University of Michigan School of Information

SI 640 DIGITAL LIBRARIES AND ARCHIVES

Winter 2017 Syllabus

Meeting Time: Monday, 8:30 AM to 11:30 AM
Location: North Quad 2245
Credits: 3

Instructor: Carl Lagoze
Office: 4444 North Quad
Office Hours: by apt.
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E-Mail: clagoze@umich.edu

Syllabus Version: January 9, 2017

Description
This course focuses on the past, present, and future of digital libraries and archives as objects of research, practical applications, and manifestations of the future of existing libraries and archives. The course takes a sociotechnical perspective, viewing digital libraries and archives as more than technical artifacts, and arguing that their development and possibilities are driven by a range of social, policy, legal, and cultural realities. At the same time, one of the primary goals of the course is to introduce students to and give them the opportunity to gain proficiency in the fundamental skills necessary to make contributions to the continued evolution of libraries and archives to the digital context. A key theme that will run throughout the course is the meaning and relevance of the library vis-à-vis the encompassing networked (Web) information context. Accordingly, we will spend the beginning of the course trying to situate and define the role of the library and archive in the contemporary information infrastructure and will revisit the framing of this problem throughout the semester as we examine components - technical, practical, social, etc. - of the digital library. Students will be expected to master a diverse literature, to participate actively in the discussion of issues, and complete individual and group assignments that reinforce understanding of tools, technologies, trends and directions of digital libraries and archives.

Objectives

- Understand digital libraries and archives both in the context of “traditional” libraries and archives and the web information space
- Understand the key tools and technologies underlying digital libraries and archives and their applications
- Establish a broad context for the issues and challenges facing digital libraries and archives, particularly building content, developing metadata frameworks that support
preservation and access, evaluating the digital library experience, and adapting to the changing information context in which they exist.

- Develop a foundation for critiquing existing digital libraries and archives and suggesting improvements.
- Participate in the ongoing dialogue about the challenges and opportunities for libraries and archives to rethink themselves in the Internet age.

**Student Responsibilities**

**Attendance:** Students are expected to attend all class sessions. Since classroom interaction and discussion are part of the course grade computation, failure to attend will have a negative impact on your grade. If you believe that there is a circumstance in which you must miss class, please notify the instructor by email in advance.

**Reading:** Each week of the class will include an assigned a set of readings from course textbooks, supplemented by selected readings. Almost all the supplemental readings will be posted on Canvas. In some cases, licensing restrictions do not allow copying of content, in which case a URL to the readings will be supplied. Again due to licensing restrictions, in some cases this URL will not be accessible outside of the university network. Each student is responsible for completing these readings before coming to class. Most class sessions will include time for discussion of readings assigned for that week. This is the time for students to demonstrate their growing expertise with the material through intelligent questions, thoughtful criticism, accurate synthesis, and helpful contributions.

**In-class exercises:** Occasionally, when appropriate for the class topic, there will be in-class exercises allowing students to demonstrate their growing proficiency with material in the class. All in class exercises will be graded on a scale of -1 (no submission), 0 (submission not adequate), 1 (adequate submission). Most in-class exercises will be submitted on paper, so please bring paper and writing implements to class for this purpose.

**Digital library discovery:** There is an abundance of digital library implementations available through the Internet. Some of them are modest collections of simple PDF or HTML documents with basic search functionality. Some are ambitious, extending far beyond what was possible in the world of paper and ink. Students will be assigned to “discovery groups”. Each week of the semester, one discovery group will give a 15-20 minute presentation/demo/critique of a digital library of note selected by the group. There are no rules for selection other than 1) the digital library shall not have been presented thus far in the semester, and 2) it should be notably interesting and innovative in services and/or content. The presentation should describe the nature of the collection, services offered, and distinguishing features of the implementation.

**Assignments:** There are four individual assignments due throughout the semester. See the assignments section of this syllabus for more details.

