# uc3m Universidad Carlos III de Madrid

# Web content management systems

Academic Year: (2022 / 2023) Review date: 14-10-2022

Department assigned to the subject: Library and Information Sciences Department

Coordinating teacher: CALZADA PRADO, FCO JAVIER

Type: Compulsory ECTS Credits: 6.0

Year: 1 Semester: 2

# REQUIREMENTS (SUBJECTS THAT ARE ASSUMED TO BE KNOWN)

Markup Languages Information Architecture

#### **OBJECTIVES**

After completing this course, students should be able to:

Carry out a process leading to implementation and launch of a website where the flow, storage and retrieval of digital content on an organization can be sustained over time.

Suggest and implement tools and applications for such sites to allow both, the consultation of the content and recovery, search engine optimization and socialmedia integration.

- Ability to analyze information flows within an organization and synthesize the most efficient way to manage them.
- Ability to organize and plan the processes leading to the implementation or changes in an organization required to manage digital assets.
  - Ability to work as a team.
- Ability to communicate orally and in writing to convince others of how the improved management of digital assets can help each individual and the organization.
  - Troubleshooting.
  - Critical thinking.
- Concern for quality and continuous improvement to consistently self-assess the implementation and / or reformulation of processes and objectives.
  - Cognitive (Knowledge)
  - To Know about the importance of information systems at the corporate level.
  - To Know the different types of Content Management Systems and to be able to install and manage it.
  - To Know different methodologies for implementation and configuration of packaged information systems.
  - To Know how to implement different apps in different organizational settings within a CMS
  - Instrumental (Learn how)
- Design, configure and integrate the functionality of an information system in an existing work process and information flows that occur in a complex information system.
  - Characterize the functions of the modules of an information system and the expected results for each one.
  - Define the convenient interface to each user.
  - Use to input data in a complex information system, attributes and methods / conditions of use of the system.
  - Monitor, analyze and interpret the behavior of users in an information system.
  - Attitudes
- Critically evaluate the effectiveness, efficiency and quality of both the processes of analysis, development and implementation of a digital content management.
- Team work: sharing tasks, rely on the activity of peers, fulfill the responsibilities assumed and assume critics from others.
  - Ethical use of information: make an appropriate, responsible and legal use of the information used and generated.
- Maintain an appropriate level of quality in the delivery of the results of work: take some basic guidelines for submission, and respect for deadlines.

# **DESCRIPTION OF CONTENTS: PROGRAMME**

The aim of the course is to enable students to understand the organizational and technological problems of implementation and use of technologies to manage digital content. This course focuses on dynamic web content management systems based on database management, installation and administration. Will discuss the organization and management of textual and multimedia objects, management of information flows, the integration of syndicated content and other web services (blogs, wikis), management of communication features and analysis of the use of these systems through log analysis.

# **PROGRAM**

UNIT 1: History, evolution and characteristics of web content management systems (WCM).

UNIT 2: Types and tools of WCM.

UNIT 3: Planning and design of WCM systems: functional analysis and prototyping.

UNIT 4: Usability, management and accesibility of WCM interfaces: templates and style sheets.

UNIT 5: WCM Security.

UNIT 6: Installing, configuring and setting up websites with WCMs.

UNIT 7: External and internal search engines, metadata.

UNIT 8: Modules, extensions, plugins and web services.

#### LEARNING ACTIVITIES AND METHODOLOGY

Theorical knowledge acquisition (3 ECTS), through lectures, teaching materials prepared by the teacher, online tutorials, readings, and personal study of the students.

Acquisition of skills and abilities (3 ECTS), by the administration and administration of a CMS. Students must define a use case defining different users with different access policies, will create a variety of content and activities and will learn how to integrate different services and work as a team.

The methodology of this course involves learning as a process of construction, and teaching as a support. Thus the teaching-learning process will encourage continuous learning and collaborative students, facilitating the exchange of experience between them.

#### Activities:

Individual

Readings

Public presentation

Implementation of particular functions on a CMS

Documentation on the use case defined

Final Report on the learning process

Group

Participation and debates on forum

Group work (project): implementation of a CMS, views definition, accessibility, internal search engine, metadata, logs, etc.

# **ASSESSMENT SYSTEM**

There will be a continuous process of assessment in accordance with the following parameters:

- Formative assessment activities, based on measuring the acquisition of knowledge, as well as carrying out practical activities and exercises: 70%. Students must demonstrate a minimun of knowledge and skill in at leas one CMS
- Final exam: 30%

The final grade is summative. To pass this course, students must pass the final exam (reaching at least 50% out of the 30% alloted to the exam) and reaching at least 50% of the total points for the course after adding the grades obtained in formative assessment activities.

According to University policy, in the regular exam session the student who did not follow the continuous assessment is entitled to take an exam for the 60% of the final grade.

In the extra exam session, if the student did not follow the continuous assessment, is entitled to take an exam for the 100% of the final grade. If she did follow the continuous assessment, her grade will be the most beneficial: considering an exam weight of 40% plus the continuous assessment score, or an exam weight of 100%, discarding the score obtained in continuous assessment.

NOTE: Plagiarism in any of the course assignments means losing the grade of that assignment.

% end-of-term-examination: 30 % of continuous assessment (assignments, laboratory, practicals...): 70

#### **BASIC BIBLIOGRAPHY**

- Eden, Bradford Lee Content management systems in libraries: case studies, Scarecrow Press, 2008
- Mauthe, Andreas; Thomas, Peter Professional content management systems: handling digital media assets , John Wiley & Sons, 2004
- Mutula, Stephen M. Web Information Management : a cross-Disciplinary Textbook , Chandos, 2007

# ADDITIONAL BIBLIOGRAPHY

- Boiko, Bob Content Management Bible, Wiley, 2005

# BASIC ELECTRONIC RESOURCES

- Connell, S. Content Management Systems: Trends in Academic Libraries: DOI:10.6017/ital.v32i2.4632
- Hullavarad, S.; O¿Hare, R.;Roy, A.K. . Enterprise Content Management solutions-Roadmap strategy and implementation challenges: http://www.sciencedirect.com/science/article/pii/S0268401214001285