

Course	Training Theory and Methodology
Level and Course of Study	Master's degree in Science and Technique in Sport (LM-68)
Italian Academic Field (SSD)	MEDF-01/B - Sport Sciences and Methodology
Course Year	1
Academic Year	2024-2025
Credits	12
Professors	Davide Curzi (Head Professor) NICKNAME: Davide Curzi EMAIL: davide.curzi@unicusano.it Fabio Olevano NICKNAME: Ambra Scolaro EMAIL: ambra.scolaro@unicusano.it Lorenzo Marcelli NICKNAME: Lorenzo Marcelli EMAIL: lorenzo.marcelli@unicusano.it Fioretta Silvestri NICKNAME: Fioretta Silvestri EMAIL: fioretta.silvestri@unicusano.it
Course Presentation	This course provides a comprehensive overview of the theoretical principles and practical methodologies of sports training. Through the study of real-world case studies, students will acquire the skills necessary to design and implement effective training programs for various sports.
Objectives	 Knowledge and understanding: Students will acquire a comprehensive understanding of the fundamental principles, methodologies, and theories of sports training. Skills in planning and programming: Students will develop the ability to plan, program, and periodize training programs effectively. Physiological knowledge: Students will gain knowledge of the physiological effects of exercise on the human body. Classification of sports: Students will understand the different classifications of sports and their implications for training. Technical-tactical knowledge: Students will acquire knowledge of motor patterns, conditioning factors, and evaluation methods in sports. Match analysis: Students will understand the key principles of match analysis and its application in sports. Training methodologies: Students will be able to apply training methodologies to individual, team, and multidisciplinary sports. Master athletes: Students will gain knowledge of the specific needs and training considerations for master athletes.
Prerequisites	Understanding of the fundamental concepts of physical preparation (PP). In particular: the role of programming, planning, and periodization in PP; PP and the development of strength, speed, endurance, and conditioning.
Expected Learning Outcomes	In summary, the expected learning outcomes are: KNOWLEDGE AND UNDERSTANDING: Students will acquire a comprehensive understanding of the fundamental principles of training and their physiological implications.