**Grade computation**

The contribution to the final grade for each student responsibility is as follows.
### In-class engagement
<table>
<thead>
<tr>
<th>Assignment</th>
<th>Percentage</th>
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<tr>
<td>1</td>
<td>15%</td>
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<td>2</td>
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<td>3</td>
<td>20%</td>
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<tr>
<td>4 - Final paper</td>
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**Regrades**

The granularity of the grading scheme for the course (small amounts of points for numerous assignments) should make regrades rare. In some cases, however, a student may wish to review their grade with the instructor. Please note the following policies regarding a grade review:

- All grade discussions may only occur face-to-face during office hours or by special appointment. Emails regarding grades should not be submitted and will be ignored.
- When appealing a grade, students should be aware that a reevaluation of the assignment by the instructor may result in a lowering of the grade.
- Grades may only be discussed within seven days of the date that the assignment was returned to the student.

**Late policy**

Late submissions will not be accepted.

**Resources**

Weekly lecture slides, additional resources for class assignments and other related materials will be posted on the class Canvas site.

**Academic Integrity**

Academic honesty and responsibility are fundamental to our scholarly and professional community. Students are responsible for maintaining high standards of conduct while engaged in course work, research, dissertation or thesis preparation, and other activities related to academics and their profession. It is expected that students will abide by the provisions of the Rackham Graduate School Policy Statement on Academic and Professional Integrity: [http://www.rackham.umich.edu/StudentInfo/Publications/GSH/html/APPC.html#1](http://www.rackham.umich.edu/StudentInfo/Publications/GSH/html/APPC.html#1)

That said, I strongly believe in the benefits of students learning from each other. Therefore, I encourage you to share information with your fellow students related to understanding aspects of the course and information resources that might help complete an assignment. Use your best judgment about where the line lies between information sharing and failure to do individual work and thinking. If you have any questions, please come to me.

**Students with Disabilities**

Any student who feels that he/she may need an accommodation for any sort of disability, please see me during office hours or email me to make an alternative appointment.
Classroom computer use

Ubiquitous, pervasive computing (via laptops, tablets, phones, and other mobile devices) has a mixed impact on the classroom environment. On the one hand, it allows students to look up and explore information during classroom discussions, work sessions, and lectures. On the other hand, even when used with good intent, for example looking up information, it can be a distraction from thinking and interacting in the classroom, and in the worst case, for example browsing Facebook pages or email, can be completely counterproductive to the purpose of the classroom environment. Therefore, I ask you to restrict your use of computing devices to notetaking and occasional information lookup and put your energy in the class and where it belongs; listening, contributing, and thinking.

Communication with the instructor

I am a strong believer in the power of face-to-face communication. Also, I really enjoy talking to students. Therefore, if you have questions, comments, critiques, or suggestions I encourage you to come to office hours or, if that is not possible, email me to set up a special appointment. Emails for other purposes are discouraged. On the other hand, email is my best vehicle for communicating important announcements, late-breaking changes, or helpful hints to students. All course email from me will originate from Canvas. Students are responsible for tracking that mail.
<table>
<thead>
<tr>
<th>Class</th>
<th>Subject</th>
<th>Assignment</th>
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<tbody>
<tr>
<td>WK1: 1/9</td>
<td>Overview: What is a (digital) library?</td>
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<td>1/16</td>
<td>MLK Day: no class</td>
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<td>WK2: 1/23</td>
<td>Overview: Interoperability and the State-of-the-art</td>
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<td>WK3: 1/30</td>
<td>Digital objects: Entities and identifiers</td>
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<td>WK4: 2/6 *</td>
<td>Structuring data: markup, schema, and namespaces</td>
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<td>WK5: 2/13</td>
<td>Describing content: Introduction to metadata and metadata standards</td>
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<td>WK6: 2/20</td>
<td>Application Profiles and crosswalks</td>
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<td>2/27</td>
<td>Spring break: no class</td>
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<td>WK7: 3/6</td>
<td>Text and documents</td>
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<td>WK8: 3/13</td>
<td>Compound digital objects; METs, Fedora, OAI-ORE</td>
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<td>WK9: 3/20 *</td>
<td>Repositories and federation; DSpace, OAI-PMH, SWORD</td>
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<td>WK10: 3/27</td>
<td>Intellectual property: Creative Commons, scholarly communication, open access</td>
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<td>WK11: 4/3</td>
<td>Data curation</td>
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<td>WK12: 4/10 *</td>
<td>Linked open data</td>
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<td>WK13: 4/17</td>
<td>Wrap up</td>
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<td>4/18</td>
<td>No Class</td>
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SI 640 DIGITAL LIBRARIES AND ARCHIVES:
Winter 2016 Reading Schedule

