

**Long Island University
Palmer School of Library and Information Science
College of Education, Information and Technology
LIS 654 Building Digital Libraries
Fall 2016
Via Blackboard**

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Office Hrs.: Post campus: in person or by-phone, 11:00-3:00PM, Tuesday and Wednesday,
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Course Description

The class will focus on developing digital libraries. During the course, we will consider the various definitions of digital libraries in theory and practice. Topics to be covered include: selection criteria, copyright, digitization, metadata, navigation, and project management. The main project will be the creation of a small digital library. Students will create fully functioning digital libraries. They also will appraise, select, digitize, describe, and make available digital materials. Experience with scanning equipment, imaging software, and HTML editors is helpful.

Objectives

Palmer School Learning Objectives:

Students will

2B: Use system for organizing and structuring information and knowledge (also for LIU Outcomes Assessment)

3A: Evaluate and use information resources and services to meet the needs of specific users and communities.

Upon successful completion of this course, students will be able to:

- Be familiar with various definitions of digital libraries
- Understand how copyright law applies to digital libraries
- Understand the digitization process
- Utilize equipment to digitize various materials
- Be able to determine the best delivery method for various materials
- Understand the advantages and disadvantages of various file formats
- Become knowledgeable with various metadata schemes and their various components
- Be familiar with various controlled vocabularies
- Understand online user behavior and create suitable navigation

Required textbooks and readings

1. D-Lib Magazine (<http://www.dlib.org/>)
2. Digital Humanities Quarterly (<http://www.digitalhumanities.org/dhq/>)
3. Digital Libraries Curriculum Development (http://en.wikiversity.org/wiki/Digital_Libraries)

Course assignments:

All written assignments must be double-spaced, one-sided, and typed in font-size 11 (Times New Roman). A title page must include project title and the name of the student.

1. **Analysis report** (a written report, 10-12 pages, and a 10-15 slide PPT file) Students should choose the type of digital library collection based on his/her personal interests/knowledge. The purpose of the analysis report is to establish fundamental knowledge for the 2nd and 3rd assignments.
 - Choose one digital library project using the CONTENTdm system. You can find projects from the OCLC CONTENTdm site (<http://www.oclc.org/contentdm/>) or IUPUI University Library Digital Collections (<http://www.ulib.iupui.edu/digitalscholarship/works>). Based on the type of the collection, you are required to pick a non-CONTENTdm digital library project to finish the assignment.
 - You must select the two DL projects carefully so you can learn clear ideas for your 2nd and 3rd assignments (building your own DL project).
Required elements for the comparison:
 - Background of the two digital library projects
 - Scope of the digital library collection (i.e., time period, material types)
 - Search interface and available search functions
 - Display of the search results
 - Display of the records
 - Access to the collections (i.e., how can use get a physical and/or digital copy?)
 - Key screen shots supporting your observations and discussion
 - References

Grading criteria for 1st assignment:

To meet the Palmer Learning Objective **3A**: Evaluate and use information resources and services to meet the needs of specific users and communities.

- Students must provide concrete examples (screen shots) from the selected DL project to answer all questions.
- Headings or subheadings should be used to present the report.
- Students also need to list references at the end of the report. The citation style is the student's choice (e.g., APA, MLA, Chicago).

2. **Digital library prototype presentation** (a PowerPoint file, 10-15 slides)

Each student is required to digitize 15-20 objects to present a prototype project. The objects will be the student's choice (e.g., family photos, personal essays). Copyrighted materials should not be used in this class. The presentation must include the following components:

- Metadata elements
- Record format (e.g., the description of the record, image format)
- Manipulation of one single record
- Search interfaces and functions
- Display formats of the search results

Grading criteria for 2nd assignment:

To meet the Palmer Learning Objective **2B**: Use system for organizing and structuring information and knowledge (also for LIU Outcomes Assessment)

- Provide visual examples for the required components
- Provide sufficient consideration for the design of the prototype
- Provide sound technological knowledge
- Present the project professionally

3. **Final project presentation** (a written report, 10-12 pages, and a 10-15 slide PPT file)
Each student must use CONTENTdm to implement the prototype digital library project with a collection of 50 objects or more. Each student is asked to update his/her Assignment #2 (a PowerPoint presentation), and to turn in a detailed project document. The document must include the following items:
- A general description of the digital collection
 - The digitization procedure and information (e.g., file format, digitization quality)
 - The metadata standard and description rules
 - The search interface and functions
 - The display of search results
 - Defined access methods
 - Students must provide screen shots to explain the design ideas
 - Headings or subheadings should be used to present the document.
 - Students also need to list references at the end of the document. The citation style is the student's choice (e.g., APA, MLA, Chicago).