	APPLYING KNOWLEDGE AND UNDERSTANDING: Students will be able to design, implement, and evaluate targeted training programs to achieve specific goals for various sports and populations.
	MAKING JUDGEMENTS: Students will develop the ability to assess individual needs and design appropriate training plans to meet predetermined objectives.
	COMMUNICATION SKILLS: Students will acquire the specialized language of coaching and the essential communication skills to effectively interact with athletes.
	LEARNING SKILLS: Students will be able to independently apply their acquired knowledge to program and execute training plans that align with specific goals.
Course Organization	The course in Training Theory and Methodology is worth 12 ECTS credits, corresponding to at least 300 hours of student workload. It is delivered through pre-recorded audio-visual lectures, slides, handouts, in-person activities, and other supporting learning materials. All study materials are available on the platform and provide everything needed to prepare for the exam. Additionally, for a more in-depth preparation, students are advised to consult the textbooks listed at the end of each module in the handout.
	The workload includes at least the following components:
	 252 hours of self-study of pre-recorded lectures (7 hours of study for every 1 hour of recorded lecture, including 2 hours for listening to the lecture and 5 hours for self-directed learning to assimilate the content, for a total of 36 hours of recorded lectures);
	• 48 hours of interactive teaching on the forum (virtual classroom) dedicated to completing exercises and activities proposed by the lecturers, known as e-tivities.
	Finally, the teaching makes use of synchronous tools such as web-conference consultations and platform chat to enable real- time interaction with enrolled students. Students are advised to distribute their study of the subject evenly over a period of 12 weeks, dedicating at least 20 hours per week to study.
Course Contents	 Module I – The principles of training - (Prof. Curzi) Module II – Coaching technique (part 1) - (Prof. Curzi) Module III – Coaching technique (part 2) - (Prof. Curzi) Module IV – Coaching tactics - (Prof. Curzi) Module V – Hypoxic training - (Prof. Curzi) Module VI – Training in special conditions - (Prof. Curzi) Module VII – Sports Performance Analysis - (Prof. Curzi) Module VIII – Methodology of training in individual sports - (Prof. Scolaro) Module IX – Master athletes - (Prof. Scolaro) Module X – Methodology of training in team sports - (Prof. Marcelli) Module XI – Multi-sport training (part 1) - (Prof. Silvestri) Module XII – Multi-sport training (part 2) - (Prof. Silvestri)
Study Resources	 Pre-recorded video lectures: the course is delivered through pre-recorded video lectures by the course instructor. Supporting materials: additional learning materials such as handouts and slides will be provided. Recommended textbooks for further reading: a brief excerpt of the recommended texts is provided below, but for a complete list of texts and scientific articles, please refer to the bibliography at the end of each module. Urso A. Le basi dell'allenamento sportivo. Calzetti & Mariucci Editori, 2014. Weineck J. L'allenamento ottimale. Calzetti & Mariucci Editori, 2009. Mantovani C. Insegnare per allenare. Edizioni SDS, 2017. La torre A. Allenare per vincere. Edizioni SDS, 2018. Platonov V. L'organizzazione dell'allenamento e dell'attività di gara. Calzetti Mariucci editori, 2004. Alfonso J. et al. A systematic review of research on tactical periodization: absence of empirical data, burden of proof, and benefit of doubt. Human Movement, 2020. Bompa T, Buzzichelli CA. Periodizzazione dell'allenamento sportivo. Calzetti & Mariucci Editori, 20017. McGarry et al. Routledge Handbook of Sports Performance Analysis (Routledge International Handbooks). Taylor and Francis, 2013. Carling et al. Analisi della prestazione negli sport di squadra. Calzetti-Mariucci, 2018. Di Mulo F. Mezzi e metodi di allenamento dello sprinter di elevato livello. Centro Studi e Ricerche FIDAL, 2010 Vittori C. L'allenamento delle specialità di corsa veloce per gli atleti d'elite. Centro Studi e Ricerche FIDAL, 2004 Francesconi K., Gandini G. Muoversi per non subire il tempo. Edi Ermes, 2017. D'Amen G & Benelli P. Triathlon. Dal modello della prestazione all'allenamento. Calzetti Mariucci; 2002.

Evaluation System and Criteria	The assessment will consist of a written examination or an oral examination (which may be held at the Rome headquarters), aimed at assessing the students' ability to analyze, use appropriate language, and apply the acquired concepts.
	The written examination will include 3 multiple-choice questions and 3 open-ended questions (theoretical and/or practical) covering the entire course program. The 3 multiple-choice questions will be worth 2 points each for the correct answer, while the 3 open-ended questions will be assigned a maximum score of 8 points based on the assessment of the expected learning outcomes by the lecturers. Alternatively, there may be 30 multiple-choice questions, each worth 1 point.
	The oral examination consists of an interview designed to assess the student's level of preparation. This typically involves 3 broad questions (theoretical and/or practical) covering the entire course program, each question being equally weighted with a maximum score of 10.
	In both examination formats, particular attention will be paid to the student's ability to rephrase, apply, and present the material from the platform using appropriate language.
	The final assessment will also take into account active participation in the forums (virtual classrooms) and the correct completion of the proposed e-tivities.
	Students who hold an official recognition of prior learning credits for the Training Theory and Methodology course from the Secretariat of the Motor Sciences Area must contact the course tutor. After consulting with the relevant lecturer(s), the tutor will inform the student about the modules they need to complete to pass the final exam.
Bachelor's thesis	The final project will be assigned based on an interview with the professor during which the student will express their specific interests in a particular topic. There are no restrictions on the topics that can be chosen for the thesis, and no minimum GPA is required to apply.