ID	2375
Curricular Unit	Design, Development and Evaluation of Multimedia Materials
Regent	Carlos Alberto Rosa Ferreira
Learning Outcomes	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	Introduction to ergonomics usability and accessibility of information systems: • 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. User-Centered Design: • 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. Evaluation of a Multimedia System Based on Heuristics: • 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	Stanton, N., Salmon, P., Walker, G., Baber, C., & Jenkins, D., (2005). Human Factors Methods: A Practical Guide for Engineering and Design. Ashgate Publishing Company. ISBN: 0754646610 Neville A. Stanton, Mark Young (1999). Guide to Methodology in Ergonomics: Designing for Human Use. CRC Publishing Company. W. Green, Patrick W. Jordan (1999). Human Factors in Product Design: Current Practice and Future Trends CRC Publishing Company Deborah J. (1992) Principles and guidelines in software user interface design. Prentice Hall, New Jersey. 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.