IST 666: Digital Libraries
University at Albany, College of Computing and Information
Department of Information Studies
Summer 2012
TTH 9:00-12:30pm

Instructor:
Catherine Stollar Peters

Contact Information:
Email: cspeters@albany.edu
OR Email through Blackboard
Cell phone: (to be used only in emergencies) (512) 573-0081
Office location: Draper 113

Office Hours:
By appointment as arranged by student and instructor

Course Description:
This course will focus on practical methodology and techniques for creating and managing digital libraries. Topics covered in the course include collection development and selection, project management, digitization, metadata, organization, access, use and evaluation of digital libraries, and preservation. Students will research and discuss the history of digital libraries as well as current issues relating to digital libraries, evaluate existing digital libraries, and learn hands-on methods of developing a digital library. Upon completion of this course, students will have a foundation for future research in digital libraries and should be able to participate in the planning and management of digital libraries.

Course Objectives:
By the end of the course, students should be able to complete the following course objectives:
• Understand the foundation of digital library research and development;
• Demonstrate an understanding of practical skills and theoretical concepts related to digital library development, management, use, and preservation;
• Understand and be able to implement national digitization and metadata standards; and
• Understand concepts in data and digital object interoperability, use, and reuse.

Optional Text:

Readings:
Articles are available online and through Blackboard. Links for readings were checked July 7, 2012.

Course Expectations:
Students are expected to attend every class, participate in class discussions, complete assignments on time, and complete a final class project.

**Late/Missed Work, Absence, and Academic Dishonesty**
Please consult the Graduate Bulletin and go to [http://www.albany.edu/grad/requirements_general_admissions.html#academic_standards](http://www.albany.edu/grad/requirements_general_admissions.html#academic_standards) for the criteria to be considered to receive extensions for late work and to understand what counts as an excusable absence. The Graduate Bulletin also provides information regarding cheating, plagiarism, or disruption of class. Please read this information and understand that your failure to comply with the University’s published code of student conduct shall result in disciplinary penalties that range from failing a class assignment to dismissal from the University. (From Güney’s INF 721 Syllabus).

**Assignments and Grading:**

*Review of Existing Digital Library (10%)*
In groups of 2-3, students will review an existing digital library and present the results of their review to the class in a 10-15 minute presentation. A list of potential digital libraries to review will be provided on the second day of class (only one group may review each digital library.)

The review will include (but not be limited to) discussion of management, content, technical infrastructure, and access. Students should address the following questions in their review:

- **Management**
  - Who owns or manages the digital library?
  - What is the digital library owner’s purpose or goal in making the collection available?
  - How long has it been available?
  - Is the digital library run by one institution or a consortium?

- **Content**
  - What topics are covered in the digital library?
  - Is a metadata standard used? If so, which one(s)?
  - Does the digital library hold material from multiple institutions?
  - How is content organized in the digital library?

- **Technical Infrastructure**
  - What software does the digital library use to run the library?
  - Was the software programmed in-house or is it an off-the-shelf software package?
  - What file formats are the digital objects stored in? Are the preservation formats different from access format?

- **Access**
  - Who is the audience for the digital library?
  - What sort of searching and browsing features are provided?
  - Is copyright information available for the digital library? If so, what is the copyright policy for the digital library?
Quality Control Assignment (25%)
After discussing digital image creation, students will perform quality control on a sample image. Students will be provided a sample image and a list of imaging requirements for an imaging project. Each student must determine if that image meets appropriate quality standards or if the image needs to be re-scanned. Students will submit a written evaluation of the image.

Students will also digitize two text-based objects using a variety of settings and evaluate the quality of OCRing each version. You can use objects that will eventually be included in your final project.

Metadata Assignment (15%)
Students will be given a MARC XML record to transform into MODS and then transform again into Dublin Core XML.

Metadata Post (5%)
Students will post a short response on a metadata standard and present their findings to the class.

Final Project (40%)
There are two options for the final project in this class. All options can be completed independently or in groups of two. If you do choose to work in a group, the final product should reflect the efforts of the number of people working on the project. On the final week of class, students will present their work to the rest of the class. I need to approve your topic and the option you choose (listed below). You will write a one-paragraph proposal describing your final project option choice and topic and submit it to me (due July 24, 2012).

Option A: Digital Library Plan
This option for the final project requires students to create a digital library plan using the literature from Class 4: Project Management and Planning Digital Library Projects. This plan should be in-depth and should cover all sections outlined in the Hughes reading. Include knowledge learned in this class to write your plan (e.g., suggest a metadata schema for describing content of digital objects.) Make sure to include a description of the repository for which the plan is intended. This plan should be in-depth, should cover most topics discussed during the course, and should be in the range of 15-25 pages.

Option B: Digital Library Prototype
Create a digital library prototype. The prototype should be online and should include at least 10 digital objects that can be accessed through search and browsing. A metadata schema must be used to organize information about the digital objects (which means each object will have an XML file). A short write-up of the prototype as well as the URL of the digital library will be submitted as the final project.

Participation (5%)
This course requires active participation in class discussion by all students. Prior reading of assigned course material is vital for participation. Attendance alone is insufficient for earning the full 5% of your participation grade; you must take an active role as a student in the course to earn the full 5%.

More details will be provided for assignments as they are assigned.

Assignment weights:

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Grading scale:

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Scores will not be rounded. The exact grade percent earned will be used to determine letter grade.
## Schedule and Readings:

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<th>Date</th>
<th>Topics and Readings</th>
<th>Assignment Due</th>
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| 7/10 | **Class 1: Introduction to Course**<br>Post definition of “Digital Library” on Blackboard on discussion board for next class. Come to class prepared to defend why your definition is the best.  
| 7/12 | **Class 2: Overview and Current State of Digital Libraries**  
| 7/17 | **Class 3: Digital Library Architecture and Design**  
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| 7/19  | 4     | Class 4: Project Management and Planning Digital Library Projects  
- Optional: Reese, Jr. and Banerjee Chapter 1. |
| 7/24  | 5     | Class 5: Metadata I  
| 7/26  | 6     | Class 6: Metadata II  
|       |       | Final Project Proposal Due |
|       |       | Metadata Post and Presentation |
**7/26**

### Class 6: Metadata II
- Reese, Jr. and Banerjee Chapter 7.
- Optional: Reese, Jr. and Banerjee Chapters 4, 5, and 6

Metadata Assignment: Students given MARC XML record to transform into MODS and then transform into Dublin Core XML Record. (due 7/31)

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**7/31**

### Class 7: Working with Images
You can skim all of these readings for class.
- Moving theory into practice: Digital imaging tutorial (2003.) available at:
  [http://www.library.cornell.edu/preservation/tutorial/contents.html](http://www.library.cornell.edu/preservation/tutorial/contents.html)
  [http://www.dlib.org/dlib/march09/powell/03powell.html](http://www.dlib.org/dlib/march09/powell/03powell.html)
- Use these resources for reference. Skim for class.
### Class 8: Working with Manuscripts, Texts, Video, and Multimedia


### Class 9: Intellectual Property


### Class 10: Users, User Interfaces and Usability; Digital Library Evaluation

8/09 | **Class 10: Users, User Interfaces and Usability; Digital Library Evaluation**  

8/14 | **Class 11: Digital Archiving and Preservation**  
**Required reading:**  

**Optional:**  
- (Or if the introductory guide isn’t enough) Reference Model
I reserve the right to alter this syllabus with timely notice to students. I will announce any changes in class and/or notify students by email in sufficient time to avoid misunderstandings.