INLS 740 Syllabus

INLS 740-01W

INLS 740 Digital Libraries: Principles and Applications (Online)

Spring 2018
Online Class

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Course Description

For more than a century, people have dreamed of a future in which all the information of the world could be summoned to an inquiring scholar at a whim. From Paul Otlet's World Brain, to Vannevar Bush’s Memex, to Google’s company mission to "organize the world’s information and make it universally accessible and useful," it is a dream of universal organization without the physical and bureaucratic barriers of traditional libraries. This vision held a special weight in the 1990s, when the increasing availability of personal computers and the invention of the Web seemed to be harbingers of a new, universally available, interconnected global information infrastructure. Hundreds of millions of dollars of public and private grants were granted to thousands of projects under the new banner of "digital library" (DL) initiatives.

Like any Utopian scheme, the reality of DLs seem disappointing in contrast to these lofty claims. Looking back from 2017, we find a hodgepodge of heterogeneous systems, standards, communities, and practices in the digital world that seem as far from universal compatibility as ever. Gone, too, are the days when the pot of money for "digital libraries" projects flowed freely.

However, that does not mean that there is nothing we can learn from the DLs and the literature about them—quite the opposite. The same motivations and issues evident in that work are still at play, even if it is clear that "digital libraries" will not be a silver bullet that renders the information organization problems of the 20th century moot. In and out of libraries, people must reckon with the intractable problems that millions of people have experienced in creating and using DL systems, including standardization, project management, metadata interoperability, and distributed communication. Anyone who must routinely interact with large-scale networked information systems—that is, everybody—would do well to reckon with them.

This course presents you with an opportunity to pull apart the tangled web of standards, systems, technologies, and arguments
that underlie the distributed information infrastructures that have, for the past twenty-five or so years, been termed "digital libraries." It will not present a set of state of the art technologies to learn, since they will be inevitably outdated by the time you find your next job. Instead, its goal is to encourage you to practice thinking critically and contextually about the sorts of projects and initiatives that you will encounter and take part in throughout your life–professional, academic, or otherwise.

A note on online classes:

While online classes are convenient, they also demand extra effort from both instructors and students to maintain consistent participation. Since we will not be in the same room together, we all must make an effort to post to Sakai and keep our conversations going. Most of this class will take place on the Sakai forums and Wiki.

Course Requirements

- Short response essays to start forum discussions (25%)
- Participation in discussion in forums (15%)
- Individual assignment 1: Describing a DL system (20%)
- Individual assignment 2: Describing a standard (20%)
- Final exam (20%)

Grading

Based on current UNC grading scales, the following grades and corresponding numeric ranges are applicable:

<table>
<thead>
<tr>
<th>Grad Grade</th>
<th>Range</th>
<th>Definitions*</th>
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<tbody>
<tr>
<td>H</td>
<td>95-100</td>
<td>High Pass</td>
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<tr>
<td>P</td>
<td>80-94</td>
<td>Pass</td>
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<tr>
<td>L</td>
<td>79-79</td>
<td>Low Pass</td>
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<tr>
<td>F</td>
<td>69 or Below</td>
<td>Fail</td>
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*Definitions are from: [http://registrar.unc.edu/academic-services/grades/explanation-of-grading-system/](http://registrar.unc.edu/academic-services/grades/explanation-of-grading-system/)

General Format

This class will revolve around weekly readings and discussions.

Each date given for a week in the schedule is a Monday. That date is when we will begin discussing the listed readings, NOT when you should start reading them. For example, when you see the following week in the schedule:
Week 4 (Feb. 5): Library automation and the rise of library consortia

Group C

...list of readings...

It means that you should have completed the listed readings by February 5, and we will be discussing library automation and library consortia that week (Feb. 5–9).

Every Thursday afternoon, I will post an introduction for the following week in the "Lessons" section of Sakai. In the example above, I would post this on Thursday, February 1. My introduction will contextualize the readings, give examples of relevant systems or practices, and raise some questions for the upcoming week’s discussion. **Do not think that you should wait for me to post an introduction before you start reading!**

Each week, a third of the class will post a response essay around which the upcoming week’s discussion will begin. It is your turn to post a response if you are in the group listed in red for the given week. Look at Wiki page on Sakai to determine your group assignment. If it is your turn to submit a response, you should post them in the relevant forum by **the Sunday night before the week begins.** Again, in the above example, if you are in Group C, you would post your response in the forums by 11:59PM on Sunday, February 4.

While we will all be reading the same things at the same time, **if it is your group's turn to respond in the upcoming week, you should probably start reading a bit earlier than you normally would.**

See the first assignment below for a description of the format of a response essay.

Assignments

**Materials. All materials can be found in Sakai.** The course syllabus, schedule, assignments, and other resources will be there.

1. **Short response essays to start forum discussions (25%)**
   Every three weeks, you will post a short (750-1000 word) essay to the discussion forum inspired by the readings for that week. Responses should not be summaries of the readings, but rather a riff on some point or theme you found interesting in one or more of the readings. You are more than welcome to reference outside literature as long as it is relevant.

