



ID	2002
ID	2983
Curricular Unit	Planning and Project Management
Regent	Carlos Jorge Pinheiro Colaço
Learning Outcomes	<ol> <li>Macroergonomics knowledge of the underlying theoretical concepts.</li> <li>Application domain methods of analysis macroergonomics.</li> <li>Cost-benefit capacity of an Ergonomic Intervention.</li> </ol>
Syllabus	<ol> <li>Macroergonomics.</li> <li>Determining the cost-effectiveness of ergonomic intervention.</li> <li>Structural Dimension of Work System.</li> <li>Project Management Methodologies in Ergonomics.</li> <li>Analysis and Design of Production Processes.</li> <li>Analysis of Results/Benefits of Ergonomic Intervention.</li> <li>Examples of application of the Cost-Benefits Analysis of Ergonomic Intervention in the Activity Sectors.</li> </ol>
Evaluation	Continuous assessment: Theoretical-component – perform a written test. The test has a minimum grade of 9.5. Practical component – perform a written work, with a minimum rating of 9.5. The note of this component is 30% of the final mark of the course. Final evaluation: Conducting an examination consisting of a written, practical and oral test. To access the oral exam the student is required to obtain the written evidence and practice a minimum grade of 9.5 values.
Bibliography	D. Beevis and IM Slade, Ergonomics-costs and benefits, Applied Ergonomics. 34 (2005) (5), pp. 413-418.  Hendrick, HW Humanizing re-engineering organizational effectiveness is true: the macroergonomic approach. In: Proceedings of the Human Factors and Ergonomics Society 39th Annual Meeting. (1995), p. 761-765.  HW Hendrick, Good Ergonomics is Good Economics, The Human Factors and Ergonomics Society, Santa Monica, CA (1997).  HW Hendrick and BM Kleiner, Macroergonomics: an Introduction to Work System Design, Human Factors and Ergonomics The Society, Santa Monica, CA (2001).  HW Hendrick and BM Kleiner. Macroergonomics-Theories, Methods, and Applications. Mahmanh, NJ: Laurence Erlbaum Associates, Publishers (2002) BM Kleiner, Macroergonomics lessons learned from large scale change efforts industry, government, and academia. In: O. Brown and HW Hendrick, Editors, Human Factors in Organizational Design and Management, North-Holland, Amsterdam (1996), pp. 483-488.