Grading criteria for 3rd assignment:

To meet the Palmer Learning Objective **2B**: Use system for organizing and structuring information and knowledge (also for LIU Outcomes Assessment)

- All search functions must be working
- All objects must be described by metadata elements
- A defined search interface
- Search results must be displayed in a meaningful order
- Defined access methods

CONTENTdm information

*****Download and install CONTENTdm information**

1. This is a PC only system. Please find a PC for this class.
2. Go to <http://www.contentdm.org>
3. You need to create an account with CONTENTdm. The account should be an email address.
4. Click on "Register" Organization ID is **LIUN5724**.
5. "Download" >> "Other downloads">>"Project Client" (The current Version is 6.1.2.)
6. Follow Windows' installation instructions and the serial number is **26J2B-ET53C-9P3J4-5DJ2J**.

*****Working on your DL project:**

1. Before working on your DL project, you need to create an account with Worldcat (<https://www.worldcat.org/>).
2. Then you send me your WorldCat account. I will create a collection for you.
3. Open Project Client.
4. **CONTENTdm server URL is: <https://server17013.contentdm.oclc.org>**
5. Log in with your WorldCat account and password. (*****You have to write down your own account and password**).
6. Choose your collection. (*****I will name your collection with your last name, i.e., Smith's Collection.**)
7. You must use "Project Client" to upload your objects. After finishing that step, you can use "Project Client" or a web interface at <http://cdm17013.contentdm.oclc.org> to "**catalog**" your objects.

8. You view your DL project at <http://cdm17013.contentdm.oclc.org>

Grading:

1. Assignment #1: 20%, (**due date: Monday, 10/10**), 5% PPT presentation and 20% written report.
2. Assignment #2: 25%, (**due date: Monday, 11/7**), 20% PPT presentation.
3. Assignment #3: 25%, (**due date: Monday, 12/5**), 5% PPT presentation and 20% written report.
4. Class participation: 30%, Weekly discussions: **#1, 9:00PM, Wednesday, #2, 9:00PM, Sunday (all Eastern Time)**. You will get 1 point when posting 1 message in time. Week 1 only has one message (2 points). 2 messages X 14 weeks= 28 points. When you post all messages in time, you will get 2 bonus points at the end of the semester. 30 points total.

Total: 100%

Rubric: Assignment #1 and #3

Criteria (Weight)	Evaluation (farthest to right checked box = points assigned)					
	Excellent		Good		Poor	
	Quality		Quality		Quality	
Grammar and Writing Style	Proper grammar, syntax, & spelling; good sentence and paragraph structure; prof'l appearance		Basic spelling accuracy; good use of grammar and syntax; slightly professional appearance		Many spelling errors; inconsistent grammar or syntax; poor paragraph structure; unprof'l appearance	
Timeliness and Currency	Selection of topic appropriate to class; citations are current; accurate factual comments		Selection of topic appropriate to class; some current citations; accurate factual statements		Topic not relevant; lack of citations; inaccurate statements	
Integration of Articles in Discussion	Outside scholarly articles cited; discussion is integrated		Outside scholarly articles cited; discussion not integrated		No outside scholarly articles cited; discussion not integrated	
Clarity of Exposition	Points made are clear, make sense, and are logical; includes reflection in exposition; facts are interpreted not just stated		Points made but not interpreted; very little reflection; facts primarily just stated and not explained		No clear point or message in writing; no reflection or interpretation; no substantive facts	
Accuracy of Statements Made	Comments made are supported empirically; no false claims; no misinterpretations		Some confusion in understanding but not detrimental; lack of understanding but no false claims		Writing is "wandering" and not focused; little to no empirical grounding; many false comments	
Adherence to Guidelines	All guidelines in syllabus followed accurately		Most guidelines in syllabus followed accurately		Few guidelines in syllabus followed accurately	

Proper Usage of Scholarly Sources and Citations	Appropriate citations included (both topically and proper sources)	Most but not all citations accurate and appropriate; cited works mentioned but not all formatted properly	Few if any scholarly citations included; lack of in-text citations; lack of cited references
Overall Appearance	Professional appearance, neatness, formatting, adherence to guidelines	Acceptable in appearance; could be neater or presented in a more business-like fashion	Generally not professional in appearance; pages damaged, not collated; not adhering to guidelines