2. **Participation in discussion in forums (15%)**
   I expect all students to regularly participate in the forums even when it is not their week to write a response essay. You should respond to your classmates' response essays on Monday or Tuesday to build on or ask questions of their arguments. You are also encouraged to your own topics, whether that is in the current week's discussion, a previous week's discussion, or the special forums for general questions and posting articles.

3. **Individual assignment 1: Describing a DL system (20%)**
   You will write an essay (~2000 words) on a digital libraries project of your choosing. I recommend skimming the
lists of projects presented in Week 3, but you are welcome to choose another. You must discuss your choice with me. The questions your essay should address include (but are not limited to):

- In what sense is this project a digital library?
- What are its institutional affiliations?
- How was it funded?
- What community is it meant to serve?
- When was it started? Does it still exist in any sense?

Additionally, you will write an annotated bibliography of sources relating to this project.

After a round of feedback and editing, you will post this paper in Sakai.

We will discuss these requirements more in Week 3.

4. Individual assignment 2: Describing a standard (20%)
You will choose one of the systems that you or one of your classmates wrote about in Assignment 1, and write an essay (~2000 words) about one standard in use in that system. The questions your essay should address include (but are not limited to):

- When was this standard started and how has it progressed?
- Who are the creators of the standard, and what are their institutional affiliations?
- What problem was it meant to address?
- Are there other existing standards that cover similar ground?
- (IMPORTANT) Why do you think this system uses this standard? What does it gain by doing so? Are there any issues with its use that you can find?

Additionally, you will write an annotated bibliography of sources describing or referring to this standard.

We will discuss these requirements more in Week 7.

5. Final exam (20%)
You will have a final exam consisting of a number of multiple choice and short answer questions.

Late work & Extension

Late work: If you submit an assignment late there is a 10% point penalty.

Extensions: Depending on circumstances and the date requested, extensions will be granted at the discretion of the instructor. If you anticipate needing an extension, please set up a meeting to discuss it as soon as possible. Asking for extensions at the last minute will not be regarded with welcome except for extreme circumstances.

Course Communication
Course announcements. Announcements will be posted on Sakai. Announcements may include information about the week's work, or other timely information.

Messages. I may use the message tool to send individual messages to you; I may also copy the message to your email address. You can also use the tool to send a message to me.

Email. Email is the best way to contact me. I try to reply to student emails within 48 hours, there are times that it may take me 2-3 days to reply.

Schedule

Week 1 (Jan. 15): Introduction

- Read the syllabus
- Introduce yourself in the forums
- Jeffrey Pomeranz: History of Digital Libraries Part 1, Part 2
- Mark Kornbluh: Digital Libraries and Infrastructure

Week 2 (Jan. 22): Definitions of digital libraries

Group A


Week 3 (Jan. 29): Digital Library funding and project management

Group B


Some lists of funded projects:

- Digital Libraries Initiative - Phase 2
  - Project announcement
  - Homepage
- NSF grants containing "digital libraries"
- Mellon Foundation grants containing "digital libraries"
- Carolina Digital Library (archived)

**Week 4 (Feb. 5): Library automation and the rise of library consortia**

**Group C**


**Week 5 (Feb. 12): Standards**

**Group A**

Week 6 (Feb. 19): Identifiers

Group B


Skim this article for an introduction to Web URIs from a more technical, non-library perspective:


Week 7 (Feb. 26): Semantic Web/Linked Open Data (Metadata and representation)

Group C

Assignment 1 due by 11:59pm on Feb. 28


Skim this report to get a sense of some current ongoing projects:


Optional reading detailing efforts to replace MARC:


**Week 8 (Mar. 5): Search and discovery**

**Group A**

**Z39.50 & federated search**


For some option background reading on the Z39.50 standard, which is mentioned in Coyle and Smith and described in its nascent state by McCoy, consult:


Optionally, read the following article, which describes the Search/Retrieve via URL (SRU) protocol, which is meant to be the successor to Z39.50:


**DPLA & aggregating content for discovery**


**Week 9 (Mar. 12):**

No class, spring break
Week 10 (Mar. 19): Digitization and preservation

Group B


Week 11 (Mar. 26): Collection development

Group C


Week 12 (Apr. 2): Annotation

Group A


Recently, the W3C promoted several standards by the [Web Annotation Working Group](http://www.w3.org/2011/08/annotationwg/) to "Recommended" status. Thompson and Barbera both make references to these standards (under the name Open Annotation Core). Please skim the [Web Annotation Data Model](http://www.w3.org/2011/08/annotationwg/annotation-model/) to get a sense of what the standard contains. More interesting to us, however, is the set of use cases that the W3C Open Annotation Community Group came up with concerning digital publishing. Review the [Digital Publishing Annotation Use Cases](http://www.w3.org/2011/08/annotationwg/dpub-use-cases/) and think about whether it covers annotation use cases in Digital Libraries.
Week 13 (Apr. 9): Content management systems and integrated library systems

Group B


Week 14 (Apr. 16): Evaluation of DLs

Group C


Week 15 (Apr. 23): "Digital Libraries" going forward

Assignment 2 due by 11:59pm on Apr. 25