LIS 665-02: Projects in Digital Archives
Spring 2012

Class Hours: Fridays 12:00 – 2:20p
Office Hours: Mondays 5-6p, Tuesdays 5-6p, Fridays 11a – 12p, and by appointment
Credits: 3
Prerequisites: LIS 654 (Information Technologies), or by permission
Location: PMC 611

Bulletin Description:

This class is a combination of theoretical, practical and hands-on approaches to digital library creation. Topics will include metadata creation, image capture, archival storage and Web presentation. Students will learn about the theories behind the practices that they will implement, and will gain an understanding about the administrative issues associated with the successful implementation of a digitization project.

Detailed Description:

This course provides an opportunity for students to learn how to create a digital archive, and practice the implementation of such a digital archive with a partner institution. Additionally, students have the opportunity to exercise their creativity in the design of a tool, program, or project that makes use of digital archives for educational or social purposes.

Course Goals:

- Familiarize students with the current discourses in the area of digital archives, including theoretical and practical aspects.
- Introduce students to the digitization of audio and visual materials, and the handling of materials that are born digital.
- Learn about metadata and standards used in digital archive creation, as well as digital infrastructure.
- Anticipate managing digital archives in a time of technical change, including issues related in archiving the web, managing digital rights, and preserving digital content.

Student Learning Objectives:

- Students will be able to digitize analog material into digital form.
- Students will be able to create metadata for a digital archive.
- Students will be able to identify rights issues (legal, ethical, moral) with digitized materials.
- Students will be able to work with a team to design a digital archive using knowledge of information architecture and usability.
- Students will be able to work with a team to implement a digital archive for a small institution using open source software.
Course Schedule and Readings

1/20 – Introduction

- Overview of Syllabus and Projects
- Assign weekly presenters of class readings
- Post a photo of yourself and fill-out your profile on the LMS
- Sign-up for the Society of American Archivists (SAA) Listserv (do not have to be a dues-paying member)
  
  http://www2.archivists.org/listservs

1/27 – Doing Digital Archiving: The Practice of and its Challenges

  http://www.archivists.org/governance/handbook/app_ethics.asp


Further Reading:


Reflection Questions:

Gilliland-Swetland (2000) discusses the use of the “archival perspective” in thinking through the movement of resources to the digital information environment. What is the “archival perspective,” and how is it useful (or not) in thinking about the digital information environment?

2/3 – Archiving Audio


Further Reading:
When working with digital archives, it is common to ask the question, “how much space will we need to save all this material?” For the American Field Service project, approximately how much space will we need just to store the audio (ignoring other data such as meta-data)? We know that we have 35 cassette tapes, and those could run as long as 60 or 90 minutes. However, how long would an interview ideally take? 20 minutes? 30 minutes? How could you find out without listening to every tape? Assume if we used 16-bit/44.1 KHZ stereo audio and create uncompressed files, what is the low-end and the high-end of disk space we would need?

2/10 – Managing Digital Collections


Further Reading:


http://framework.niso.org/node/7
http://framework.niso.org/node/8
http://framework.niso.org/node/18


Archivists Toolkit: http://www.archiviststoolkit.org/
Digitization 101: http://hurstassociates.blogspot.com/
Digitization in the Real World: http://metroblogs.typepad.com/ditrw/

Reflection Questions:

This week’s reading deal with creating and managing digital archives from the perspective of major libraries, universities and governments. What is this perspective, and how might it differ from how individuals manage their digital collections?

2/17 – Digital Infrastructure: Content Management Systems


Further Reading:

Archon - http://www.archon.org/
Duraspace - http://duraspace.org/
Omeka - http://omeka.org/
CollectiveAccess – http://collectiveaccess.org
Greenstone – http://greenstone.org
ContentDM – http://www.contentdm.org/
(Example Omeka site) Digital Amherst - http://www.digitalamherst.org/
(Example Omeka site) digitalMETRO - http://nycdigital.org/
Parallel Archive - http://www.parallelarchive.org/


**Reflection Questions:**

This week we will be discussing content management systems (CMS). CMS are used for storing and publishing digital content, which can be documents, video, audio, etc. Do you have any experience working with any of the CMS mentioned in the two articles. For example, have you used WordPress to create a blog?

