

<b>ID</b>	3629
<b>Curricular Unit</b>	Systematics of Ergonomics
<b>Regent</b>	José Domingos de Jesus Carvalhais
<b>Learning Outcomes</b>	<p>1. Objectives: Development of Classificatory systems to describe human tasks and performance. Definition of classifications process and product and evaluation criteria. Taxonomic developments and use of data bases.</p> <p>2. Skills and knowledge - Dominates the conceptual basis of Ergonomics:</p> <ul style="list-style-type: none"> <li>- Know the objectives, methodology and conceptual basis of the classification of Human Performance and tasks in Ergonomics.</li> <li>- Know the characteristics of ergonomics as applied science and its place in the classification of sciences.</li> <li>- Know the Importance of a taxonomy of human performance and knows the main classification models in Ergonomics.</li> <li>- Develops classificatory systems for description of tasks and human activities and draws up a taxonomic project in Ergonomics.</li> </ul>
<b>Syllabus</b>	<p>I - INTRODUCTION</p> <ol style="list-style-type: none"> <li>1. Systematics as science of classification: objectives and fundamental concepts</li> <li>2. Importance of taxonomies in scientific development and implications in the area of human performance</li> <li>3. Theoretical model of classification in Ergonomics</li> </ol> <p>II - THEORETICAL KNOWLEDGE IN ERGONOMICS</p> <ol style="list-style-type: none"> <li>1. Ergonomics in the classification of sciences: Object, theory and method</li> <li>2. Conceptual basis for Human performance classification</li> <li>3. Classification methodology</li> <li>4. Taxonomic development in Related Areas</li> </ol> <p>III - MAN-SYSTEM INTERACTION</p> <p>A Taxonomic Project in Ergonomics:</p> <ol style="list-style-type: none"> <li>1. Man-System Interaction Variables</li> <li>2. Man-System Interaction Optimization</li> </ol> <p>IV - RESEARCH AND PRACTICE IN ERGONOMICS</p> <ol style="list-style-type: none"> <li>1. Ergonomics practice</li> <li>2. Research in Ergonomics</li> </ol>
<b>Evaluation</b>	<p>In the first part of the class theoretical aspects of the program are developed using PowerPoint presentations. In the second part we propose a set of problems through worksheets for discussion and resolution in work groups. Due to the theoretical and practical components of the course, there are two alternative assessment models. Model A: Continuous assessment, consisting of the presentation of practical reports and one written test and one oral exam. To succeed, students must have a grade greater or equal to 9.5 in the written test. Model B: Final exam, covering both theoretical and practical components and one oral exam. For both models, the theoretical component accounts for 60% to the final result and the practical component, for 40%.</p>

## **Bibliography**

- Amalberti, R. et al. (1991) "Modèles en Analyse du Travail" P. Mardaga Éditeur, Liège.
- Daniellou, F. (1996) "L'Ergonomie en Quête de ses Principes: Débats Epistémologiques", Octarès, Toulouse.
- Denis, M.; Sabah, G. (1993) "Modèles et Concepts pour la Science Cognitive", PUG, Grenoble
- Fleishman, E.; Quaintance, M. (1984) "Taxonomies of Human Performance", Academic Press, N. York.
- Franus, E.A. (1991) "Connective Networks in Ergonomics", Elsevier, Amsterdam.
- Fleishman, E. et al. (1982) "Human Performance and Productivity", Vol. I, II, III, LEA Publishers, N. York.
- Houde, Olivier et al. (1998) "Vocabulaire des Sciences Cognitives" PUF, Paris.
- Montmollin, M. (1995) "Vocabulaire de l'Ergonomie", Octarès, Toulouse.
- Wisner, A. (1997) "Anthropotechnologie: Vers un Monde Industriel Pluricentrique", Octarès, Toulouse.