

Syllabus

Department: Division of Library and Information Science

Course Number and Title: LIS 315 Data Preservation & Access

Bulletin Description Course acquaints students with best practices in digital preservation. Students explore current issues LAM professionals confront within relevant organizations.

Credit: 3 semester hours.

Course Description This course provides both the theoretical and practical knowledge required to understand the processes and techniques involved in creating, organizing, presenting, and using information within the digital environment. As such, this course will cover topics such as: (1) organization, planning, and project management of digital collections; (2) digital content such as media types & standards; (3) metadata formats & standards; (4) technologies & systems; (4) user-center design; (5) preservation; (6) access, and; (6) institutional, societal, and professional issues/challenges.

Prerequisite(s): None

Co-requisite(s): None

Course Objectives

As outcomes of the course, students will/will be able to:

- Identify the key events in the history of digital preservation and access
- Define and apply essential terminology related to data preservation
- Distinguish between the concepts underlying data preservation and digital curation
- Understand the primary issues and challenges within data preservation and curation activities
- Demonstrate familiarity with a variety of data preservation and curation projects worldwide
- Identify standards that are important to the data curation lifecycle
- Identify best practice guidelines and organizations that are creating them for digitization and data preservation
- Discuss the OAIS model and how it fits into the trusted digital repository movement
- Discuss what makes a repository “trustworthy.”
- Identify tools and standards for audit and certification of digital repositories
- Be familiar with the development of institutional repositories
- Explain the data workflow and all the steps involved in major digitization projects

- Be familiar with best practice guidelines and organizations that are creating them for digitization and data preservation
- Select materials for digitization projects and provide sound justifications for these selections
- Select and justify standards and benchmarks for a given digitization project
- Create appropriate metadata for digital objects for access, management, and preservation purposes
- Determine the costs of digitization projects and plan appropriate facilities and resources
- Understand how to manage a digitization project including assessing risk and establishing a quality control program
- Write a well-argued and constructed grant proposal for a digitization, repository building, or digital preservation project

Program Goals and Outcomes

The course contributes towards satisfying the following MS LIS program goal/s:

2A. Understand the concepts, issues, and methods related to the acquisition and disposition of resources, and the management, preservation and maintenance of collections

3A. Understand the principles involved and the developmental, descriptive, and evaluative skills needed in the organization, representation and retrieval of recorded knowledge and information resources

3B. Demonstrate ability to organize recorded knowledge and information using the systems of cataloging, metadata, indexing, and classification standards and methods

4A. Acquire, apply, analyze and assess information, communication, assistive, and other technological skills related to resources, service delivery, professionalism, efficacy, and cost-efficiency of current technologies and relevant technological improvements.

Units of Instruction

Unit	Title
1	Introduction & Data Preservation
2	Institutional Repositories
3	Grant Writing & Funding Sources
4	Digital Preservation & Curation Challenges/Opportunities
5	Data Preservation & Longevity
6	Institutional Readiness for Repositories & Best Practices

7	Data Preservation Landscape Research & Practice
8	Project Planning, Policies & Workflows
9	Metadata for Access, Management, and Preservation
10	File Formats & Storage
11	Selection & Appraisal
12	Trustworthy Repositories & Evaluation
13	Providing Access
14	Disaster Planning
15	Policies & Sustainability

Learning Activities

1. Five to Ten Minute Madness Presentation (5%)
2. First Grant Discussion w/ Instructor
3. Preliminary Report on Grant Application & Meeting w/ Instructor (5%)
4. Preservation Landscape Presentation (5%)
5. Interview Report (15%)
6. Data Curation Scenario Presentations (10%)
7. Grant Presentation (10%)
8. Culminating DTIR Exercise (10%)
9. Grant Peer Review (5%)
10. Grant Proposal (25%)
11. Class Participation (Ongoing) (Padlet) (5%)

Assessment

1. Course-Level Assessment

a) The grant project & individual exercises are designed to reinforce one or more of the course objectives listed above.

2. Program-Level Assessment. The MS LIS program is reviewed every seven years for continued accreditation by the American Library Association's (ALA) Committee on Accreditation. The program's most recent accreditation was in the Fall 2018 term. As part of this accreditation process, all students, faculty, alumni, and employers participate in periodic assessments, providing feedback for improving the MS LIS program. The two assessments below apply to every course in the program.

a) Faculty-Selected Assessment. Over a four year period each course in the MS LIS program is assessed by the instructor to determine how well students are learning the program goal/s related to the course. For each course, faculty select one or more artifacts (e.g. assignment, exam, or semester project) as a representative measure of student learning of the related program goal/s. At the end of the course, the faculty member completes a course artifact assessment form describing the class' performance on the artifact, and any course revisions prescribed as a result. Sample artifacts with their respective reviews are included as well.

In the Data Preservation & Access course, the final grant-proposal project is used as a representative measure of student learning of the related program goal/s.

b) Student-Selected Assessment. The end-of-program assessment is an e-portfolio consisting of student-selected artifacts (assignments, discussion posts, projects, etc.) from their courses as evidence of satisfying each of the eight program goals. For each program goal, students write a reflection which describes the relationship of the artifact to the respective goal and their learning from the artifact.

In the Data Preservation & Access course the final grant-proposal project is suggested as the course artifact should students decide to use their work in this course as evidence of satisfying the related program goal/s. This is because of the comprehensive nature of the project.

Grading Scheme

The course grade will be determined from the following activities. The percent in parentheses is that of the overall course grade.

- a) Discussion (10%)
- b) Individual exercises (65%)
- c) Final Grant-Writing (Proposal) Project (25%)

Bibliography

Owens, Trevor. 2018. *The Theory and Craft of Digital Preservation*. Baltimore, Maryland: Johns Hopkins University Press.

Corrado, Edward M. and Sandy, Heather Moulaison. 2020. *Digital Preservation for Libraries, Archives & Museums*. Maryland: Rowman & Littlefield Publishing Group, Inc.

Instructional Time Requirements: 150 hours for 3 credits (10 hours per week for our 15 week semester)

- Asynchronous or synchronous Lecture
- Assigned weekly reading
- Weekly assignments (individual and group)
- Active participation in online discussions
- Research for semester-long projects (term papers, projects)
- Presentations (online or face to face)
- Academic Service-Learning projects (where appropriate)