

**LIS 2670 DIGITAL LIBRARIES**  
School of Information Sciences  
University of Pittsburgh  
Spring 2012

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## SYLLABUS

### Description

The purpose of the LIS 2670 Digital Libraries is twofold. First, it intends to provide each student with a substantial background bearing on the development and role of digital libraries, with particular emphasis on the role that digital libraries, digital repositories, and content management systems play in support of contemporary scholarship. The second aim of the course is to provide each student with a series of "hands-on" experiences that provide a familiarity with and understanding of the uses of some of the key applications and systems that have been developed, mainly in the open source environment, for use in digital libraries and related settings, with an emphasis on collection building. (For Spring 2012, those applications include Archon, CONTENTdm, Drupal, DSpace, Evergreen ILS, IR Plus, Islandora, Fedora, and several systems developed under the Public Knowledge Project.)

Login



DSpace Home

### Debons: the DSpace Repository at SIS

This repository is named in honor of Anthony Debons, one of the founders of the discipline of information science. It is part of an experiment aimed at the development of a virtual computing laboratory at the School of Information Sciences, University of Pittsburgh, and is supported in part by Amazon Web Services. This instance supports a collaboration between LIS 2670 Digital Libraries and LIS 2674 Digital Preservation for Spring 2011.

### Search DSpace

Enter some text in the box below to search DSpace.

### Search DSpace

[Advanced Search](#)

### Browse

- All of DSpace
  - [Communities & Collections](#)
  - [By Issue Date](#)
  - [Authors](#)
  - [Titles](#)
  - [Subjects](#)

### My Account

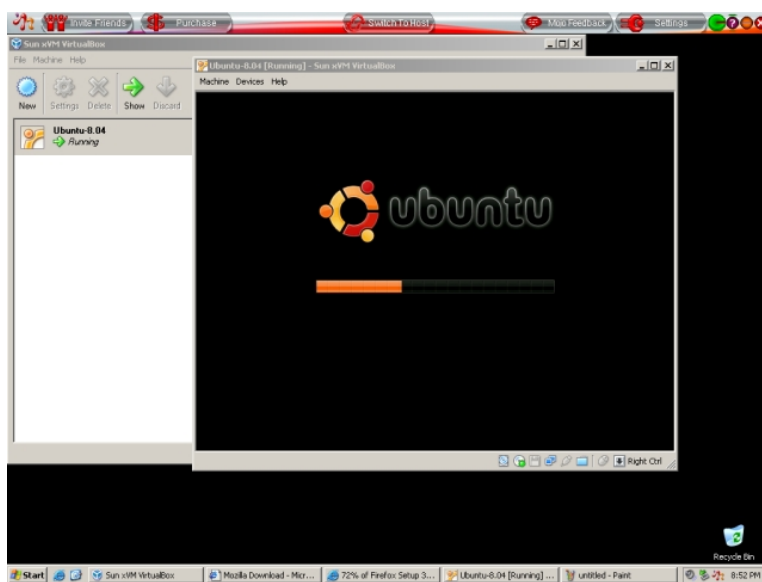
- [Login](#)
- [Register](#)

### Communities in DSpace

Select a community to browse its collections.

- [MLIS Program](#)

An ongoing segment of the course will be concerned with cloud computing and the use of virtualization as a basis for automated library and archival services. Students will be provided the means to construct virtual machines on personal computers and subsequently install and run versions of the systems central to this course. Cloud computing services, as provided by Amazon Web Services and OCLC, will also provide the basis for access to several systems, including CONTENTdm, DSpace, and Evergreen, and Islandora. (Oracle's VirtualBox, which is available free-of-charge for Apple, Microsoft, and Linux systems, will be used as the basis for virtualization on personal computers. For additional information, see <http://www.virtualbox.org/>.) In addition, the course will delve into a number of related areas, ranging from e-books to learning management and digital publishing systems.



Pursuant to these ends, there will be on-campus classroom sessions on the following dates: January 5, 12, 26, February 2, 9, 16, 23, March 15, 22, 29, and April 5, 12, 19. The classroom sessions will be recorded using Panopto. Face-to-face sessions will begin at 9:30 a.m. On-campus students are expected to attend the classroom sessions; online students are required to review the Panopto recordings of those sessions. (For weeks during which no classroom session is scheduled, other recordings will be presented for review.)

There will also be an online chat session each week. The online chat sessions will begin on Thursday, January 12 at 9 p.m., Eastern Standard Time. (The initial sessions will employ Blackboard's Office Hours applet, but it is expected that another conferencing tool, WebEx, will be used later in the term.) Participation in the online chat sessions is optional. All of the sessions will be archived and available for future reference.

