

Digital Preservation Systems

Code: 44750
ECTS Credits: 6

Degree	Type	Year	Semester
4318290 Archival Studies and Information Governance	OB	2	1

Contact

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Teaching groups languages

To check the language/s of instruction, you must click on "Methodology" section of the course guide.

Teachers

Juan Jose Bote Vericad

Prerequisites

Without mandatory requirements

Objectives and Contextualisation

- Identify and understand the structure, components, and characteristics of electronic records, as well as grasp the concept of legality and validity.
- Identify and familiarize themselves with the typologies and formats of electronic records and comprehend their specificities.
- Learn and become familiar with different systems of identification and electronic signature, as well as the services derived from their use.
- Understand the electronic administration services applicable to electronic document management. Identify and analyze the role of archives within the context of electronic administration.
- Identify and understand the processes involved in managing electronic documents and analyze the use of cloud services in their management.
- Acquire knowledge of digital preservation concepts, including strategies and techniques, and learn how to develop a digital preservation plan.
- Gain an in-depth understanding of the characteristics and functionalities of a digital archive.

Learning Outcomes

- CA23 (Competence) Establish an organisation's digital preservation strategy.
- CA24 (Competence) Plan the implementation of e-governance in an organisation.
- KA33 (Knowledge) Cite e-governance concepts, instruments and regulations.
- KA34 (Knowledge) Identify computer applications for information and documentation management in organisations.
- KA35 (Knowledge) Inform about digital preservation policies on the long-term preservation of electronic documents.
- SA26 (Skill) Use the basic concepts of e-governance and digital preservation.
- SA27 (Skill) Use archival standards and requirements, and technological aspects of digital preservation in an organisation.
- SA28 (Skill) Apply different preservation techniques in an organisation.

Content

Unit 1 - Electronic record.

Definition. Components. Characteristics. Types and formats. Problems of electronic records. Archival models in the management of electronic records. Legal value of electronic records. The electronic record in the NTI.

Unit 2 - Digital certification and electronic signature

Identification and electronic signature systems. Digital certification in the Catalan Public Administration. Electronic signature. Policy of electronic signature and certificates of the Administration in the NTI.

Unit 3 - Electronic administration

Definition. The rights and duties in e-government. The Catalan model of e-government. Catalogue of services offered by the Consorci AOC. Open Data and transparency, practical cases

Unit 4 - Management of electronic records

The integration of electronic records in the RMS. The electronic file in the NTI and LPACAP. Record management processes and their specificities in an electronic environment. Record management policy in the NTI. Cloud computing and Records Management System.

Unitat 5 - Digital Preservation

Introduction and basic concepts of digital preservation. Strategies and techniques for digital preservation. Analysis of risks in digital preservation: national and international scenarios. Policies and plans for digital preservation.

Unitat 6 - Digital Archive

Definition. Models of digital Archive. Components and functionalities. Practical applications and tools. Evaluation and certification.

Methodology

The teaching methodology will combine the teacher's explanations in the classroom or virtual environment, joint activities for discussion and presentation, individual and group exercises in the classroom, as well as individual exercises outside the classroom, which may be evaluative. This combination of methodologies aims to facilitate the learning of the necessary theoretical concepts to pass the subject, as well as to apply the theory in solving situations and making decisions when dealing with topics and cases related to the subject's curriculum.

The language of instruction for the classes will be Catalan.

Annotation: Within the schedule set by the centre or degree programme, 15 minutes of one class will be reserved for students to evaluate their lecturers and their courses or modules through questionnaires.

Activities

Title	Hours	ECTS	Learning Outcomes
Type: Directed			
Seminar sessions and sessions in the computer room	20	0.8	CA23, CA24, KA33, KA34, KA35, SA26, SA27, SA28, CA23
on line sessions	25	1	CA23, CA24, KA33, KA34, KA35, SA26, SA27, SA28, CA23
Type: Supervised			
Coursework activities and practical work	55	2.2	CA23, KA33, KA35, SA26, SA27, SA28, CA23
Type: Autonomous			
Study and analysis of cases. Readings	50	2	CA23, CA24, KA33, KA34, KA35, SA26, SA27, SA28, CA23

Assessment

This subject does not have a single evaluation system.

Evaluation activities:

- Practice on web archives (25%)
- Practice on risk analysis in a chosen institution (25%)
- Practice with digital certificates and electronic signature, and development of an electronic signature management protocol (25%)
- Perform a set of functional tests to simulate the operation of an digital archive (25%)

The activities must be submitted within the specified deadlines and will be carried out sequentially as the course progresses.

If a student does not meet the learning requirements, there is a recovery system based on a final theoretical exam.

To participate in the recovery, students must have been previously evaluated in a set of activities that account for at least two-thirds of the total grade.

Assessment Activities

Title	Weighting	Hours	ECTS	Learning Outcomes
Practice Unit 1: web archiving	25 %	0	0	CA23, KA35, SA27, SA28
Practice Unit 2: identification and digital signature	25 %	0	0	CA24, KA33, KA34, SA26, SA28
Practice Unit 5: risk analysis and digital preservation	25 %	0	0	CA23, KA35, SA26, SA27, SA28
Practice Unit 6: digital archive	25 %	0	0	CA24, KA33, KA34, KA35, SA27, SA28

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<http://www.dpconline.org/handbook>

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Consultor de los ayuntamientos y de los juzgados: Revista técnica especializada en administración local y justicia municipal. Núm. 7, 2017: La gestión documental en la nueva administración digital

CRUZ MUNDET, José Ramón y DÍEZ CARRERA, Carmen (2015). Los costes de la preservación digital permanente. Ediciones Trea

DURANTI, Luciana (2005). La conservación a largo plazo de documentos electrónicos auténticos. Hallazgos del Proyecto InterPARES,. 1a ed. Cartagena: Ayuntamiento de Cartagena.

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ISO 14721:2003 Space data and information transfer systems -- Open archival information system -- Reference model

ISO 14721:2012: Space data and information transfer systems -- Open archival information system (OAIS) -- Reference model

ISO 16363:2012 Space data and information transfer systems - Audit and certification of trustworthy digital repositories

ISO 16919:2014. Space data and information transfer systems - Requirements for bodies providing audit and certification of candidate trustworthy digital repositories:

ISO 20652:2006 Space data and information transfer systems - Producer-archive interface - Methodology abstract standard

ISO 20104:2015 Space data and information transfer systems - Producer-Archive Interface Specification (PAIS)

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Tabula [Salamanca], núm. 5 (2002): Documentos Electrónicos.

Tabula [Salamanca], núm. 19 (2016): Innovación, participación y diversidad

Tabula [Salamanca], núm. 22 (2019): La gestión de los documentos electrónicos. Normalización y ordenamiento jurídico

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TÉRMENS, Miquel (2013). Preservación Digital. 1a ed. Barcelona: Editorial UOC. 109 p. (El professional de la información; 16)

Software

For online sessions, we will use the Microsoft Teams application.

For practical sessions, although the computers in the computer lab will already be prepared, those who are using their laptops should install the following applications:

Applications for signing and validating electronic records:

- Signador AOC: <https://signador.aoc.cat/signador/installNativa>
- Autofirma: <https://firmaelectronica.gob.es/Home/Descargas.html>
- Digital Signature Service (DSS): <https://ec.europa.eu/cefdigital/DSS/webapp-demo/home>