**2/24 – Digital Infrastructure: Introduction to Storage, Databases, Networks, and Cloud Computing**

**Storage:**


**Databases:**


**Networks:**


**Cloud Computing:**


**Further Reading:**


Reflection Questions:

This week’s readings and videos discuss the core infrastructure of digital archives: storage, databases and networks. Most (if not all) digital archives make extensive use of these components. In addition, this course section discussed cloud computing, which is an emerging method for acquiring these components (e.g., Library of Congress’ cloud computing pilot project). Of these four discussion topics, which do you feel the most comfortable with? For example, have you ever created or used a relational database (MySQL, Microsoft Access, Oracle)? If so, describe the project and how you used a relational database. How comfortable are you with your understanding of how the Internet works (or other networks such as Ethernet)? How comfortable are you with your understanding of data storage and some of the related concepts, such as RAID? Which component(s) would you like to discuss more fully in this class section?

3/2 - Designing Digital Interfaces: Information Architecture, Usability, and Design Considerations


Further Reading:


Reflection Questions:

This week we will be discussing user interfaces to digital archives. A variety of approaches are discussed in the readings with respect to designing a user interface, from a Web 2.0 approach (Cocciolo, 2010) to one specific to designing a historical website (Cohen & Rosenzweig, 2005). Discuss the readings and a user interface that you love OR hate. Why does it provoke such feelings of love or hate? How did your feelings about it change (or not) after using it for a period of time?

3/9 - Metadata and Standards


Review:

Society of American Archivists, Standards Portal: http://www2.archivists.org/standards

Further Reading:


Join EAD Listserv (Library of Congress): http://listserv.loc.gov/cgi-bin/wa?SUBED1=ead&A=1

EAD Help Pages from Society of American Archivists: http://www.archivists.org/saagroups/ead/


Dublin Core Metadata Initiative, http://dublincore.org/documents

OAIster (search engine for OAI-harvested metadata): http://www.oaister.org

Text Encoding Initiative (TEI): http://www.tei-c.org/index.xml

Reflection Questions:

Many different metadata standards and structuring devices exist for a variety of purposes. Why would you want to adopt a standard metadata schema?
3/16 – Spring Break, No Class

3/23 – Digital Archives in Teaching and Learning


*Further Reading:*


*Reflection Questions:*

Teaching and learning is the cornerstone of our K-12 education system, and one of the most important components of our higher education system. Many archives and libraries are beginning to realize that one way to increase their visibility and impact is to better connect themselves with a teaching and learning mission. What are some strategies to do this, as described by Robyns (2001) and Krause (2010)?

Do you have any teaching experience (either K-12 or higher education)? Have you ever used primary sources in your teaching? Do you think archives should be investing more time and energy in teaching or learning, or are they better off doing other tasks, such as archival management, or working on the “move to digital”?

3/30 – Personal Digital Archiving

**Design Project Proposals due.**


*Review:*
Reflection Questions:

Walker (2011) discusses the growing interest individuals have in their digital afterlife, and discusses some projects and their implications for this emerging area. Marshall (2008) discusses some challenges to personal digital archiving, and offers some strategies for overcoming these challenges.

Given the number of issues presented here (and there are many), what problem do you think is greatest facing personal digital archiving, and what do you think a possible solution to it may be? Does Marshall have it right? Or does one of the solutions that Walker mentions make more sense?

4/6 – Archiving Visual Media


Further Reading:


Reflection Questions:

What are some of the choices that a digitization project has to make? What affects the answers if you are scanning:

- a famous manuscript (e.g. the Declaration of Independence)
- large collections of manuscripts (e.g. the papers of some Senator)
- printed 18th or 19th century books
- recent printed material
- flat works of art (paintings, posters, ....).

Technical Question: A collection of 96,000 4 X 5-inch transparencies is scanned at 400 dpi, 24-bit color, and then losslessly compressed at a 1.3:1 ratio. Calculate the cost of hard disk storage (at .75 cents/GB) needed for this collection.

