

<b>ID</b>	2112
<b>Curricular Unit</b>	Theory and Methodology of Sports Training
<b>Regent</b>	Francisco José Bessone Ferreira Alves
<b>Learning Outcomes</b>	<ol style="list-style-type: none"> <li>1. To identify the general principles of sports training planning, guidance and evaluation.</li> <li>2. To recognize age and sport experience dependent requirements and limits of performance development.</li> <li>3. To know how to apply basic procedures for physical conditioning gain and maintenance.</li> <li>4. To explain and analyze integrative models of sports technique and tactics enhancement within the global training process.</li> <li>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.</li> </ol>
<b>Syllabus</b>	<ol style="list-style-type: none"> <li>1. Principles of sports training. Work load characterization and quantification. General, special and specific levels of preparation. The delayed effect of training loads.</li> <li>2. Physical conditioning: Training methods and evaluation procedures for a) aerobic and anaerobic endurance; b) muscular strength and power; c) speed and d) flexibility.</li> <li>3. Technical and tactical training: models and procedures; integrated models supported by the interaction between biomotor capabilities, cognitive and perceptive-motor skills.</li> <li>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).</li> <li>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.</li> </ol>
<b>Evaluation</b>	<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 students 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<sup>a</sup> ed.). Bruxelles: De Boeck & Larcier.
- Bompa TO (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<sup>a</sup> 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