

ID	3612
Curricular Unit	Introduction to Ergonomics
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Learning Outcomes	<p>The UC Introduction to Ergonomics aims to provide the student an overview of the role of ergonomics science in the actual socio-economic context as well as the understanding of the Ergonomics practice. Learning purposes are:</p> <ul style="list-style-type: none"> - To know the historical evolution of ergonomics and state of the art at the national and international settings; - To understand the needs and importance of ergonomics in the current socio-economic context; - To know framework of the ergonomist in labor systems; - To understand the basic stages of ergonomics practice.
Syllabus	<ol style="list-style-type: none"> 1. Concept of Ergonomics 2. Development of Ergonomics <ul style="list-style-type: none"> - Origin and evolution; - The main currents of Ergonomics 3. Approach to the concept of Ergonomics <ul style="list-style-type: none"> - Ergonomic Concepts various authors and agencies; - Ergonomics: Science Multi, Inter and Trans-disciplinary; - Key Features Ergonomics: Comfort, safety, health, efficiency and reliability 4. Approach to the concept of Work <ul style="list-style-type: none"> - Work concept; - Man's position in the work organization; - Perspective of ergonomics about work 5. System Man-Work / Work situation <ul style="list-style-type: none"> - Concept of system; - System components / work situation; - Types of relationships 6. Ergonomics practice <ul style="list-style-type: none"> - Ergonomic analysis: areas of ergonomic analysis- socio-technical system; Activity; activity results. - Ergonomics intervention: areas of ergonomics intervention; classification of ergonomics from the intervention perspective; subject, context and scale of the intervention; - Examples of application contexts of Ergonomics.

Evaluation

The UC includes two alternative models of evaluation: continuous and final. An ongoing evaluation provides for evaluation tests and one or two practical assignments (records, comments, reviews); The minimum grade admitted by test will be 9.5 values. An average of the two tests has a weight of 70% in the final classification. The minimum mark of the work classification (or the average of the work) is of 9,5 values and has a weight of 30% for a final of classification. This model requires a mandatory attendance in 4/5 of the classes actually taught. Alternatively students can choose the final evaluation that consists of a written examination, covering the whole subject. For an oral access (case by case decision) the student must obtain in the written and practical tests, the minimum grade of 9.5 values.

Bibliography

Cazamian, P. (1988) *Traité d'ergonomie*, Editions Octarés - Entreprises, Marseille.

Dan MacLeod (1995) *The ergonomics edge: improving safety, quality and productivity*, VNR, USA.

Guérin et al (2007). *Comprendre le travail pour le transformer*. Octares.Toulouse.

Karwowski, W. (2011) *International Encyclopedia of ergonomics and human factors*, Vol.1, Taylor & Francis.

Laville, A. (1990) *L'ergonomie*, Colecção Que sais-je?, PUF, Paris.

Montmollin, M. (1990) *L'ergonomie*, Editions la Découverte, Paris.

Noulin, M. (1992) *Ergonomie*, Techniplus, France.

Rabardel, P.; Carlin, N.; Chesnais, M.; Lang, N.; Joliff, G.; Pascal, M. (2001) *Ergonomie, concepts et methods*, Editions Octarés, 3^a ed., Toulouse.