

Course Title	TRAINING PRINCIPLES			
Course Code	SSTRA203-1			
Course Type	MANDATORY			
Level	BSc (Level 1)			
Year / Semester	1st / Spring			
Teacher's Name	Dr Garifallos Anagnostou			
ECTS	6	Lectures / week	3	Laboratories / week
Course Purpose	<p>The general aim of the course is to provide students with a comprehensive understanding of the principles, methodologies, and practices involved in designing and implementing effective training programs for athletes across various sports disciplines. This course aims to equip students with the skills and competencies necessary to optimize athletic performance, prevent injuries, and enhance overall athlete development. Additionally, the course seeks to foster critical thinking, problem-solving abilities, and evidence-based decision-making in the context of sports training, preparing students for careers in coaching and sports science.</p>			
Learning Outcomes	<p>Upon completion of the course, students will be able to:</p> <ul style="list-style-type: none"> • Describe the basic principles of the training process • Recognize the elements of sports training and their terminology • Structure a training unit and calculate the training load • Know the different strategies used for recovery from training • Understand the process and mechanisms of overcompensation, overtraining and rehabilitation • Design appropriate programs to improve fitness parameters • Understand, describe and evaluate an annual training plan 			
Prerequisites	No	Corequisites	No	
Course Content	Introduction to coaching: Elements of the coaching process, terminology.			

	<p>Training principles: general principles for planning and guiding training, principle of individualization, principle of specialization, principle of burden, principle of adaptation, principle of reversal.</p> <p>Periodization: training cycles, training unit, annual training plan, training plan design, forming, adaptation and achievement of ideal performance</p> <p>Quantification of training load and training volume</p> <p>Overcompensation, overtraining and tapering models.</p> <p>Fitness training: principles of endurance training, speed and power, strength, flexibility.</p> <p>Recovery strategies: Importance of rehabilitation in athletic training, Exercise-induced muscle damage, inflammation and delayed-onset muscle soreness (DOMS), active and passive recovery techniques, sleep, stress management, and other rehabilitation interventions.</p> <p>Summary and critical evaluation of the topics taught.</p>
Teaching Methodology	<p>Theory</p> <p>The teaching of the course includes lectures on the offer of the theoretical background. The teaching uses detailed notes with PowerPoint and material rich in images and videos. Methods such as case studies, clinical scenarios, discussion, questions/answers are used in teaching methodology depending on the nature of the course. Relevant material published in international scientific journals is also used to follow the latest developments related to the subject of the course.</p>
Bibliography	<p>Τζιωρτζής, Σ. Θεωρία Αθλητικής Προπόνησης. Εκδόσεις Artwork. Αθήνα, Ελλάδα. (2004).</p> <p>Bompa, T.O. & Buzzichelli, C. Periodization training for sports. 3rd Edition. Human Kinetics, Champaign, IL, USA. (2015)</p> <p>Grosser, M. & Starischka, S. Προπόνηση Φυσικής Κατάστασης σε όλα τα Αθλήματα και τις Ηλικίες. 2^η έκδοση. Εκδόσεις Salto, Θεσσαλονίκη. (2007).</p> <p>Mujika, I. Tapering and peaking for optimal performance. Human Kinetics, Champaign, IL, USA. (2009)</p> <p>Γεωργιάδης, Γ. Αθλητική προπόνηση. Εκδόσεις Πασχαλίδη (2015).</p> <p>Fleck, S.J. & Kraemer, W.J. Σχεδιασμός προγραμμάτων άσκησης με αντίσταση. Αθήνα: Ιατρικές Εκδόσεις Πασχαλίδη (2007).</p>
Assessment	<p>Continuous evaluation (50%):</p> <p>The continuous evaluation shall include a combination of the following:</p>

	<ul style="list-style-type: none"> • Online quizzes or interactive assessments (30%): Online quizzes, or interactive assessments, are used through the Moodle platform to create quizzes with various question formats. These assessments are timed, and immediate feedback is provided to students. • A critical reflection assignment (20%): where students are asked to analyze and evaluate their experience on the specific topics of the course. In the context of such a project they will connect their personal feelings, compare their previous empirical knowledge on sports training issues, and relate their experience with the theoretical knowledge they acquired. These types of work aim to be personal and authentic, focusing on the development of the student's self-consciousness and analytical thinking. Sometimes these tasks also include suggestions for future actions or improvements based on their experience. • Class discussions: Students participate in class discussions to assess their theoretical knowledge. Active participation is encouraged to hone their critical thinking skills, asking open-ended questions and facilitating their dialogue. <p>Final exam (50%): Comprehensive final exam to assess students' overall theoretical knowledge. These assessments cover a wider range of topics and learning outcomes from across the curriculum, to assess students' understanding and integration of knowledge in various areas.</p>
Language	Greek / English