

ID	701
Curricular Unit	Planning and Project Management
Regent	Carlos Jorge Pinheiro Colaço
Learning Outcomes	<ol style="list-style-type: none"> 1. Macroergonomics Knowledge of the underlying theoretical concepts. 2. Application domain methods of analysis macroergonomics. 3. Capacity cost-benefit of an Ergonomic Intervention.
Syllabus	<ol style="list-style-type: none"> 1 - Macroergonomics. 2 - Determining the cost-effectiveness of ergonomic intervention. 3 - Structural Dimension of Work System. 4 - Project Management Methodologies in Ergonomics. 5 - Analysis and Design of Production Processes. 6 - Analysis of Results / Benefits of Ergonomic Intervention. 7 - Examples of application of the Cost-Benefit Analysis of Ergonomic Intervention in the Activity Sectors.
Evaluation	<p>Continuous assessment :</p> <p>Theoretical-component - perform a writing frequency. The frequency must have a minimum grade of 9.5.</p> <p>-Practical component - perform a job, the minimum rating is 9.5. The note of this component is 30% of the final mark of the course.</p> <p>Final evaluation :</p> <ul style="list-style-type: none"> • Conducting an examination consisting of a written, practical and oral test. To access the oral exam is required to obtain the written evidence and practice a minimum grade of 9.5 values.

Bibliography	<p>D. Beevis and IM Slade, Ergonomics-costs and benefits, <i>Applied Ergonomics</i>. 34 (2005) (5), pp. 413-418.</p>
	<p>Hendrick, HW Humanizing re-engineering organizational effectiveness is true: the macroergonomic approach. In: <i>Proceedings of the Human Factors and Ergonomics Society 39th Annual Meeting</i>. (1995), p. 761-765.</p>
	<p>HW Hendrick, Good Ergonomics is Good Economics, <i>The Human Factors and Ergonomics Society</i>, Santa Monica, CA (1997).</p>
	<p>HW Hendrick and BM Kleiner, <i>Macroergonomics: an Introduction to Work System Design</i>, Human Factors and Ergonomics The Society, Santa Monica, CA (2001).</p>
	<p>HW Hendrick and BM Kleiner. <i>Macroergonomics-Theories, Methods, and Applications</i>. Mahmanh, NJ: Laurence Erlbaum Associates, Publishers (2002)</p>
	<p>BM Kleiner, Macroergonomics lessons learned from large scale change efforts industry, government, and academia. In: O. Brown and HW Hendrick, Editors, <i>Human Factors in Organizational Design and Management</i> , North-Holland, Amsterdam (1996), pp. 483-488.</p>