

<b>ID</b>	3500
<b>Curricular Unit</b>	Research Methods on Sport Sciences II
<b>Regent</b>	Pedro Vítor Mil-Homens Ferreira Santos
<b>Learning Outcomes</b>	<p>Practical experience in research techniques related with Neuromuscular Function and Notational Analysis</p> <p>Basic procedures and interpretation of the results</p>
<b>Syllabus</b>	<p>1. Neuromuscular Function</p> <p>Isometric force time curve measurements</p> <p>Dynamic measurement of muscle strength</p> <p>Isokinetic measurements</p> <p>Evaluation of force production in Stretch-Shortening Cycle movements</p> <p>Representation and interpretation of force-time, force-velocity and force-power curves</p> <p>2. Notational Analysis</p> <p>Basics on Notational Analysis</p> <p>Observation systems</p> <p>Data reliability and validity</p> <p>Software: Longomatch, Match Vision Globally and Positioning Sport - SPI PRO tracking system (GPS)</p>
<b>Evaluation</b>	<p>The teaching methodology in this unit is strongly "hands-on" (on the lab). For each topic of the program, the students have to collect and process data, for posterior analysis. The evaluation consists in a written report based on the laboratory work.</p>
<b>Bibliography</b>	<p>MacDougall, J. D., Wenger, H. A., Green, H. J. (Eds.). Physiological Testing of the High-Performance Athlete (2ª edição). Champaign. Il: Human Kinetics, 1991.</p> <p>Hughes, M., Franks, I. (2008). The Essentials of Performance Analysis: An Introduction. London: Routledge &amp; Francis Group.</p> <p>Procedures Manual for the topic Neuromuscular Evaluation</p>