
Academic Year: (2024 / 2025)**Review date: 17-05-2024**

Department assigned to the subject: Library and Information Sciences Department**Coordinating teacher: MENDEZ RODRIGUEZ, EVA MARIA****Type: Compulsory ECTS Credits : 6.0****Year : 1 Semester : 1**

REQUIREMENTS (SUBJECTS THAT ARE ASSUMED TO BE KNOWN)

There is not a mandatory course that the student need to have passed beforehand

OBJECTIVES

BASIC SKILLS:

CB9 Students might know how to communicate their conclusions and the latest knowledge to specialized and non-specialized audiences in a clear and unambiguous way.

GENERAL SKILLS:

CG5 To Recognize the growing importance of teamwork in the world of work and demonstrate adaptability and integration in different work environments, maintaining relationships and communication workflows.

CG8 To value the rigorous work, in planning, organizing and developing one's own activities, demonstrating initiative, creativity and sense of responsibility, maintaining interest throughout the process, and feeling personal satisfaction with the results achieved.

CG9 To make judgments and communicate conclusions and be able to do reasoning to support them in front of specialized and non-specialized audiences in a clear way.

CG11 Capacity to interpret methodologies, technologies, policies and new methods of information analysis, processing and retrieval.

SPECIFIC SKILLS

CE1 To know and analyze the current and future of ICTs and their application in libraries and archives.

CE6 To use metadata vocabularies and other semantic schema/es for digital information processing

LEARNING OUTCOMES

In this course is specially important everything related to interoperability among digital data and information, as well as other digital assets, with special focus on Semantic Web and LOD (Linked Open Data) technologies.

At the end of the course, students should be able to:

- Distinguish and choose the vocabularies that best suit to represent the digital objects in the GLAM institutions (galleries, libraries, archives and museums) as well as other kinds of digital information services.
- Know and select the appropriate international standards for the creation of vocabularies. Not only from the point of view of the rules of construction in terms of semantic relationships but also the specifications and standards to formalize such vocabularies for the Web.
- Lead and/or approach a project of vocabularies and metadata creation including its update and creation of the best practices and manuals to use those vocabularies in order to better represent digital information objects.
- Use and manage specific software for the creation and maintenance of thesauri, ontologies, taxonomies and other vocabularies.
- Understand the semantic search engine optimization on the Web.

DESCRIPTION OF CONTENTS: PROGRAMME

Theory:

- UD0: Vocabularies in digital libraries and information systems
- UD1: Context, evolution and theoretical foundations of vocabularies
- UD2: Linked Open Data and Linked Open Vocabularies
- UD3: Standards for the formalization of vocabularies ON/FOR the Web
- UD4: Resource Description Framework: RDF and RDFs
- UD5: Simple Knowledge Organization Systems: SKOS
- UD6: Ontology Web Language: OWL

Practice (Small Private Online Course - Videos for the students to address the practical scenario)

- SPOC-Module 1: Needs analysis / Functional requirements of vocabularies
- SPOC-Module 2: Analysis of the environment. Searching, analyzing and choosing pre-existing vocabularies
- SPOC-Module 3: The tools in the development and management of vocabularies
- SPOC-Module 4: Development structure vocabularies (schema)
- SPOC-Module 5: Creating content vocabularies (concept scheme)
- SPOC-Module 6: Linked Open Vocabularies: our vocabularies on the web of linked data
- SPOC-Module 7: Evaluation and maintenance of vocabularies

LEARNING ACTIVITIES AND METHODOLOGY

* THE TRAINING ACTIVITIES ACORDING TO THE STUDY PLANIFICATION WILL BE:

- AF1 Individual work for the study of theoretical and practical materials developed and contributed by the teacher.
- AF2 Individual work for problem solving and case studies.
- AF3 Theoretical-practical classes.
- AF4 Tutorials.
- AF5 Group work.
- AF6 Active participation in forums enabled by the teacher in the virtual educational platform.
- AF7 Perform self-assessment test for content review.
- AF8 Synchronous online debates and colloquiums

Type of activity	Is it synchronous?	Total hours	Hours of synchronous interactivity	No. In-person hours	% In-person attendance Student
AF1	NO	49	0	0	
AF2	NO	45	0	0	
AF3	SI	6	6	6	
AF4	SI	6	6	0	
AF5	NO	60	0	0	
AF6	NO	2	0	0	
AF7	SI	6	6	0	
AF8	SI	6	6	0	
	Total	180	24	6	
					3,33%

* TEACHING METHODOLOGIES:

MD1 Presentations in the teacher's class with support of computer and audiovisual media, in which the main concepts of the subject are developed and the bibliography is provided to complement the students' learning.

MD2 Critical reading of texts recommended by the teacher of the subject:

Press articles, reports, manuals and / or academic articles, either for later discussion in class, or to expand and consolidate the knowledge of the subject.

MD3 Resolution of practical cases, problems, etc. Raised by the teacher individually or in a group.

MD4 Exposition and discussion in class, under the moderation of the professor of subjects related to the content of the subject, as well as of practical cases.

MD5 Preparation of individual and group work and reports.

MD6 Reading of theoretical and practical teaching materials.

ASSESSMENT SYSTEM

% end-of-term-examination: 50

% of continuous assessment (assignments, laboratory, practicals...): 50

E1 Participation in class and forums in virtual educational platform

SE2 Individual or group work carried out during the course

SE3 Conducting evaluable and scoring questionnaires

SE4 Exam or Final Work *

* The exam or final work will be done in face-to-face mode, at the facilities of the Carlos III University of Madrid or at a center arranged by the university that guarantees the student's identity, and must be passed in order to pass the course/topic.

Evaluation

System

	minimum weighting %)	maximum weighting(%)
SE1	5	5
SE2	30	30
SE3	15	15
SE4	50	50

In SE4, final f2f exam means 15%.

In the extraordinary call, if the continuous assessment has not been followed, the exam might only reach 75% of the maximum grade.

COVID-19

Taking into account the health emergency situation, the final f2f test might suffer modifications that are going to be announced beforehand, if needed.

BASIC ELECTRONIC RESOURCES

- . ANSI/NISO Z39.19. 2005 Guidelines for the Construction, Format, and Management of Monolingual Controlled Vocabularies: : <http://www.niso.org/kst/reports/standards>

- . DC, DCMI (Dubin Core, Dublin Core metadata initiative): : <http://dublincore.org>

- . LinkedData: : <http://linkeddata.org>

- . LOV project (Linked Open Vocabularies): : <http://lov.okfn.org/dataset/lov>

- . Metadata Registry: Vocabulary list: : <http://metadataregistry.org/vocabulary/list.html>
- . NKOS (Networked Knowledge Organization Systems/Services): : <http://nkos.slis.kent.edu>
- W3C (World Wide Web Consortium). . Linked data: : <http://www.w3.org/standards/semanticweb/data>