4/13 – Digital Preservation

Further Reading:


Archive.org: http://www.archive.org/about/about.php


Reflection Questions:

This week’s readings discuss digital preservation. Smith et. al.(2007) discuss the recent thinking on digital preservation, including centralized (e.g., JSTOR) and decentralized approaches (LOCKSS). What approach do you gravitate to?
Have you had any digital preservation challenges in your past experiences (e.g., unable to access digital content) and what were they? How do you imagine that this kind of challenge might by amplified within a library or institutional context?

**4/20 - Web Archiving**


*Further Reading:*


*Reflection Question:*

This week’s reading discusses web archiving. Masanès (2006) discusses why the web should be archived and preserved, and the primary methods for capturing the web. Giving the arguments he provides, do you think libraries and archives should be archiving the web?

**4/27 – Digital Rights Management**


*Further Reading:*


*Reflection Questions:*

Besek (2003) outlines the copyright issues relevant to the creation of a digital archive. What are the issues? Given what she says about copyright, what do you think the implications are for an oral history digital archive (like the LHA project)? Are there other digital rights issues other than copyright that we should be paying attention to?

**5/4 – Design Project Presentations**
Textbooks, Readings, and Materials

No textbook is required for this course. All readings are available online via the LMS (http://lms.pratt.edu).

Course Requirements

Students’ course grades will be determined by performance on the following activities:

1. Class Participation (20%)
2. Weekly Responses (20%) – 11 responses required over the course of the semester
3. Digital Archive Creation Project (25%)
4. Design Project (25%)
   4a. Proposal (2-5 pages) (5%) – due March 30
   4b. Design Document (5-10 pages) (15%) - due May 4, last day of class
   4c. Presentation (5%) – present on May 4, last day of class
5. Self-assessment (10%) – due May 4, last day of class

Class Participation

Students are expected to be prepared and to contribute to class discussions each week with scholarly analyses and insights. In addition, each week one student or a team of two students will present their understanding of the readings to the class. This is an opportunity to consolidate your (or your team’s) understanding on a topic, to present your perspective, to make novel connections to other domains, and to relate the readings to real-world experience. Presenters may use the essential questions posed (available on the LMS) to guide their presentations, or may choose their own direction in discussing the readings. Presenters should be prepared to make around a 10-15-minute presentation, and conclude with some questions or issues they would like to discuss more thoroughly. Remember that everyone in the class has read the week’s readings, so it should not simply be a summarization of what we have already read.

The schedule of presenters will be decided on the first day of class.

Weekly Responses

Each week, students are expected to write at least two paragraphs that reflect on the readings. Reflections can be in response to the essential questions posted on the LMS. Students responses should be posed on the LMS by 11am (at the latest) on the day of class (late responses will receive a reduced grade). Please do not bring in a hard-copy or email unless the LMS is unavailable. The purpose of these responses is to allow students the opportunity to reflect on the readings and share their reflections with the other members of the class. Students are encouraged to read the responses by their fellow classmates (this is, however, not a requirement). Based on interests, students may choose two weeks NOT to do a weekly response. This means by the end of the semester, each student should have posted 11 responses.

Please note that the instructor will refer to these responses during class discussion and may ask students to further clarify or expand on their response.

Digital Archive Creation Project (DACP)

The objective of the Projects in Digital Archives course is to provide students with the theoretical, practical and hands-on experience in digital archive creation. In order to provide the most relevant and realistic learning experience for...
students, students will digitize an actual archival collection and develop the means of access to that collection through creating a web-presence.

This semester, we will be working with The Archives of the American Field Service and AFS Intercultural Programs (aka AFS Archives). AFS can trace its origins to 1914 shortly after the outbreak of World War I, when young Americans living in Paris volunteered as ambulance drivers at the American Hospital of Paris. During the Second World War, AFS ambulance drivers were one of the earliest responders to the atrocities inflicted by Nazi Germany. More information on the AFS Archives can be found here: http://www.afs.org/afs-history-and-archives/about-the-archives/archival-collections/.

