

ID	3269
Curricular Unit	Theory and Methodology of Sports Training
Regent	Francisco José Bessone Ferreira Alves
Learning Outcomes	<ol style="list-style-type: none"> 1. To identify the general principles of sports training planning, guidance and evaluation. 2. To recognize age and sport experience dependent requirements and limits of performance development. 3. To know how to apply basic procedures for physical conditioning gain and maintenance. 4. To explain and analyze integrative models of sports technique and tactics enhancement within the global training process. 5. To explain and analyze different periodization models and their adequacy to the training process of the various types of sports and the variety of practitioner characteristics.
Syllabus	<ol style="list-style-type: none"> 1. Principles of sports training. Work load characterization and quantification. General, special and specific levels of preparation. The delayed effect of training loads. 2. Physical conditioning: Training methods and evaluation procedures for: a) aerobic and anaerobic endurance; b) muscular strength and power; c) speed and d) flexibility. 3. Technical and tactical training: models and procedures; integrated models supported by the interaction between biomotor capabilities, cognitive and perceptive-motor skills. 4. Planning and periodization: intermediate structures (session, microcycle, mesocycle, macrocycle), load organization and levels of preparation. Training and performance modelling. Temporal constraints and structure of competitions time schedule (calendar). 5. Training the young athlete: performance and trainability during childhood and adolescence; initial sports education; periodization. Compatibility between striving for competition success and pedagogical issues.
Evaluation	<p>The theoretical lectures cover all the main themes of the program, explaining the broad picture and the fundamentals of each one. The TP lessons may have a practical focus, occurring in a sports facility (athletics track, tennis court, sport games hall, resistance training room), where the student is supposed to execute and practice himself the different tasks selected, or a discussion and analysis focus, complementary to the theoretical lectures, starting from real-life examples presented by the teacher. Students evaluation is done by continuous assessment, as long as the student is present in, at least, 2/3 of the TP classes: task worksheets for the practical lessons; 2 written exams (eliminating contents) and final oral examination regarding the whole program or by final assessment, which consists of a written exam and oral examination, both regarding the whole program.</p>

Bibliography

- Baechle TR, Earle RW (eds.) (2008). Essentials of strength training and conditioning. Champaign: Human Kinetics (3rd edition).
- Billat, V (2003). Physiologie et méthodologie de l'entraînement - de la théorie à la pratique (2^a ed.). Bruxelles: De Boeck & Larcier.
- Bompa, T.O. (2009). Periodization: Theory and methodology of training. 5th Edition. Champaign: Human Kinetics.
- Bompa, T.O. (1995). From childhood to champion athlete. Toronto: Veritas Publishing Inc.
- Castelo J, Barreto H, Alves F, Santos PM, Carvalho J, Vieira J (2000). Metodologia do treino desportivo (3^a Edição). Lisboa: Edições FMH-UTL.
- Matveyev, L. (1986). Fundamentos do treino desportivo. Lisboa: Horizonte.
- Verkhoshansky, Y. (2002). Teoría y metodología del entrenamiento deportivo. Barcelona: Ed. Paidotribo.
- Zatsiorsky VM, Kraemer WJ (2006). Science and Practice of Strength Training (2nd Edition). Champaign: Human Kinetics