Class Hours: Tuesdays 6:30 – 8:50p  
Office Hours: Mondays 5-6p, Tuesdays 5-6p, Fridays 11a – 12p, and by appointment  
Credits: 3  
Prerequisites: LIS 652 and LIS 654, or by permission  
Location: PMC 611  

**Bulletin Description:**

This course will examine the current state of digital libraries in a new context. We will look at: the history and background of digital libraries; particular areas of digital librarianship including digitization, preservation and subscription and other third party resources. Finally we will look at communities of practice that can be served by digital libraries, with emphasis on the shifting world of learning, scholarship and play.

**Detailed Description:**

This course will cover the theoretical, practical and technical aspects involved in creating, using, and deploying digital libraries. Students will study the evolution of digital libraries, consider the relationship between digital libraries and their social, spatial and technical elements, and collaboratively design a digital library or a new program or service related to digital libraries. Additionally, students will have the opportunity to enact their design vision using digital tools in the small-scale build-out. Students will be asked to think creatively and critically about the future of digital libraries and where to best direct future development effort.

**Course Goals:**

- To become familiar with the history and evolution of digital libraries, particularly with respect to the changing socio-technical environment that digital libraries are situated.
- To understand the current and emerging tools and methods used to curate, facilitate access to, and preserve digital objects.
- Apply the latest research and one’s creativity to collaboratively design an innovative digital library or related service.

**Student Learning Objectives:**

- Students will be able to work with a team to implement a digital library using open source software.
- Students will be able to create metadata for digitized and born digital materials
- Students will understand the issues and best practices in digitizing materials.

**Course Schedule and Readings**

1/17 – Introduction

- Overview of Syllabus and Digital Library Project
- Assign weekly presenters of class readings
- Post a photo of yourself and fill-out your profile on the LMS

1/24 – Defining Digital Libraries


Further Reading:


**Essential Questions:**

How does Witten, Bainbridge and Nichols (2010) define a digital library? How might have new developments over the last decade have changed how we view digital libraries (e.g., the extensively annotated photo collections available in Facebook).

1/31 – Contemporary Digital Library Projects: Uses and Applications


Further Reading:


Duraspase - http://duraspace.org/
Omeka - http://omeka.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/
(Example Omeka site) Elvis at 21 - http://160.111.252.141/elvis/

Essential Questions:

This week’s articles discuss two digital library projects. Choose one to discuss. What did the authors see as the “big challenges” these projects presented?

2/7 - Wither the Physical Library? Spatial Considerations and Digital Libraries

We will not be meeting in-person during this class because I will be presenting at the iConference in Toronto. Instead, this week’s class we will be meeting virtually (asynchronously, meaning that we won’t meet at some predefined time). Rather, please post your weekly response to the LMS, read the responses of your fellow students, and respond to two of your classmates. I will be responding to posts as well.


Further Reading:


Essential Questions:

When one speaks of a “digital library,” it can easily be construed as what comes after or replaces the [physical] library. In the field of LIS, there is ongoing discussion and debate regarding what to do with the physical library (as discussed by Cocciolo, 2010) and how it should relate to its digital counterparts (e.g., websites, digital libraries, digital displays, mobile devices, etc.). What is your vision for the relationship between physical and digital libraries?

2/14 – Preparing materials for the Digital Library: Analog Visual Stills


Further Reading:


**Essential 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.

**2/21 - Preparing materials for the Digital Library: Other Formats**

Please select a section to read based on the types of materials you will be working on (or hope to be working on) for your group project. You may choose to go through more than section.

**Analog Audio to Digital**


**Analog Video to Digital**


**Further Reading:**


**Born Digital**


**Essential Questions:**

Which section did you cover (e.g., Born Digital, Analog Video to Digital, Analog Audio to Digital)? What do you think are the most important aspects about preparing the material you will be working with for use in a digital library?

**2/28 – Metadata and Identifiers**

Further Reading:


Essential Questions:

Witten, Bainbridge, and Nichols (2010) discuss a wide-variety of metadata formats for a variety of content types. Pick a metadata format and discuss. Why would you want to use it? Why wouldn’t you want to use it? Why even bother to use the format that someone else came up with?

