

<b>ID</b>	3041
<b>Curricular Unit</b>	Training and Evaluation of Physical Qualities
<b>Regent</b>	Pedro Vítor Mil-Homens Ferreira Santos
<b>Learning Outcomes</b>	<p>Training and Evaluation of Physical Qualities is a discipline that can be classified as intermediate synthesis. Starting from the basic physiological nature of knowledge that students have acquired during the degree, at the end of the course, successful students should:</p> <ul style="list-style-type: none"> <li>a) Know in depth the fundamentals and methodologies for the development of physical performance;</li> <li>b) Know designing and implementing evaluation and diagnosis of the physical qualities;</li> <li>c) Know how to interpret and draw methodological conclusions from their results;</li> <li>d) Understand specificities associated to the methods of training and periodization of training.</li> </ul>
<b>Syllabus</b>	<p>Theoretical Course</p> <ul style="list-style-type: none"> <li>1. The development of aerobic and anaerobic performance <ul style="list-style-type: none"> <li>1.1. Metabolic characterization of the competitive situation and building endurance programs</li> </ul> </li> <li>Models of analysis and typology of sports</li> <li>Presentation and discussion of examples related to the most relevant sports</li> <li>1.2. The general preparation of resistance - basic resistance on cyclic endurance sports, in speed and power sports and acyclic sports</li> <li>The aerobic dominant of basic endurance: control and prescription</li> <li>1.3. Specific resistance: means and methods of training <ul style="list-style-type: none"> <li>In the disciplines of long distance and middle distance</li> <li>In the disciplines of power and speed</li> <li>In combat sports</li> <li>In team sports</li> </ul> </li> <li>1.4. Assessment and prescription of resistance training</li> <li>Aerobic Capacity</li> <li>Use of the different parameters characterizing the metabolic transition thresholds for individual prescribing training</li> </ul>

### Final Exam

Written test on all subjects taught in the theoretical and practical courses. Students with a grade equal to or greater than 9.5 will have access to a compulsory oral examination.

### Continuous Assessment

Students will be exempt from final exam if they cumulatively meet the following requirements:

- Obtain a grade equal to or higher than 9.5 in each of the two frequencies;
- Obtain favorable information on three of the four reports;
- Register two thirds of attendance in practical classes.

The oral test will always be compulsory for all students. Reports are individual. Ratings will be conducted at three levels: negative, positive and positive with 1 add value to the final average.

## Evaluation

## Bibliography

Alves, F. (1996). Estudo sobre a resistência. In, Castelo, J., Barreto, H., Alves F., Santos, P.M., Carvalho, J., & Vieira, J. Metodologia do treino desportivo. pp. 323-351, Lisboa: Edições FMH-UTL.

Baechle, T.M. e Earle, R.W. (2000). Essentials of Strength Training and Conditioning. 2<sup>a</sup> ed., NSCA, Human Kinetics.

Billat, V. (2003). Physiologie et methodologie de l'entraînement : de la théorie à la pratique. Bruxelles: De Boeck & Larcier.

Bompa, T.O. (2005). Treinando atletas de desporto colectivo (trad.). S. Paulo: Phorte Editora.

Bompa, T.O. (1999). Periodization: Theory and Methodology of Training. 4<sup>a</sup> ed. Champaign, Human Kinetics.

Gore, C.J. (Eds.) (2000). Physiological Test for Elite Athletes. Australian Institute of Sport.

MacDougall, J.D., Wenger, H.A. and Green, H.J. (1991). Physiological Testing of the High-Performance Athlete. 2<sup>a</sup> ed., Champaign: Human Kinetics.