Digitalization And Preservation

Academic Year: (2023 / 2024)   **Review date: 17/05/2023 18:10:15**

Department assigned to the subject: Library and Information Sciences Department

Coordinating teacher: ROBLEDANO ARILLO, JESUS

Type: Compulsory ECTS Credits : 6.0

Year : 1 Semester : 1

REQUIREMENTS (SUBJECTS THAT ARE ASSUMED TO BE KNOWN)

For this course, no prerequisites or passing any subject are required, although it will be very useful to have studied "Markup Languages", since knowledge of XML will help to understand the topic dedicated to metadata and the topic dedicated to digital preservation. . It is also useful to have taken the Digital Document Security course.

OBJECTIVES

The main knowledge that students will acquire if they follow the complete theoretical and practical syllabus of the course are:

- Fundamental technical concepts of digital documents in still image, video and digital sound formats.
- Understanding of the fundamental aspects of the most appropriate capture equipment for each medium and type of document.
- Understanding of the elements involved in the selection of the most appropriate digital capture and processing parameters according to the purpose of a digitisation project.
- Technical and organisational concepts to be applied in a quality assurance and quality control programme in a digitisation project.
- Experiences, positive and problematic aspects, that institutions that have already faced the digitisation of their collections are having.
- Understanding the life cycle, tasks and resource management in a digitisation project of a collection.
- Ways to plan and develop digital preservation strategies.
- Standards and models applicable in a digital preservation programme.
- Understanding the importance of metadata in the lifecycle of the digital object, from digitisation or digital creation to preservation.
- Technical and organisational concepts in terms of metadata standards selection, editing, storage and exchange.

The specific competences and skills of this subject that the student will acquire are:

- Establish the objectives of a digitisation and preservation policy for documents regardless of their format.
- Design, implement and manage a digitisation project. Amongst these, the ability to design the specifications for digitisation of a documentary collection and the ability to choose a digitisation service company in accordance with the needs of a project.
- Use appropriate selection criteria to digitise and preserve a given collection.
- Apply the necessary technical requirements in a digitisation project.
- Analyse and select the most appropriate forms of preservation for a digital collection.
- Carry out a quality control programme for the digitised collection.
- Ability to analyse, understand and apply the technical specifications of a digitisation project of a documentary collection.
- Ability to correctly assess the quality of digitisations.
- Ability to read and understand specialised bibliography on digitisation of documents.
- Ability to select and adopt the most appropriate metadata schemes for the digitisation and digital preservation project.

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DESCRIPTION OF CONTENTS: PROGRAMME

Through this course we try to provide knowledge and develop skills to carry out digitization projects and digital preservation of documentary collections or archive funds of information services in any of its types. The syllabus is organized into three didactic units:

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. Metadata systems for the digital document.

Practices:

· Management of basic concepts about digital documents in different media
and typology using specific editing and digital treatment applications.
· Inclusion of metadata in digital documents in different media and
Format.
· Image quality control.
· Generation of METS documents for the encapsulation of various types of metadata, the integration of files in
multipage documents and the definition of structural maps of the documents.
· Assumptions of capture and processing of digital funds.
· Resolution of digital preservation cases.
· Assumption of carrying out a digitalization and digital preservation project.

LEARNING ACTIVITIES AND METHODOLOGY

* THE 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
AF5 40 0 ¿¿0
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

% end-of-term-examination/test:	25
% of continuous assessment (assigments, laboratory, practicals…):	75

The evaluation activities are:

¿ SE1. Participation in class and forums in virtual educational platform. 5 %.
¿ SE2. Individual or group work carried out during the course. 50 %.
¿ SE3. Completion of evaluable and scoring questionnaires. 20 %.
¿ SE4. Exam or final work. 25%

* The final exam must be passed in order to pass the course.

% end-of-term-examination/test:	25
% of continuous assessment (assigments, laboratory, practicals…):	75

* The continuous evaluation will be carried out through the individual resolution of the practical cases and case studies, the approach of a digitization project, participation in the subject forum and two partial theoretical tests. The compulsory final exam will contribute 25% of the mark.

In the extraordinary call, the following evaluation criteria will be applied: a practical theoretical test as a final exam (20%), a non-contact questionnaire on the complete syllabus of the subject (30%); a supposed digitization project to be carried out in a group (20%); a mandatory practice (30%).

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

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.

- 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). 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.nyu.edu/its/humanities/ninchguide/.

- IHRIG, Emil; IHRIG, Sibil. Manual del escáner para profesionales., MacGraW-Hill, 1996..

- 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..

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