



ID

3675

Curricular Unit Theory and Methodology of Sports Training

### Regent

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- 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.

## Learning Outcomes

- 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.
- 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.

# Syllabus

- 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**

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.

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, 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 (3ª 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

## Bibliography