uc3m Universidad Carlos III de Madrid

Digitalization And Preservation

Academic Year: (2022 / 2023) Review date: 07-04-2022

Department assigned to the subject: Library and Information Sciences Department

Coordinating teacher: ROBLEDANO ARILLO, JESUS

Type: Compulsory ECTS Credits: 6.0

Year: 1 Semester: 0

REQUIREMENTS (SUBJECTS THAT ARE ASSUMED TO BE KNOWN)

In this subject is not mandatory to pass any subject, although, it will be useful to have completed the subject of Markup Languages, because the knowledge of XML will help to understand the topic dedicated to metadata and the one dedicated to digital preservation. It is also useful to have taken the subject of Digital Document Security.

OBJECTIVES

THE BASIC SKILLS OF THIS SUBJECT ARE:

CB6 Possess and understand knowledge that provides a basis or opportunity to be original in the development and / or application of ideas, often in a research context.

CB9 That students know how to communicate their conclusions and the latest knowledge and reasons that support them to specialized and non-specialized audiences in a clear and unambiguous way.

CB10 Students have the learning skills that allow them to continue studying in a way that will be largely self-directed or autonomous.

GENERAL COMPETENCES

CG4 To carry out consultancy and technological consultancy tasks for the implementation of basic services for the creation, processing, storage, diffusion and conservation of information in digital format.

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

CG6 Accept the need for constant self-learning and continuous training as instruments that facilitate adaptation to technological and organizational innovations.

CG7 Acquire a global and coordinated vision of the processes and services that are given in libraries and archives and the incidence that has the control of the quality in them in the satisfaction of the users.

SPECIFIC COMPETENCES

CE3 Employ the essential techniques of digitalization of documents and production of digital collections, as well as the preservation of digital objects obtained

THE LEARNING RESULTS ARE:

The student of this subject will acquire a deep training on the various aspects that have to do with the social web, the operation of reference services, the creation of the digital document, its preservation, management, diffusion and normalization.

The student after passing the subject must:

1. Understand and manage the fundamental technical concepts inherent in digital documents and their digitization in various media and formats (still image, video and digital sound).

- 2. Understand the life cycle, tasks and management of resources in a digitization project of a documentary fund with a variety of means.
- 3. Set the objectives of a policy of digitization and preservation of documents regardless of the format in which they are
- 4. To know the most important products, services, experiences and good practices in the creation of spaces for interaction and social collaboration in the field of libraries and digital information services.
- 5. Develop strategies for standardization of management processes and exploitation of documentation to ensure levels of efficiency and organizational effectiveness.
- 6. Understand the basis of production, management and exploitation of information and documentation in public and private organizations on all storage media, especially digital media.
- 7. To know the normative framework related to the systems of management of documents and the process of elaboration of norms.
- 8. To know the technical and functional characteristics that the computer systems must satisfy for the management of documents.

DESCRIPTION OF CONTENTS: PROGRAMME

The objective of this course is to provide knowledge and develop skills to carry out digitization and digital preservation projects in the context of GLAM.

Its contents are:

Learning Unit 1: Technical aspects of digital documents relevant to a digitization project.

Topic 1. Digital imaging and digital text technology.

Topic 2. Digital video and digital audio technology.

Topic 3. Mass Storage Systems.

Learning Unit 2: The approach and development of a digitization project.

Topic 4. The life cycle of a digitization project.

Topic 5. The initial phases of a digitization project.

Topic 6. Preparation, execution and monitoring.

Topic 7. Implantation of a quality control program.

Learning Unit 3: The management, maintenance and use of the digitized collection.

Topic 8. Organizational aspects of digital collection.

Topic 9. Preservation of digital content.

Topic 10. The application of metadata in the digitization workflow.

- * Practical work:
- · Handling of basic concepts on digital documents in different media

And typology using image, sound, video and PDF editors.

- · Inclusion of metadata in digital documents in different media and Format.
- · Editing documents.
- · Image quality control.
- · Digital capture and processing assumptions.
- · Resolution of cases of digital preservation.
- · Assumption of realization of projects of digitization and preservation digital.

LEARNING ACTIVITIES AND METHODOLOGY

TRAINING ACTIVITIES ACORDING TO THE STUDY PLANIFICATION ARE:

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.

