



ID	2104
Curricular Unit	Product Ergonomics
Regent	Raquel João Henriques Soares dos Santos
Learning Outcomes	Understand the ergonomist contribution in a product development team. Identify the ergonomist intervention in the design phases of a product. Dominate the methodologies used in product design and its usability evaluation.
Syllabus	Product Ergonomics - Concepts and perspectives. The Ergonomics intervention in the global process of a product useful lifecycle. The Ergonomics intervention in each phase of product design process (project practicability, preliminary studies, detailed development studies, realization and execution, evaluation). Methodologies applied in product development (brainstorming, discovery matrix, evaluation matrix) and in product usability evaluation (heuristics, questionnaires, interviews, observation). Product design and interdisciplinary – Value analysis.
Evaluation	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: Continuous evaluation – 50% practical component (worksheets) + 50% theoretical component (written exam) with a minimum of 9.5 values on each component. Final evaluation – Final exam (50%) + practical work (50%).
Bibliography	 Ameli, M. (2001) Product development approach, International Encyclopedia of Ergonomics and Human Factors, Taylor & Francis, pp. 951-953. Buti, L. (2001) Ergonomic product design, International Encyclopedia of Ergonomics and Human Factors, Taylor & Francis, pp. 906-910. Cushman, W. H. and D. J. Rosenberg (1991). Human Factors in Product Design, Elsevier. Green, W. S. & P. W. Jordan (1999). Human Factors in Product Design, Taylor & Francis. Jordan, P. (2001) Creating pleasurable products, International Encyclopedia of Ergonomics and Human Factors, Taylor & Francis, pp. 1095-1097. Jordan, P. W. (1998). An introduction to usability, Taylor & Francis. Nielsen, J. (1993). Usability engineering, Academic Press, Inc. Norman, D. A. (1998). The design of everyday things, MIT Press. Stanton, N. (1998). Human Factors in Consumer Products, Taylor & Francis.