

<b>ID</b>	3040
<b>Curricular Unit</b>	Training the Young Athlete
<b>Regent</b>	Anna Georgievna Volossovitch
<b>Learning Outcomes</b>	<p>The central aim of the course is to provide the students with theoretical knowledge required to organize the training process in youth sport. The specific aims are:</p> <ol style="list-style-type: none"> <li>1. To provide students with the knowledge regarding the age particularities of young practitioners at different stages of their development and the influence of maturation on sports performance.</li> <li>2. To develop the skills related to organizing and leading the training process, based on the appropriate progression in practical contents according to the young athletes evolution.</li> <li>3. To ensure the articulation of knowledge and skills, which have been acquired by students in other curses, with the specific aims of training in youth sports.</li> </ol>
<b>Syllabus</b>	<ol style="list-style-type: none"> <li>1. Aims of the youth sports. Benefits and risks of sports practice in the pediatric age. Stages of the human development. Development of the bone, muscular and cardiovascular systems. Motor development. Maturation. Effects of the sports training on the growth and maturation. The importance of biological age assessment.</li> <li>2. Motor performance and maturation. Muscle development in the pediatric age. Influence of maturation on aerobic and anaerobic performance. Maturation and competitive success.</li> <li>3. Concept of sports and motor readiness. Trainability and maturation. Sensitive periods for the development of the different factors that influence sport performance. Retention of functional and motor adaptations.</li> <li>4. Agility development during the childhood and adolescence.</li> <li>5. Youth speed training.</li> <li>6. Youth strength training.</li> <li>7. Youth endurance training.</li> <li>8. Long-Term Athlete Development in different sports. Early specialization and its consequences.</li> <li>9. Talent in sport. Individual development. Concept of the sport selection. "Pros" and "cons" of the sports selection. Expertise development and stages of sports selection.</li> </ol>

Students may choose one of the following alternative evaluation models:

**Continuous evaluation** comprises:

- 1) attendance of the student, at least 2/3 of the classes actually held;
- 2) written test (minimum grade of 9,5 values, 70% of the final grade) and
- 3) bibliographic review of 4-5 scientific articles focused on the themes regarding the youth sports training (minimum grade of 9,5 values, 30% of the final grade).

## Evaluation

**Final evaluation.** For students, who did not choose the continuous evaluation or who failed at one of the components of this evaluation, the final evaluation consists of:

- 1) written test (with a minimum grade of 9,5 values, 70% of the final grade);
- 2) bibliographic review of 4-5 scientific articles focusing on the themes regarding the youth sport training (minimum grade of 9,5 values, 30% of the final grade).

## Bibliography

Balyi, I., Cardinal, C., Higgs, C., Norris, S. and Way, R. (2006). Long-Term Athlete Development - Canadian Sport for Life (Resource Paper). Vancouver: Canadian Sport Centres.

Bompa, T. (2000). Total Training for Young Champions. Champaign: Human Kinetics.

Coelho e Silva, M., Figueiredo, A., Elferink-Gemser, M., Malina, R. (2009). Youth Sports. Participation, Trainability and Readiness. Coimbra: Imprensa da Universidade de Coimbra.

Faigenbaum, A and Westcott, W. (2009). Youth Strength Training for Health, Fitness and Sport. Champaign, IL: Human Kinetics.

Filin, V. (1996). Desporto Juvenil: teoria e metodologia. Londrina: CID.

Hebestreit, H. & Bar-Or, O. (Eds.) (2008). The Young Athlete. Encyclopaedia of Sports Medicine, vol XIII. Oxford: Blackwell Publishing.

Lopes, V., Maia, J., Mota, J. (2000). Aptidões e habilidades motoras. Uma visão desenvolvimentista. Lisboa: Livros Horizonte.

Rowland, T. (2004). Children's exercise physiology. Champaign: Human Kinetics.

Sobral, F. (1988). O adolescente atleta. Lisboa: Horizonte.

Sobral, F. (1994). Desporto infanto-juvenil. Prontidão e talento. Lisboa: Horizonte.

Stafford, I. (2005). Coaching for long-term athlete development: To improve participation and performance in sport. Leeds: Sports Coach UK.

Wilmore, J., Costill, D., Kenney, W. (2008). Physiology of sport and exercise. Champaign: Human Kinetics.