ID	2610
Curricular Unit	Information Technologies
Regent	Rui Jorge Bértolo Lara Madeira Claudino
Learning Outcomes	At the end of the course, students should be able to: - understand the fundamental concepts about sport organizations information systems; and technologies - understand the methodologies used to analyze and develop information systems; - apply the technologies used to build web based information systems;
Syllabus	1. Information technologies in the context of sports organizations 1.1 Case studies at the Portuguese Football Federation and the Comitée Européene de Rink-Hockey 2. General concepts of information systems and technologies 2.1 Systems and information technologies 2.2 Concept of data and information 3. Classification of technologies and information systems 4. Information technologies to the web 4.1 Web servers, databases and applications 5. Technologies of publishing documents on the web 5.1 Hyper Text Markup Language 5.2 Structure of an HTML document 6. Technologies of dynamic publishing documents on the web 6.1 the Hypertext Preprocesser-PHP 6.1.1 Structure of a document 6.1.2 Instructions, variables, and constants 7. Database Technologies 7.1 Notion of relational database 7.2 Concept of table, record, and fields 8. SQL and databases 8.1 The main SQL commands 9. Database Normalization 9.1 Primary and secondary keys 9.2 Data normalization 10 Use of spreadsheets

Evaluation	The teaching is conducted through theoretical and practical classes, because many of the contents have a operational application component. The classes consist of an initial part, with an exhibition and theoretical component. In addition the students carry out practical exercises, as autonomous as possible, through practical sheets available in the online reserved area of the discipline. Two tests are performed online, through the corresponding functionality in the Agon web application. In addition students will have to perform autonomously, a pratical work, which consists in developing a Web application, using HTML, PHP and MySQL. This work has an initial presentation in the course of lessons and a final presentation, after the completion of classes. The students who do not realize the continuous assessment, previously presented, will have to perform a written test and an oral presentation about the whole matter.
Bibliography	Laudon, K., Laudon, J., Management Information Systems, Ed.:Prentice Hall, Inc., New Jersey, 2000; Dessler, G., Management – Leading People and Organizations in the 21st Century, Ed.: Prentice Hall, Inc., Upper Saddle River, New Jersey, 1998; Turban, E., MacLean, E., Wetherbe, J., Information Technology for Management, Ed.: John Wiley & Sons, Inc., New York, 1996; Varajão, J. E. Q., A arquitectura da gestão de sistemas de informação, Ed.: FCA – Editora de informática, Lisboa, 1998; Whittin, J., Bentley, L., Systems Analysis and Design Methods, Ed.: Irwin/McGraw-Hill, 4ª ed., Boston, 1998; Yourdon, E,. Modern Structured Analysis, Ed.:Prentice Hall, Englewood Cliffs, New Jersey, 1990; Damas, Luís,. SQL - Structured Query Language, Ed.: FCA - Editora Informática, 6ª ed., Lisboa, 2005; Serrão, C., Marques, J., Programação com PHP 5, Ed.: FCA - Editora Informática, Lisboa, 2007.