

 <p><b>IPG</b> Politécnico da Guarda Escola Superior de Educação, Comunicação e Desporto</p>	<b>GUIA DE FUNCIONAMENTO DA UNIDADE CURRICULAR</b>	<b>MODELO PED.007.02</b>
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<i>Course</i>	<b>Master Degree in Sports Sciences</b>		<i>Academic year</i>	2021/2022	
<i>Subject</i>	<b>Children and Youth Athletes Training</b>		<b>ECTS</b>	5	
<i>Type of course</i>	<b>Mandatory</b>				
<i>Year</i>	<b>1º</b>	<i>Semester</i>	<b>2º</b>	<i>Student Workload:</i>	
<i>Professor(s)</i>	<b>Natalina Roque Casanova/Faber Martins</b>		<i>Total</i>	135	<i>Contact</i> 30
<i>Area Coordinator</i>	<b>Teresa de Jesus Costa e Fonseca</b>				

## Planned

### 1. LEARNING OBJECTIVES

Develop skills that enable the improvement of analytical skills, diagnosis and prescription motor behaviors, based on the children practice the principles applied and young athletes. In this context, it objectifies It will be a better understanding, interpretation, implementation and evaluation of the guiding principles inherent to the basic training concepts, improve training and transition training as a continuous and logical process. In this context, this UC intends to acquire the following skills: i) Mastering the framework of the basic concepts of sports training and their respective stages of periodization; ii) Identify and apply the laws of biological adaptation and structural principles of sports training; iii) analyze the growth, maturity, understanding of procurement and development of motor skills, and the perceptual-motor development in children and young athletes; iv) To understand the influence of training loads in different traumatic responses; v) Apply the fundamental assumptions of the development of motor skills in children and youth; vi) Understand the concepts of detection and selection of talent and their performance intervention factors

### 2. PROGRAMME

#### 2.1 The sports preparation in children in young athletes

- The pedagogical dimension of sport participation of young people
- Training young model
- Development; Growth; Maturation; Learning; Adaptation
- Development of skills: basic, transition driven, specific motor, motor specialist
- Principles of sports preparation of young people

#### 2.2 Motor skills at different stages

- The development of motor skills
- Key concepts: Physical Capacity, Physical Fitness; Physical activity
- Conditional skills (Strength, Endurance, Speed and Flexibility) and Coordinative skills

#### 2.3 Specialization Early

- Early training concept; Description; Consequences
- The benefits of a proper sports preparation in young
- The other side of sports preparation of young

#### **2.4 The training of periodization in children and adolescents**

- The concept of periodization
- The sports way
- Fundamental Principles of periodization of the Youth Training
- Periodization models applied to children and youth
- Step of preliminary preparation
  - Step initial specialization
  - Step-depth expertise

#### **2.5 Concepts detection and selection of talent**

- Key factors inherent detection
- Basic principles for talent detection
- Selection process and talent development
- Reviews of sports skills and performance

### **3.COHERENCE BETWEEN THE PROGRAMME AND OBJECTIVES**

The contents converge with Course objectives in order to enable students to develop autonomously and supervised way, the capabilities of theoretical scientific and practical approach, acquiring the following skills: understanding the training process in respect of its aspects general and the guiding principles of training planning for children and young athletes, knowledge and application of the laws of biological adaptation and structural principles of sports training, as well as the various periodization of intervening factors training and their relationship in yield and performance of children and young people; understanding the importance of training of coordinative, conditional and motor skills; knowledge of the theories and methodologies of applied sports training children and young people; identification models and principles talent detection. Additionally, this content aims to significantly contribute to the quality of the practical activities, consolidating the skills grounded in knowing how to be, knowing how to be and know-how.

### **4.MAIN BIBLIOGRAPHY**

Balyi, I. (2002) Long-term athlete development: The British Columbian Approach. Sport Med BC. 18, 1

- Bradshaw, E.J., Le Rossignol, P. (2004). Anthropometric and biomechanical field measures of floor and vault ability in 8 to 14 year old talent-selected gymnasts. *Sports Biomech*, 3(2), 249—62
- Bompa, T. (2005). *Entrenamiento para jóvenes deportistas*. Editorial Hispano-Europea.
- Costill, D., Wilmore, J., Kenney, W. (2012). *Physiology of sport and exercise*. 5<sup>th</sup> ed. Human Kinetics.
- Elferink-Gemser, M., Visscher, C., Lemmink, K., et al. T. (2004). Relation between multidimensional performance characteristics and level of performance in talented youth field hockey players. *J Sports Sci*, 22 (11-12), 1053-63
- Gudrun, F. (2003). *Esfuerzo físico y entrenamiento en niños e jóvenes*. Editorial Paidotribo.
- Faber, I., Oosterveld F., & Nijhuis-Van der Sanden, R. (2004). A first step to an evidence-based talent identification program in the Netherlands; a research proposal
- Falk B1, Lidor R, Lander Y, Lang B. (2004). Talent identification and early development of elite water-polo players: a 2-year follow-up study. *J Sports Sci*. 22(4):347-55.
- Gallahue, D.L., Donnelly, FC. (2003). *Developmental physical education for all children* (4th ed.). Champaign, Ill.: Human Kinetics
- Hoare, D. (1998). Talent Search: A review and update. *Sports Coach Spring*, 32-33
- Rowland, T.W. (2008). *Childrens exercise physiology*. 2<sup>nd</sup>. Ed. Human Kinetics
- Tomkinson GR, Olds TS, Gulbin J. (2003). Secular trends in physical performance of Australian children. Evidence from the Talent Search program. *J Sports Med Phys Fitness*, 43(1), 90-8
- Vaeyens R., Lenoir, M., Williams, A.M., Philippaerts, R.M. (2008). Talent identification and development programmes in sport: current models and future directions. *Sports Med*.38(9):703-14.

### **5.TEACHING METHODOLOGIES (INCLUDING EVALUATION)**

The lectures are realized primarily through lectures and dialogue; practical classes are based on the work of guidance and analysis and observation of problem issues inserted in the children and young athletes training; the hours of service in individual format or in groups, and individual student work, are mostly reserved for discussion and guidance of practical work components set for the final evaluation. The evaluation of continuous character, is the result of participation in school activities; realization and presentation original works under the contents taught (reading and analysis of scientific papers) and evaluation through written test, with their weighting (60%).

### **6.COHERENCE BETWEEN TEACHING METHODOLOGIES AND OBJECTIVES**

The teaching methodologies aim at satisfying the questions and the skills to be developed considering the course program. The lectures permit compliance with the transmission of content

that allow students to know, understand and master the more general aspects, the guiding principles and fundamental factors of the training process applied to children and youth. Search lessons the, discussion, descriptive synthesis and the development of research provide students with the analysis, interpretation, development and reflection on the theoretical knowledge acquired during the semester. Evaluation methodologies accompany the teaching / learning in relation to the type of competence and the objectives of the course. The knowledge order of skills and understanding are mainly evaluated by performing individual written evaluations and participation of the expository sessions and interpretative analysis of scientific articles.

## **7. ATTENDANCE**

According to the rules of the School of Education, Communication and Sport

## **8. CONTACTS AND OFFICE HOURS**

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