Letter grade	GPA	Definition
A	4.0	<i>Outstanding achievement.</i> Student performance demonstrates full command of the course materials and shows a high level of originality and/or creativity that far surpasses course expectations; grammatical errors, misspellings, and typos are minimal or non-existent.
A-	3.7	<i>Very good work.</i> Student performance demonstrates thorough knowledge of the course materials and exceeds course expectations by completing all requirements in a superior manner; grammatical errors, misspellings, and typos are minimal (average one-two per page) or non-existent.
B+	3.3	<i>Good work.</i> Student performance demonstrates above-average comprehension of the course materials and exceeds course expectations on all tasks as defined in the course syllabus; grammatical errors, misspellings, and typos are present (average two-three per page).
B	3.0	<i>Adequate work.</i> Student performance meets designated course expectations, demonstrates understanding of the course materials, and is at an acceptable level; grammatical errors, misspellings, and typos are present (average four-five per page).
B-	2.7	<i>Marginal work.</i> Student performance demonstrates incomplete understanding of course materials; grammatical errors, misspellings, and typos are frequent (average six-ten per page).
C+	2.3	<i>Unsatisfactory work.</i> Student performance demonstrates incomplete and inadequate understanding of course materials; grammatical errors, misspellings, and typos are very frequent (average 11-14 per page) and adversely affect the structure and flow of the narrative.
C	2.0	<i>Unacceptable work.</i> Student performance demonstrates incomplete and inadequate understanding of course materials; grammatical errors, misspellings, and typos are ubiquitous (average 15 or more per page) and adversely affect the structure and flow of the narrative.
F	0.0	<i>Failing.</i> Student failed to turn in an assignment or plagiarized.

Required readings:

Journal articles: available at BlackBoard and arranged by the first author's last name.

Citation formats:

Students are free to choose the following three writing styles:

- APA (American Psychological Association)
- MLA (Modern Language Association)
- Chicago (The Chicago Manual of Style)

Tutorials for the styles are available at <https://owl.english.purdue.edu/owl/>

Plagiarism and academic misconduct:

Students must fully understand the gravity of copyright and plagiarism issues. Inappropriate activity in these areas will be handled accordingly. Detailed information is available at:

<http://www2.liu.edu/cwis/cwp/library/exhibits/plagstudent.htm>

Late Submissions

In fairness to students who turn in assignments on time, late papers will be penalized. The earned grade will be lowered one grade level (e.g., from A- to B+) for each day that the assignment is late.

Students with Disabilities or Special Needs:

Please feel free to contact the instructor via email or in person early in the semester to discuss any modifications that may be necessary to accommodate special needs.

Course schedule

Week	
1, 9/7-11	Introduction <ul style="list-style-type: none"> • Read the syllabus carefully • Preview Digital Libraries Curriculum Development (http://curric.dlib.vt.edu/modDev/modDev.html) • Preview CONTENTdm (http://www.oclc.org/contentdm.en.html)
2, 9/12-18	DL projects <ul style="list-style-type: none"> • American Memory (http://memory.loc.gov/ammem/index.html) • New York Heritage Digital Collections (https://www.nyheritage.org) • LIS 654 projects (http://cdm17013.contentdm.oclc.org/) • COTENTdm projects (http://www.oclc.org/en-US/contentdm/collections.html) • Greenstein, D., & Thorin, S. E. (2002). The Digital Library: A Biography (No. 109). Washington, DC: Council on Library and Information Resources. (http://www.clir.org/PUBS/reports/pub109/pub109.pdf)
3, 9/19-25	CONTENTdm Lab I Install "Project Client" from CONTENTdm <ul style="list-style-type: none"> • CONTENTdm is a PC-based system. You need to have a PC. • Mac users need to run a software, Boot Camp, for the PC environment (https://www.apple.com/support/bootcamp) • Go to http://www.contentdm.org • Create an account to download "Project Client" • Log into CONTENTdm • Click "Download" • Find "Other downloads" >>Project Client Read Online Help Version 6 http://www.contentdm.org/help6/projectclient/index.asp
4, 9/26-10/2	Digital Library Evaluation, User Studies Zhang, Y. (2010). Developing a holistic model for digital library