Textbooks (All are on 4hr reserve at Shapiro)


WK1: What Is a (Digital) Library?

• Calhoun, Chapter 1 (available online at http://www.alastore.ala.org/pdf/Calhoun_sample.pdf)


WK2: Interoperability and the state-of-the art

• Witten, Chapter 1,7

• Calhoun, Chapter 2

• Lewis, Introduction and Ch. 1-2


WK3: Digital Objects: Entities and identifiers

• Lewis, Ch. 4-5


• Lewis, Part Two

**WK4: Structuring data: markup, schema, and namespaces**


• *W3Schools XML tutorial*, [http://www.w3schools.com/xml/default.asp](http://www.w3schools.com/xml/default.asp)


• Lewis, Ch. 6, Intelude

**WK5: Describing content: Introduction to metadata and metadata standards**

• Whitten, chapter 6

• Lewis, Step one, two


• VRA Core Element description, [https://www.loc.gov/standards/vracore/VRA_Core4_Element_Description.pdf](https://www.loc.gov/standards/vracore/VRA_Core4_Element_Description.pdf)

**WK6: Application profiles and crosswalks**


• Lewis, Step three, four

**WK7: Text and documents**

• Witten et al. (2009) Ch. 4

• Lewis, Step five, six, and conclusion

• Van den Branden, R., Terras, M., and Vnahoutte, E. TEI by Example. http://www.teibyexample.org/. Tutorial 0: Introduction to Text Encoding and the TEI is available at: [http://www.teibyexample.org/modules/TBED00v00.htm](http://www.teibyexample.org/modules/TBED00v00.htm)


**WK8: Compound digital objects; METs, Fedora, OAI-ORE**


**Week 9: Repositories and federation; DSpace, OAI-PMH, SWORD**

• Calhoun, Chapter 4


**Week 10: Intellectual property: Creative Commons, scholarly communication, open access**

• Calloune, chapter 8, 9


**WK11: Data curation**


**WK12: Linked open data**


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Assignments

NOTE: These are just drafts of the assignments to give you an idea of time commitments. The actual assignment with full details will be available on Canvas at the assignment opening date.

Assignment 1: What is a (digital) library or archive? (due January 23, 8:30AM)
in the first lecture and in the readings for the first week, we looked at what distinguishes a library or archive be it physical or digital, and what it means for it to transition from physical walls and physical resources to the networked environment. Sit down with your web browser and look around the web to find four sites that provide some sort of digital content. The content can be text, audio, video, software, or any other medium in digital form. Two of the sites you choose should be exemplars of what you consider to be a “digital library”. The other two sites should not be exemplars of this. For each site, supply the following information:

1. URL of the site home page
2. Title of the site
3. Institution or organization holding responsibility for the site
4. What are the characteristics of the site that have led you to classify it as a digital library or as not a digital library. Your determination should be based on an informed and generalized notion of what is a library; e.g., what are the services, organizational structures, assurances, etc. that distinguish a library from a content repository.

Note that there are no “correct answers” to this assignment. I expect and look forward to a variety of perspectives on the definition of the library. We will take time in class on January 23 to review some of your answers, so be prepared to verbally justify your decisions.

Assignment 2: Metadata (due February 24, 11:30PM)

Assignment 3: Complex digital content (due March 27, 8:30AM)

Assignment 4: Designing/imagining a digital library/archive (due April 24, 11:30PM)