

ID	2002
Curricular Unit	Design, Development and Evaluation of Multimedia Materials
Regent	Carlos Alberto Rosa Ferreira
Learning Outcomes	<ol style="list-style-type: none"> 1. Know and differentiate the concepts of ergonomics, usability and accessibility of information systems. 2. Understand and explain the conceptual framework for the development of a user-centric multimedia system. 3. Designing and implementing the usability heuristics to evaluate multimedia systems.
Syllabus	<p>Introduction to ergonomics usability and accessibility of information systems:</p> <ul style="list-style-type: none"> • The concepts of ergonomics, usability and accessibility in information systems. • Integration of the concepts of accessibility and usability in organizations • areas of research in information systems. • Strategies for designing interfaces. <p>User-Centered Design:</p> <ul style="list-style-type: none"> • The principles of ISO / DIS 14915-1. • Heuristic usability of information systems (methodology, advantages and disadvantages) • Examples of user-centric multimedia system developed at the Laboratory of Ergonomics of the FMH-UL. <p>Evaluation of a Multimedia System Based on Heuristics:</p> <ul style="list-style-type: none"> • Development and application of heuristics to evaluate usability of a multimedia system. Presentation of the results of developing an information system based on usability heuristics.
Evaluation	Development and defense of a practical work.

Bibliography

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Helander, M. (1992). Handbook of human computer interaction. North-Holland.

Mayhew, Deborah J. (1992) Principles and guidelines in software user interface design. Englewood Cliffs, Prentice Hall PTR.

Norman, Donald (1999). Invisible Computer: why good products can fail, the personal computer is so complex and information appliances are the solution. MIT Press, Cambridge.