



ID

539

Curricular Unit Ergonomic Work Analysis

Regent

Teresa Margarida Crato Patrone de Abreu Cotrim

Learning Outcomes

A grasp of the methodological framework for the development of Ergonomic Intervention, based on Work Activity, Analysis and its interaction with technical and organizational factors and human factors. Grasp of analysing techniques of generic use in Ergonomic Work Analysis. Applying analysis techniques in practical situations.

Syllabus

- 1. Work Analysis as a pillar of Ergonomic Analysis and Intervention: Ergonomics work analysis evolution; Main features of ergonomic work analysis; notions of work site, real work and ergonomics intervention; Different models of work analysis and its implications in ergonomics analysis.
- 2. Methodologies in Work Analysis: Observational methods; Verbal methods.
- 3. General Methods for Ergonomic Work Analysis: Questionnaires; Interviews; Verbal Protocols; Critical Incidents Method; Checklists; Focus Groups; Other methods.
- 4. Methodology for Ergonomics Practice Analysis and Intervention: Developing the methodology; Main phases of ergonomics work analysis; Understanding the systems functioning; Selecting workplaces for analysis; Prediagnosis; Diagnosis; Ergonomic proposals for work improvements.
- 5. An integrative perspective of Ergonomics Work analysis: Building up knowledge about work and field examples.

Evaluation

The presentation of the theoretical content is supported by PowerPoint and based on the literature and articles provided to students. The practical part is based on exercises and case studies with the application of theoretical issues through the analysis of articles, the development of tools and their application, role-playing and video analysis. The two assessment models (continuous and final) encompass both aspects: theoretical and practical, with a weighting, respectively, 70 % and 30 % in the final classification. In the continuous assessment model a minimum of 2/3 of class attendance is required and 3 tests are performed. The minimum score accepted for each test is 9.5. It includes works of various kinds, such as information sheets, field work, and reviews of articles. The model for the final evaluation includes a written test with both theoretical and practical contents.

Amalberti e cols (1991), Modéles en Analyse du travail, Pierre Madraga Éditeur. Bardin, Laurence (1977), Análise de Conteúdo, Edições 70, Lisboa. Foddy, William (2002), Como perguntar, Teoria e prática da construção de perguntas em entrevistas e questionários, Celta Editora, Oeiras. Guérin, F., Laville, A., Daniellou, F., Duraffourg, J. e Kerguelen, A. (1997), Comprendre le Travail pour le Transformer, Anact, France. Kirvan, B. e Ainsworth, L. (1992), A Guide to Task Analysis, Taylor and Francis, **Bibliography** London. Langford e McDonagh (2003). Focus Groups. Taylor and Francis. Rosenfeld, P., Edwards, J. E. e Thomas, M. D. (1993) Improving Organizational Surveys, New Directions Methods and Applications, Sage Focus Edition, London. Stanton, N. e Young, M. (1999), A Guide to Methodology in Ergonomics, Taylor and Francis, London. Wilson e Corlett (1990), Evaluation of Human Work, Taylor and Francis, London.