We will be working to digitize a collection of oral histories available on audiocassette from WWII ambulance drivers recorded during the later half of the 20th century. In order to digitize the materials, each student will be responsible for digitizing approximately a few tapes. In addition to students digitizing a few tapes, students will be placed in groups based on interests to carrying-out the project:

- Research and Collection Development: Research the cutting edge in digital archiving; bring ideas and research to enrich the collection; providing any auxiliary materials (photos, etc.) that could augment the experience.
- Metadata: Develop a metadata plan; import digital materials into the CMS
- Technology: Responsible for setting-up and installing the Content Management System, working with the design team to integrate the design.
- Design: Responsible for designing the look and feel of the site (graphics, colors, user experience, usability).

More information on this project will be made available as the course progresses.

**Design Project**

**Overview**

Each day, the web expands with new web pages, tweets, status updates, videos, files, links, among many other types of contributions. With the deluge of new information, a challenge associated with contributing any primary source materials to the web is making it meaningful to users. Relatedly, what constitutes a “digital archive” is continually evolving (e.g., Twitter is now archived at the Library of Congress). Your challenge is to design your “ideal” project, tool, or program that could be used to accompany the digital archive being created for the AFS. Unlike that archive we will be creating, this project is more about designing—not fully implementing—some digital archiving idea you are interested in. You should consider the ways in which your project, tool or program makes the content interesting, relevant or useful to new or existing users.

The class will be divided into design groups; these are the same groups as for the Digital Archive Creation Project. Time will be provided in class for groups to meet; however, meeting out of class time may be required. Each group will be expected to deliver a project proposal, a project design document, and a presentation on the last day of class. Details on these aspects are below:

**Proposal**

The Proposal should be 2-5 pages and outline the idea for your project. The proposal should be considered a less fully-fleshed-out version of the project design document (see below). The instructor will provide feedback on the proposal which you can use in further refining your project.
**Design Document**

The project design document should be 5-10 pages, and can include figures and diagrams. This document should take the form of a traditional document (hence, it should not be a Powerpoint or in a presentation form). The design document should address:

a) What is the purpose of your project?

1) Why do we need it?
2) What materials will you use for this project?
3) What educational or learning goals will motivate this effort, if any?
4) What populations of users (if any) will be served?
5) What type of community (if any) will be fostered by this effort?
6) What role (if any) will librarians or archivists play in this project?
7) What will be the size of this effort?
8) What resources will be required?
9) How will the project be assessed?

b) What are the features and functions of the project? Please be specific.

c) Implementation: What do you think would be involved to make this design a reality? Provide estimations.

d) What does the literature and research on digital archives offer in thinking about this project?

**Presentation**

Each group will get 15 minutes to present, and a 5 minute question and answer period. Each group should:

a) Make it fun and educational! Be creative! We have all been subject to ill-prepared or low-energy presentations- avoid it!

b) Discuss the goals, why your project is needed, and what makes your project innovative.

c) Provide a way of demonstrating your design to the class. These may include electronic illustrations (Powerpoint), an interactive simulation, or large paper/drawing presentations. You may also want to consider handouts for the class.

**Self-Assessment**

In one or more pages, reflect on your contribution to the Digital Archive Creation Project (DACP) and the Design Project. What role did you play in each? What were your specific contributions? How would you rate your performance, and how does it compare to your fellow group members? Please submit by the end of the final class electronically via the LMS.

**Assessment and Evaluation**

1. All assignments must completed in order to receive a passing grade in the course
2. SILS is going green: assignments must be turned in electronically via the LMS. Late assignments will receive a reduced grade
4. Late papers will receive a grade but no comments
5. Pratt policy: Students with extensive absences (three or more for any reason) will be required to drop the course.
Pratt’s grading scale:

- Superior work: A 4.0 (96-100)  A- 3.7 (90-95)
- Very good work: B+ 3.3 (87-89)  B 3.0 (83-86)  B- 2.7 (80-82)
- Marginally satisfactory: C+ 2.3 (77-79)  C 2.0
- Failed: F 0.0 (0-69)

Policies

All Institute-wide policies are listed in the Bulletin under “Community Standards,” which include policies on attendance, academic integrity, plagiarism, computer, and network use. Students who require special accommodations for disabilities must obtain clearance from the Office of Disability Services at the beginning of the semester. They should contact Mai McDonald, Disability Services Coordinator, in the Office of the Vice President for Student Affairs, Main Building, Lower Level: 718-636-3711.