

<b>ID</b>	3221
<b>Curricular Unit</b>	Exercise Prescription
<b>Regent</b>	Luís Bettencourt Sardinha
<b>Learning Outcomes</b>	This course analyzes the theoretical and practical background related with exercise prescription and has the following objectives: I) to describe, analyze and quantify fitness testing and reporting; II) to describe, analyze, quantify and report tailored exercise dose.
<b>Syllabus</b>	<ol style="list-style-type: none"> <li>1. The dose-response relationship. Concepts of efficacy, efficiency, power, variability, and slope in the dose-response relationship.</li> <li>2. Empirical evidence that relates the exercise dose adaptation in function of activity type, energy expenditure, physical activity vs physical fitness, absolute values vs relative values, intermittent physical activity, individual differences, age, sex, and health status.</li> <li>3. Individual prescription for apparently healthy subjects and subjects with low, moderate and high cardiovascular risk.</li> <li>4. Recommended intensity, duration, frequency and type of exercise considering initial fitness testing and health status.</li> <li>5. Critical analysis of the ACSM equations, their evolution, development and validity. Advantages and disadvantages of the sliding method for exercise prescription.</li> <li>6. Pharmacological conditions that need exercise prescription adaptations.</li> </ol>
<b>Evaluation</b>	During the lecture classes, an expository method is used through slide presentation with the possibility of a final discussion about the specific topic. In the lecture-practical classes it is adopted a work group task methodology and the resolution of problems. The summative assessment model requires the completion of one test about the lecture and lecture/practical classes. The final assessment model consists of a written exam about the issues discussed during the lecture and lecture/practical classes, performed in the end of the semester. The student is approved and exempt from an oral exam if a minimum score of 12.0 (score 1 to 20) is obtained in the final exam. The student is not approved if the final exam is lower than 10 (score 1 to 20).
<b>Bibliography</b>	<p>ACSM Guidelines for Exercise Testing and Prescription, 7th Edition, Lippincott Williams and Wilkins, 2005.</p> <p>Teixeira, PJ, Sardinha, L.B. &amp; Themudo Barata, JL. Nutrição, Exercício e saúde. Lisboa: Lidel-edições técnicas, 2008.</p> <p>Baptista, F &amp; Sardinha, LB (2006). Cálculos Metabólicos. Cruz-Quebrada: Faculdade de Motricidade Humana.</p>