# uc3m Universidad Carlos III de Madrid

## Advanced Metadata

Academic Year: (2023 / 2024) Review date: 27-04-2023

Department assigned to the subject: Library and Information Sciences Department

Coordinating teacher: ORTIZ-REPISO JIMENEZ, VIRGINIA

Type: Electives ECTS Credits: 6.0

Year: 4 Semester:

# REQUIREMENTS (SUBJECTS THAT ARE ASSUMED TO BE KNOWN)

Organization of knowledge

#### **OBJECTIVES**

The basic objective of the subject is to analyze the concept of metadata and present the different models that can be applied to the organization of digital information in different professional contexts.

Upon completion of this course, the student will be able to:

- 1. Understand the concept of metadata and its application possibilities in different areas.
- 2. Know the contexts and the ways of access to digital information.
- 3. Identify the different standards that currently exist related to metadata.
- 4. Understand and access the documentation related to the implementation of any of the metadata models.
- 5. Analyze the different standards that currently exist related to metadata.
- 6. Be able to use tools for creating and editing metadata.
- 7. Know the different applications and initiatives that are being developed around metadata in different professional fields: education, technology and documentation.

#### **DESCRIPTION OF CONTENTS: PROGRAMME**

## UNIT 1. ACCESS TO DIGITAL INFORMATION: FEATURES

- 1.1. Access to digital information: contexts and models
- 1.2. Problems associated with recovery on the Internet.
- 1.3. Typology of recovery systems that use metadata.

UNIT 2. METADATOS: WHAT THEY ARE AND WHAT THEY ARE FOR

- 2.1. Definition and basic concepts.
- 2.1. Records and metadata schemas.
- 2.1. Description by metadata.
- 2.3. Metadata standards: development and typologies.

UNIT 3. INTEROPERABILITY AND STANDARDS.

- 3.1. Concept and types of interoperability.
- 3.2. Standards: identification and location (DOI, URI, PURL).
- 3.3. Standards: markup languages ¿¿(HTML, XML, RDF).
- 3.4. The Z39.50 protocol.
- 3.5. The OAI-PMH protocol (Open Archives Initiative Protocol for Metadata Harvesting.).
- 3.6. Collectors and directories of digital resources: HISPANIA, OAIster, Worldcat, Europeana

## UNIT 4. DUBLIN CORE AND EUROPEAN

- 4.1. Characteristics of the DC scheme.
- 4.2. Brief history of the Dublin Core Metadata Initiative (DCMI).
- 4.3. Organization of the DCMI.
- 4.4. DC in Spain.
- 4.5. Characteristics of the standard.
- 4.6. Simple and qualified DC.
- 4.7. Europeana (European Semantic Elements)
- 4.8. Europeana Standards

## UNIT 5. TOOLS FOR THE CREATION OR EDITING OF METADATA

- 5.1. Typology
- 5.2. External metadata
- 5.3. Internal metadata
- 5.4. Functional description of applicable tools

UNIT 6. METADATOS IN CULTURAL INSTITUTIONS

- 6.1. Antecedents and Evolution
- 6.2. FRBR: Functional Requirements for Bibliographic Records
- 6.3. Entities and Relations
- 6.4. Extension of the FRBR model to the authority data: FRAD
- 6.5. Extension of the FRBR model to the matter ratio: FRSAD
- 6.6. RDA: Description and Access to the Resource
- 6.7. Structure and interoperability

## **UNIT 7. AREAS OF APPLICATIONS**

- 7.1. Advantages and disadvantages of the use of metainformation on the Web.
- 7.2. Applications, experiences and perspectives (multimedia, semantic web ...)
- 7.3. Applications in media
- 7.4. Scientific applications
- 7.5. Applications in Archives, Libraries and Museums
- 7.6. Educational metadata

## LEARNING ACTIVITIES AND METHODOLOGY

## TRAINING ACTIVITIES, METHODOLOGY TO BE USED AND TUTORIALS REGIME

Acquisition of theoretical and practical knowledge (4 ECTS) through theoretical classes, discussion of readings, as well as debates in physical and virtual environments, problem-solving and case studies, both individually and in groups.

Acquisition of competences and skills (2 ECTS) in the use of sources and resources related to the world of Information and documentation, problem-solving and applications to real-life situations.

The days and hours of the tutorials can be consulted in the space dedicated to the subject in Aula Global.

#### ASSESSMENT SYSTEM

For the evaluation of this subject a continuous evaluation process will be followed, according to the following parameters:

- Formative evaluation, which will be based on self-assessment exercises that measure the acquisition of theoretical knowledge and the development of practical exercises and activities: 40%

20%: Class activities, tests and practices

20%: Work and exposure of a subject related to the subject

- Final exam (60%): will take place in person on the date determined by the University.

% end-of-term-examination:	60

% of continuous assessment (assigments, laboratory, practicals...):

## **BASIC BIBLIOGRAPHY**

- BRENNDORFER, THOMAS RDA Essentials, American Libray Association, 2016
- DCMI Metadata Terms DCMI Metadata Terms , http://www.dublincore.org/specifications/dublin-core/dcmi-terms/, 2012
- DUBLIN CORE METADATA INITIATIVE, Dublin Core Metadata Element Set, Version 1.1: Reference Description, http://www.dublincore.org/specifications/dublin-core/dces, 2012
- RED.IRIS ublin Core en castellano: Elementos del conjunto de metadatos de Dublin Core, http://www.rediris.es/search/dces/, 2018