3/6 – Social Media and Digital Libraries


Further Reading:


Essential Questions:

Cocciolo (2010) discusses creating an institutional repository using a Web 2.0 or social media perspective, and Shirky (2005) discusses knowledge organization from a similar perspective. Do you gravitate to this perspective? What do you like and what do you dislike?

3/13 – Spring Break; No Class

3/20 - User Interface, Usability and Human Factors in Digital Libraries


Further Reading:


Jakob Nielsen’s Alert box: http://www.useit.com/alertbox/


Essential Questions:

Discuss the reading in terms of 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?

3/27 – Purchasing Digital Libraries: Subscription and Third-party resources


Further Reading:


Essential Questions:

Past class sessions have dealt with designing your own digital library. This week's readings deal with subscribing to digital libraries owned by third parties. What are the issues involved in making a digital library available to your patron community when the content is owned by someone else?

4/3 - Integration and Interoperability


Further Reading:


OAI for Beginners - the Open Archives Forum online tutorial http://www.oaforum.org/tutorial/

Open Archives Initiative homepage - http://www.openarchives.org/
Essential Questions:

This week’s reading discusses communication formats developed for sharing information within a digital library context (Z39.50, OAI-PMH, DOIs, OpenURL and Web Services). Why would you want a digital library (or other digital system) to interoperate with other digital libraries (or other digital systems)? If you can think of an example, please share.

4/10 – Computation and Automation in Digital Libraries


Further Reading:


Essential Questions:

Berthard and Wetzler (2009) discusses a strategy for automating quality control in a digital library. How does this system work? Do you think quality control in a digital repository will or should move to an algorithmic approach (rather than the peer review approach that was described in the article)?

4/17 - Preservation of Digital Content


Essential Questions:

The Digital Preservation Management tutorial highlights that technology is not the only obstacle to digital preservation but that it is an assemblage that has three components: organization, technology and resources.

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 be amplified within a library or institutional context? Would you be interested in being a “Chief Digital Preservation Officer,” and if so, what would your agenda be (for some given institution of your choosing)?

4/24 – Evaluating Digital Libraries


Further Reading:


Essential Questions:
Read Chapter 1 of Evaluating Digital Libraries: A User-Friendly Guide, and then pick one evaluation
method that interests you and discuss. The evaluation methods are broken down into the following
chapters: 3) Service Evaluation, 4) Usability Evaluation, 5) Information Retrieval, 6) Bibliometrics
Evaluation, 7) Transaction Log Analysis, 8) Survey Methods, 9) Interviews and Focus Groups, 10)
Observations, and 11) Experiments.

5/1 – Digital Library Project Presentations.

Design Documents are due.

Textbooks, Readings, and Materials

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

Supplementary Texts:
The following texts are available at the PMC Library:

Witten, I. H., Bainbridge, D. & Nichols, D. M. (2010). How to Build a Digital Library (2nd ed.).
Burlington, MA: Morgan Kaufmann.

Association.


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 Library Project (50%)
   a. Proposal (2-5 pages) (10%) – March 27, 2011
   b. Design Document (10-15 pages) (15%) - due May 3, last day of class
   c. Small-scale Build-out (15%) – due May 3, last day of class
   d. Presentation (10%) – present on May 3, last day of class
4. Self-assessment (10%) – due May 3, 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 in response to the essential questions
posted on The LMS. Students should respond to the question on the LMS by noon (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 (except for April 12, which is an online class). 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 Library Project

Overview

The primary assignment for the course is to participate in a team that will draw on the digital libraries research and literature to design and build-out a digital library or a new program or service related to digital libraries (e.g., facilitating access to and/or preserving digital objects). Members of the class will work on designing a new digital library project (something that does not exist), or choose to work on a project that has already been started (to varying degrees) but needs further work. The class will be divided into groups of five, with approximately four members, focusing on the following areas:

**Group 1 and Group 2: New Digital Library Project**

These two groups should aim to design a new project that does not yet exist. Groups should use this opportunity to be innovative and think creatively and critically about digital libraries (What is a digital library? What counts as a digital library? Why do we need this?). This project could be “picked-up” by an outside agency (a library, university, venture-capitalist, foundation, technology company, non-profit, think-thank, etc.) and fully implemented using your group’s design materials as a guide. In order to ensure innovativeness, teams should consider the work being done by outside agencies and ask: does our project have something to offer that these projects don’t? Why is our project innovative?

