

ID	2849
Curricular Unit	Product Ergonomics
Regent	Francisco dos Santos Rebelo
Learning Outcomes	<p>Understand the ergonomist's contribution in a product development team.</p> <p>Identify the Ergonomics intervention in the design phases of a product.</p> <p>Dominate the methodologies used in product design and its usability evaluation.</p>
Syllabus	<p>Product Ergonomics - Concepts and perspectives.</p> <p>The Ergonomics intervention in the global process of a product's useful lifecycle.</p> <p>The Ergonomics intervention in each phase of the product design process (project practicability, preliminary studies, detailed development studies, realization and execution, evaluation).</p> <p>Methodologies applied in product development (brainstorming, discovery matrix, evaluation matrix) and in product usability evaluation (heuristics, questionnaires, interviews, observation).</p> <p>Product design and interdisciplinary - Value analysis.</p> <p>Case study.</p>
Evaluation	<p>Theoretical-practical lessons, with support from media projection provided to the students. Realization of worksheets in groups to apply the methods taught. Two evaluation options:</p> <p>Continuous evaluation - 50% practical component (worksheets) + 50% theoretical component (written exam) with a minimum of 9.5 values on each component.</p> <p>Final evaluation - Final exam (50%) + practical work (50%).</p>
Bibliography	<p>Ameli, M. (2001). Product development approach, International Encyclopedia of Ergonomics and Human Factors, Taylor & Francis, pp. 951-953.</p> <p>Buti, L. (2001). Ergonomic product design, International Encyclopedia of Ergonomics and Human Factors, Taylor & Francis, pp. 906-910.</p> <p>Cushman, W. H. and D. J. Rosenberg (1991). Human Factors in Product Design, Elsevier.</p> <p>Green, W. S. & P. W. Jordan (1999). Human Factors in Product Design, Taylor & Francis.</p> <p>Jordan, P. (2001). Creating pleasurable products, International Encyclopedia of Ergonomics and Human Factors, Taylor & Francis, pp. 1095-1097.</p> <p>Jordan, P. W. (1998). An introduction to usability, Taylor & Francis.</p> <p>Nielsen, J. (1993). Usability engineering, Academic Press, Inc.</p> <p>Norman, D. A. (1998). The design of everyday things, MIT Press.</p> <p>Stanton, N. (1998). Human Factors in Consumer Products, Taylor & Francis.</p>