroid conditions • Exercise and people with arthritis • Exercise and people with osteoporosis • Exercise to prevent and restore musculoskeletal problems • Exercise and mental health • Exercise during pregnancy • Special populations and exercise adaptation according to guidelines from national organizations and associations		
Teaching methodology	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.		
Bibliography	**Greek Bibliography** • Τοκμακίδης Σ. (2003). *Άσκηση και χρόνιες παθήσεις [Exercise and chronic illness].* Εκδόσεις Πασχαλίδη. • Γεροδήμος, Β., Καρατράντου Κ. (2021). *Άσκηση για την Υγεία, Πρόληψη και αποκατάσταση [Exercise for health, prevention and rehabilitation]*. Κωνσταντάρας, ISBN 978-960-608-051-7 • Θεοδωράκης, Ι. (2017), *Άσκηση, ψυχική υγεία και ποιότητα ζωής [Exercise, psychological health and quality of life]*, Αφοί Κυριακίδη Εκδόσεις Α.Ε., ISBN 978-960-602-168-8. • Sharkey, Brian J. (2017). *Άσκηση και υγεία: Ολοκληρωμένος οδηγός [Exercise and health: A complete guide]*. 7η Έκδοση. Παρισιάνου Α.Ε., ISBN 978-960-583-171-4. • Beneka, A., Malliou, P., Pafis, G., Malliou, V., & Koutra, C. (2015). *Θεραπευτική άσκηση [Therapeutic exercise]*. Kallipos, Open Academic Editions. https://hdl.handle.net/11419/372 • Καρατζαφέρη, Κ., et al. (2015). *Εγχειρίδιο για την σωματική αξιολόγηση αθλητών: δοκιμασίες εργαστηρίου και πεδίου για την επιστημονική υποστήριξη του αγωνιστικού αθλητισμού [Manual for the body evaluation of*		

	the athletes]. Kallipos, Open Academic Editions. https://hdl.handle.net/11419/4443 **English Bibliography** • Morc Coulson (2013). *The Complete Guide to Teaching Exercise to Special Populations*. London : Bloomsbury Sport. **EBSCOHost**. • Ayan Perez, C., Cancela C., Jose M., Martinez, V., S. (2010). *Aerobic Exercise in Special Populations*. New York : Nova Science Publishers, Inc. **EBSCOHost**.
Assessment	• Attendance and class participation: 10% • Assignment: 20% • Final written assignment: 40% • Final practical assignment 30%
Language	Greek or English