Code

Activity No Total hours No Hours Presencial% Presencialidad Student

AF1 60 0 0

AF2 58 0 0

AF3 10 6 100%

AF4 10 0 0

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AF6 1 0 0

AF7 1 0 0

TOTAL COURSE 180 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

Activities:

SE1 Participation in class and forums in virtual educational platform

SE2 Individual or group work done during the course

SE3 Carrying out evaluable and scoring questionnaires

SE4 Exam or Final Work *

System of

Evaluation Minimum	Weighting (%)	Maximum Weighting (%	6
SE1	5	5	
SE2	30	30	
SE3	15	15	
SE4	50	50	

^{*} The continuous evaluation will be carried out by means of the individual resolution of the practical assumptions and case studies, the proposal of a digitization project, participation in the forum of the subject and two partial theoretical tests. The final compulsory exam will contribute 50% of the grade.

The following evaluation criteria will be applied in the extraordinary call: a practical theory test as a final exam (50%), a non-face-to-face questionnaire on the complete syllabus of the subject (30%); a course of digitization project to be carried out in a group (20%).

The percentage of the maximum grade that can be achieved in this call will be 100%.

% end-of-term-examination:	50
% of continuous assessment (assigments, laboratory, practicals):	50

BASIC BIBLIOGRAPHY

- BEAGRIE, Neil; JONES, Maggie. Preservation management of digital materials: a handbook. 2008., Digital Preservation Coalition, 2008. Disponible en Internet: http://www.dpconline.org/docs/handbook/DPCHandbook.pdf.

^{*} The final exam or work will be done in face-to-face modality, at the Carlos III University and it is obligatory to pass it in order to pass the subject.

- BLATNER, David (et. al). El Escáner en el Diseño Gráfico. (Edición 2005)., Madrid: Anaya Multimedia, 2005.
- Biblioteca de la Universidad de Cornell / Departamento de Investigación. Llevando la teoría a la práctica. Tutorial de Digitalización de Imágenes., Disponible en Internet: http://www.library.cornell.edu/preservation/tutorial-spanish/contents.html.
- Cornell University Library Digital Preservation Management: Implementing Short-term Strategies for Long-term Problems. Tutorial., Disponible en: http://www.dpworkshop.org, 2007
- Federal Agencies Digitization Initiative (FADGI) Still Image Working Group. Technical Guidelines for Digitizing Cultural Heritage Materials..., Disponible en http://www.digitizationguidelines.gov/guidelines/FADGI_Still_Image-Tech_Guidelines_2010-08-24.pdf , August 2010 IFLA (International Federation of Library Associations and Institutions), ICA (International Council on Archives).
- IFLA (International Federation of Library Associations and Institutions), ICA (International Council on Archives) Directrices para proyectos de digitalización de colecciones y fondos de dominio público..., Marzo de 2002 (Actualizado, mayo 2009). Disponible en Internet: http://travesia.mcu.es/documentos/pautas_digitalizacion.pdf.
- JISC Digital Media. Still images, moving images and sound advice., Disponible en Internet: http://www.jiscdigitalmedia.ac.uk/.
- KENNEY, Anne R. (et al.) Digital Preservation Management: Implementing Short-term Strategies for Long-term Problems (Tutorial de la Cornell University Library). Última actualización mayo 2010. , Disponible en http://www.icpsr.umich.edu/dpm/dpm-eng/eng_index.html, 2010
- KENNEY, Anne R. y RIEGER Y. Oya. Moving Theory into Practice: Digital Imaging for Libraries and Archives., Mountain View, CA: Grupo de Bibliotecas de Investigación, 2000..
- VVAA Conservación de fotografías: treinta años de ciencia, CAAP, 2016

ADDITIONAL BIBLIOGRAPHY

- BRADLEY, Kevin. Defining Digital Sustainability, Library Trends, 2007, vol. 56, no. 1, pp. 148-163...
- CHAPMAN, Stephen. Managing Text Digitisation, Online Information Review, 2003, vol. 27, no. 1, pp. 17-27...
- HAZEN, Dan , HORRELL, Jeffrey y MERRILL-OLDHAM, Jan. Selecting Research Collections for Digitization., Disponible en Internet: http://www.clir.org/pubs/reports/hazen/pub74.html.
- HODGE, Gail; and ANDERSON, Nikkia. Formats for Digital Preservation: A Review of Alternatives and Issues., Information Services & use, 2007, vol. 27, no. 1-2, pp. 45-63..
- Humanities Advanced Technology and Information Institute (HATII). The NINCH Guide to Good Practice in the Digital Representation and Management of Cultural Heritage Materials., Disponible en Internet: http://www.nvu.edu/its/humanities/ninchquide/.
- IHRIG, Emil; IHRIG, Sibil. Manual del escáner para profesionales., MacGraW-Hill, 1996...