	<p>evaluation. <i>Journal of American Society for Information Science and Technology</i>, 61(1), 88-110. (BlackBoard)</p> <p>File Formats, Transformation, and Migration</p> <p>Arms, Caroline R. and Carl Fleischhauer. Sustainability of Digital Formats: Planning for Library of Congress Collections. (http://www.digitalpreservation.gov/formats/index.shtml)</p> <p>Digitization</p> <ul style="list-style-type: none"> • Cornell University Library. (2000). Moving theory into practice: Digital imaging tutorial. https://www.library.cornell.edu/preservation/tutorial/
5. 10/3--9	<p>Collections</p> <p>Henry, G. and Spiro, L. (2010). <i>Can a new research library be all-digital?</i> in <i>The Idea of Order: Transforming Research Collections for 21st Century Scholarship</i>, Washington, D.C.: Council on Library and Information Resources, pp. 5-80. (BlackBoard)</p> <p>Metadata</p> <p>Weibel, Stuart. (1995). Metadata: The Foundations of Resource Description. <i>D-Lib Magazine</i>, 1(1). (http://www.dlib.org/dlib/July95/07weibel.html)</p> <p>DL architecture</p> <p>Arms, W. Y. (1995). Key Concepts in the Architecture of the Digital Library. <i>D-Lib Magazine</i>, 1(1). (http://www.dlib.org/dlib/July95/07arms.html)</p>
6, 10/10-16	Assignment #1 presentation
7, 10/17-23	CONTENTdm Lab II
8, 10/24-30	<p>Information Needs/Relevance</p> <p>Salwasser, J., & Murray-Rust, C. Assessing the need for a natural resources digital library. (http://www.istl.org/02-winter/article2.html)</p> <p>Online Information Seeking Behaviors & Search Strategies</p> <p>Lown, C., Sierra, T., & Boyer, J. (2013). How users search the library from a single search box. <i>College & Research Libraries</i>, 74(3), 227-241. (http://crl.acrl.org/content/74/3/227.full.pdf)</p>
9, 10/31-11/6	CONTENTdm Lab III
10, 11/7-13	<p>Assignment #2 presentation</p> <p>Interaction Design & Usability Assessment</p> <p>Bates, M. J. (2002). The Cascade of Interactions in the Digital Library Interface. <i>Information Processing and Management</i>, 38, 381-400. (BlackBoard)</p> <p>Indexing and Searching</p> <p>Lossau, N. (2004). Search Engine Technology and Digital Libraries, "Libraries need to discover the academic content." <i>D-Lib Magazine</i>, 10(6). (http://www.dlib.org/dlib/june04/lossau/06lossau.html)</p> <p>Image Retrieval</p> <p>Datta, R. Joshi, D. Li, J. Wang, J.Z. (2008). Image Retrieval: Ideas, Influences, and Trends of the New Age. <i>Computer Surveys</i>, 40 (2), 5:1- 5:60. (BlackBoard)</p>
11, 11/14-20	<p>Reference Services</p> <p>Nilsen, K. (2004). The Library Visit Study: user experiences at the virtual reference desk. <i>Information Research</i>. (http://www.informationr.net/ir/9-</p>

	<p>2/paper171.html)</p> <p>Recommender Systems Smeaton, A. F. and Callan, J. (2005) Personalisation and recommender systems in digital libraries. <i>International Journal on Digital Libraries</i>, 57 (4). pp. 299-308. (BlackBoard)</p> <p>Infrastructure Henry, G. (2012). <i>Core infrastructure considerations for large digital libraries</i>. Washington, D.C.: Council on Library and Information Resources (BlackBoard)</p>
<p>12, 11/21-27</p>	<p>Thanksgiving</p>
<p>13, 11/28-12/4</p>	<p>Web archiving Masanes, J. (2005). <i>Web Archiving Methods and Approaches: A Comparative Study</i>. <i>Library Trends</i>. (http://muse.jhu.edu/journals/library_trends/v054/54.1masanas.html)</p> <p>DL standard documentation Image Standards (http://www.in.gov/library/files/dig_imgst.pdf); (http://www.cdlib.org/services/access_publishing/dsc/contribute/docs/cdl_gdi_v2.pdf)</p> <p>Metadata Standards (http://www.in.gov/library/files/dig_metast.pdf); (http://www.cdlib.org/services/access_publishing/dsc/contribute/docs/GDO.pdf)</p> <p>Institutional Repositories Burns, C. S., Lana, A., & Budd, J. (2013). Institutional repositories: exploration of costs and value. <i>D-Lib Magazine</i>, 19(1), 1. (http://www.dlib.org/dlib/january13/burns/01burns.html) Example: IUPUI University Library Center for Digital Scholarship (http://ulib.iupui.edu/digitalscholarship/works)</p>
<p>14, 12/5-11</p>	<p>Assignment #3 presentation</p>