

ID	2107
Curricular Unit	Human Factors and Performance
Regent	José Domingos de Jesus Carvalhais
Learning Outcomes	<p>FHD is aimed at understanding the fundamentals of human performance under different conditions and contexts of action, that is, to meet a set of issues that affect the performance and represent its factors of variability, which allow the knowledge on the application of methods and tools for action and research in ergonomics. Thus seeks the following specific knowledge and skills:</p> <ol style="list-style-type: none"> 1. Understand the fundamentals of human variability and diversity, particularly those related with older people and people with disabilities and special needs. 2. Understands the influence of temporal aspects in human performance at work: <ul style="list-style-type: none"> - Know the working time organization and its consequences for operators; - Understands the effects of the passage of time on individuals and on the systems. 3. Optimizes the interaction of people with special needs with their occupational context, defining the principles for its adaptation and design.
Syllabus	<p>Module A - Variability and Human Performance</p> <p>I - Introduction to the course: Concepts and Perspectives</p> <p>II - Human Variability: intra-individual and inter-individual</p> <p>III - Ergonomics and populations with special needs</p> <ol style="list-style-type: none"> 1. Concepts and Perspectives: Classification and characterization of the main types of disabilities 2. Principles for the design and adaptation of the occupational context. 3. Help systems <p>Module B - Time and work</p> <p>I - Temporal framework of human activity</p> <ol style="list-style-type: none"> 1. Work variables related to temporal factors 2. Evolution of the temporal framework of human activity <p>II - Temporal organization of work</p> <ol style="list-style-type: none"> 1. Durations, schedules and pace of work 2. Chain work 3. Night work and shift work <p>III - Time management in dynamic environments</p> <ol style="list-style-type: none"> 1. Dynamic environments 2. Human reliability 3. Time management <p>IV - The work on time</p> <ol style="list-style-type: none"> 1. Change in work 2. Aging and Work

Methods:

The methods expositive (using PowerPoint), demonstrative, participatory and interrogative are used by appealing to verbalization and reflection around the taught content; whenever possible, supported by case studies, promoting the work in groups.

Evaluation Models:

1. Continuous evaluation, which consists in performing and presenting two reports elaborate by work groups, with oral presentation and discussion and two written tests on the following themes: Human Variability and Time and Work.

For the final grade, the practical component accounts for 30% and the theoretical component for 70%.

2. Final exam: written test that encompasses both components a (theoretical and a theoretical-practical) involving all subjects taught.

Evaluation

Bibliography

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- Fisk & Rogers (1997), Handbook of Human Factors and the Older Adult; London: Academic Press, Inc.
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- Parent-Thirion, Agnès; Fernández Macías, Enrique; Hurley, John; Vermeylen, Greet (2007) "Fourth European Working Conditions Survey", European Foundation for the Improvement of Living and Working Conditions.
- Pestana, N.N. (2003), Trabalhadores Mais Velhos: Políticas Públicas e Práticas Empresariais, Cadernos de Emprego e relações de Trabalho, Direcção-Geral do Emprego e das Relações de Trabalho, Lisboa.
- Wedderburn, A. (editor) "Shiftwork and Health"; "BEST - Bulletin of European Studies on Time", European Foundation for the Improvement of Living and Working Conditions, n.º 1, 2000, 54 pág.
- World Health Organization (2002), Active Ageing: A Policy Framework, Geneva