**Group 3: Oral Histories of the American Jewish Joint Distribution Committee**

This group will be working with the American Jewish Joint Distribution Committee (a.k.a. the Joint or JDC) to digitize a collection of spoken word archives available on audiocassette. The JDC is a worldwide relief organization headquartered in New York. It was established in 1914 and is active in more than 70 countries. In 1944, the JDC made it possible for 81,000 Jews to emigrate out of Nazi-occupied Europe to safety. After the war, the Joint worked to transition and resettle the devastated European Jews to Israel and to countries across the globe. Today, the Joint runs humanitarian relief programs, providing food, medicine, home care, and other critical aid to the elderly and children in need. More information on the JDC can be found at [http://www.jdc.org](http://www.jdc.org).

**Group 4: The Dalton School, Video Collection to Digital**

The Dalton School is a not-for-profit, private K-12 school based on the Upper Eastside of Manhattan. Founded in 1919 by Helen Parkhurst, the school today is considered one of the best college preparatory schools in the country and is one of the most selective schools in New York City. This group will be working to create a digital video archive from a collection of VHS tapes from the school’s archive. The goal is to make such material available to interested alumni, students and faculty, and secondarily as a resource on the history of the school. More information on the Dalton School can be found at [http://www.dalton.org](http://www.dalton.org).

**Group 5: An Institutional/Academic Archive for the Pratt SILS LMS program**

Like many academic programs, the Library Media Specialist program (LMS) at Pratt SILS needs to maintain digital records of student work for the purpose of accreditation. Accreditation agencies (e.g., Middle States for general education,
or NCATE for teacher accreditation) need evidence of the breadth and depth of student work. As is the case for much work produced today, this student work is largely born digital. This program will work with the LMS program (in particular, the coordinator of the program, Prof. Jessica Hochman), to envision and build-out an archive for the LMS. This archive could be envisioned more broadly as an institutional archive for Pratt SILS, or for Pratt Institute in general. Working on this project should provide students with experience in developing an institutional archive within the context of a higher education environment. More information on the LMS program can be found at: http://www.pratt.edu/academics/information_and_library_sciences/degree_programs/library_media_specialist/.

Proposal

The purpose of the Proposal is to outline:

1) The doable by the end of the semester: What functions and features will you include in the build-out of your digital library, which you will deliver on the final day of class?
2) The Ideal: If you were not constrained by time, and had a budget (which you would determine), how would this project function ideally?

Design Document

The project design document should be 10-15 pages (this page count can include figures, but not references or other appendices). The design document should more fully article “The Ideal” project that you began to article in your proposal.

a) What is the purpose of your project?

1) Why do we need it?
2) What extent (if at all) does your digital library make use of the following? What extent (if at all) does your project use or re-imagine the following?

- meta-data, identifiers, folksonomies, tags, preservation, storage, databases, networks, applications, subscriptions, third-party resources, integration, interoperability, computation, automation, social media, Web 2.0, user interface, usability, human factors, law, economics, technology

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 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) Include one or more prototypes of the project. These prototypes can come generated electronically (Adobe Illustrator, Photoshop, Powerpoint, etc.) or by-hand (drawings on paper, etc.). These prototypes should strive to be more than sketches; they should be visibly assembled with care.

i) Screen shots: What would a user see when interacting with this system? What elements make up the user interface (if any)?

ii) Diagrams: Illustrations that convey flows or networks of interaction.

iii) Visualizations: How would you convey the design’s social and/or human interactions? Be creative.

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

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

Small-scale Build-Out (SSBO)
The SSBO provides students with the opportunity to enact their design vision using digital tools. Each group will be responsible for building-out their digital library to the extent to which was described in the proposal. This could include using open source digital library application, such as Greenstone or Omeka, to build a small digital library collection that reflects the overall intent of the digital library project. Students can use free services available on the web (e.g., Omeka.net), use their own webserver space (e.g., godaddy.com), or use Pratt SILS’s webserver (prattsilso.org), which the instructor can provide access to.

Presentation

Each group will get 15 minutes to present, and a 5-10 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 prototypes 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 Library Project. What role did you play in it? 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.

Course Assessment and Evaluation

1. All assignments must completed in order to receive a passing grade in the course
2. Assignments must be turned in electronically using 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.