## **Course Objectives**

- Apply key library and archival principals to digital library programs
- Establish a context for the issues and challenges facing digital libraries and archives
- Understand the development of digital libraries and archives in socioeconomic and technical terms
- Specify and apply the critical skills required to build and maintain digital collections
- Explore the relevant literature, key leaders, and significant digital library/archive programs

## **Readings**

There is no textbook for the course. A general set of readings is available under the COURSE DOCUMENTS folder on CourseWeb. Readings relevant to specific topics will be identified during the course of the term.

## **Computing Resources**

Each student will receive a set of user credentials, i.e., userID and password, that have been created for this course and which will provide access to all of the systems that are used in the course. These credentials should not be shared. An array of resources related to the course, including readings and software, is available at <http://bing.exp.sis.pitt.edu:8080/webdav/>, in the folders labeled lis2670\_readings, lis2670\_software, and lis2670\_tutorials.

## **Grading**

The grade for the course will be determined by the performance on 5 assignments. (See below.) The assessment of student performance on each assignment will be based on compliance with the terms of the specific assignment and in accord with rubrics that will be distributed through CourseWeb in advance of each assignment. Work submitted after a specified due date will be accepted only if the student has the explicit permission of the instructor; otherwise, such work will be assigned zero grade points.

## **Academic Integrity**

Students in this course will be expected to comply with the [University of Pittsburgh's Policy on Academic Integrity](#) Any student suspected of violating this obligation for any reason during the semester will be required to participate in the procedural process, initiated at the instructor level, as outlined in the University and SIS Guidelines on Academic Integrity.

## **Students with Disabilities**

If you have a disability that requires special testing accommodations or other classroom modifications, you need to notify both the instructor and the [Disability Resources and Services](#) no later than the 2nd week of the term. You may be asked to provide documentation of your disability to determine the appropriateness of accommodations. To notify Disability Resources and Services, call 648-7890 (Voice or TTD) to schedule an appointment. The Office is located in 140 William Pitt Union.

## **Office Hours**

On-campus office hours will be maintained on Thursday afternoon of each week, from 1-3 p.m. Online students and on-campus students unable to take advantage of the posted office hours will need to make individual appointments.

## **Bibliographic Issues**

In the matter of questions of formatting for papers and other presentations, students should refer to the latest edition of the *Chicago Manual of Style*. (See [http://www.chicagomanualofstyle.org/tools\\_citationguide.html](http://www.chicagomanualofstyle.org/tools_citationguide.html) as a source for answering basic questions about formatting.)

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## **COURSE SCHEDULE**

### **Introduction**

- Review of Goals and Objectives; Course Requirements, Policies, and Procedures (January 5)

### **Standards and Technologies**

- History of Library Automation and Digital Library Development; Introduction to Library Automation (January 12, 26)
- Computing and Networking Infrastructure for Digital Libraries and Archives (February 2, 9)
- Key Digital Archiving, Library and Repository Systems (February 16, 23)
- Content Management/Collaborative Systems; Learning Management Systems; Mobile Computing Applications (March 15, 22)

## **Building Digital Collections**

- Digitization & Manipulation of Digital Objects (March 29)
- Metadata Issues (April 5)
- Design and Workflow Issues (April 12)
- Case Studies on Building Digital Collections (April 19)

## **ASSIGNMENTS**

**Assignment 1:** Assess a digital library collection and/or service. The assessment should be based on explicit criteria, including (but not restricted to) content, presentation, navigation, and accessibility. The assessment should include a justification for the selection of the collection or service under review. 750-1000 words. Due January 19. (10 points)

**Assignment 2-1:** Using Archon, a digital archiving system developed at the University of Illinois and known locally as Room 608 -- see <http://50.17.193.184/archon/> -- create and describe a collection of 15 items. The collection you create should consist of digital images assembled in accord with a specific theme. Due February 9. (15 points.)

**Assignment 2-2:** Prepare a report of 750-1000 words comparing Archon and ICA AToM in terms of suitability for use in archives. The report should include a specific recommendation and pertinent examples supporting it. Due February 23. (10 points)

**Assignment 3:** Build a subject collection of materials, using [Debons](#), the DSpace installation for this course, as the medium for construction. The collection should include at least 25 unique items, incorporating text and Web-based audio and/or video materials. Due March 15. (15 points)

**Assignment 4:** Build a collection using CONTENTdm that integrates related images and textual materials. The collection should include 15 unique items, on a subject or theme of your choice. Due March 29. (15 points)

**Assignment 4-2:** Build three composite documents using CONTENTdm. Each document must consist of at least 5 related objects. Due April 5. (15 points)

**Assignment 5:** Prepare a systematic comparison of Evergreen and Koha for the purposes of recommending an integrated online library system for use in a medium-sized public library. Also provide a recommendation for building an open source content management system to run in parallel with the library's IOLS and defining the roles for such a system. The report should be approximately 1000 words in length. Due April 16. (20 points)