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University of Michigan
School of Information

SI 640 DIGITAL LIBRARIES AND ARCHIVES

SYLLABUS

Term: Winter 2009
Instructor: Paul Conway
GSI: Ricardo Punzalan

Description

This course focuses on the current state of “digital libraries” from a multidisciplinary perspective. Its point of departure is the possibilities and prospects for convergence of professions and cultures around the notion of digital media and content. The course covers the history of the idea of digital library and digital archive, especially its manifestation as projects and programs in academic, non-profit, and research settings, and the suite of policy issues that influence the development and growth of digital libraries and archives. A foundation of core archival principles as applied in digital library and archives settings will serve as an

intellectual construct supporting the exploration of the related concepts of scholarly communication, digital preservation, cyberinfrastructure, representation, and standards/best practices. Students will be expected to master a diverse literature, to participate actively in the discussion of issues, and to take steps, collectively and individually, to advance our understanding of future directions of digital libraries and archives.

Objectives

- Apply key archival principals to a digital library program
- Understand the development of digital libraries and archives as an international phenomenon
- Explore the literature, key leaders, and significant digital library/archive programs
- Specify the critical skills required to build and maintain digital collections
- Refine a set of research questions associated with knowledge representation in digital libraries
- Establish a broad context for the issues and challenges facing digital libraries and archives

Readings

Required readings average 150 to 250 pages per week, with optional reading determined by each student's interests and knowledge, as well as the relevance of a given topic to course projects and final reports. All required readings are either on the World Wide Web (WWW), accessible through the CTools site for the course, or available through University Reserves' Electronic Reserve Service.

<http://www.lib.umich.edu/reserves>

Resources

Weekly lecture slides, additional resources for class assignments and weekly discussion topics will be posted on CTools by start of class. Students wishing to follow the lecture with the slides can download them from CTools. The CTools Portal URL is: <http://ctools.umich.edu>

Grading

- | | |
|--------------------------------|-----|
| • Class participation | 25% |
| • Literature scan | 15% |
| • Image representation project | 25% |
| • Research report | 35% |

Academic Integrity

Academic honesty and responsibility is 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>

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 Etiquette

Students are encouraged to bring notebook computers to class and to use them actively as learning tools.

Students should:

... use laptops for taking notes, conducting research required for activities, and other specific classroom tasks as assigned by the instructor. During class, students should not check e-mail, chat, IM, play games, or perform other off-task activities.

... engage in class activity as actively as they would in any other class. The computer should not become a barrier to one-on-one interaction, but instead should help facilitate the exchange of ideas and engagement in classroom contact.

... demonstrate sensitivity to others. Students should not display screen images, including wallpapers and screen savers, that might be distracting or offensive to other members of the class.

Office Hours

Students are strongly encouraged to take advantage of at least one office hour session during the course. The instructor is available and willing to advise on project topics, specialized readings, and contacts in the digital library field.

COURSE STRUCTURE, REQUIRED READINGS, and RESOURCES

Week 1 (January 12): Definitions and Key Constructs

The first course session will review the structure of the courses and outline its principal underlying themes. We will explore perspectives on the idea of libraries and archives, digital or otherwise, collaborate to establish a shared definition of a digital library, and frame this definition within the broader notion of “convergence culture” and the functional convergence of libraries, archives, and museums.

Required Readings:

Borgman. [2000] *Gutenberg to Global Information Infrastructure*, Chapter 2, pp. 33-52.

Gilliland-Swetland. [2000] *Enduring Paradigm, New Opportunities: The Value of the Archival Perspective in the Digital Environment*. <http://www.clir.org/pubs/abstract/pub89abst.html>

Jenkins. [2006] *Convergence Culture: Where Old and New Media Collide*. Introduction, pp. 1-24.

Levy. [2003] “Documents and Libraries,” in Bishop, et al. *Digital Library Use*, Chapter 2, pp. 25-42.

Resources:

Bearman. [2007] “Digital Libraries.” *Annual Review of Information Science and Technology* 41. Information Today, Inc.

Fox, & Urs. [2002] “Digital Libraries.” *Annual Review of Information Science and Technology* 36. Information Today, Inc.

Pomerantz, et al. [2006] “The Core Digital Library Education in Library and Information Science Programs.” *D-Lib Magazine* 12 (11). <http://www.dlib.org/dlib/november06/pomerantz/11pomerantz.html>

NB: Due to the MLK Holiday, we will cover Week 2 content in Weeks 1 and 3.

Week 2 (January 19): Origins and International Perspectives

Digital libraries have a distinctive history, a consideration of which sheds light on the predispositions of those who design and build them. This session will contrast design/build perspectives on an international basis with what we do and do not know about the people who use them. This session will cover the major sources of information on digital libraries and archives.

Required Readings:

Dempsey. [2006] “The (Digital) Library Environment: Ten Years After.” <http://www.ariadne.ac.uk/issue46/dempsey/>

Ross. [2007] “Digital Preservation, Archival Science and Methodological Foundations for Digital Libraries” http://www.ecdl2007.org/Keynote_ECDL_SROSS.pdf

Saracevic. [2005] “How Were Digital Libraries Evaluated?” <http://www.scils.rutgers.edu/~tefko>

Schnapp. [2008] "Animating the Archive." *First Monday*, Volume 13 Number 8 - 4
<http://www.uic.edu/htbin/cgiwrap/bin/ojs/index.php/fm/article/viewArticle/2218/2020>

Woldering. [2004] "The European Library: Integrated Access to the National Libraries of Europe."
<http://www.ariadne.ac.uk/issue38/woldering/>

Resources:

Fox. [1993] Digital Library Sourcebook. <http://fox.cs.vt.edu/DLSB.html>

Digital Library Federation. <http://www.diglib.org/>

ERpanet: European Resource Preservation and Access Network. <http://www.erpanet.org/index.php>

JISC: Joint Information Systems Committee. <http://www.jisc.ac.uk/>

PADI: Preserving Access to Digital Information. <http://www.nla.gov.au/padi/>

Week 3 (January 26): Content Landscapes: How Much Information

In spite of the fact that the manufacture of paper continues unabated, we are living in a digital world. This session will explore alternative scenarios for describing the landscape of digital content, using as a point of departure a seminal study that attempts to measure the volume of information created annually.

Required Readings:

Lyman and Varian. [2003] *How much information? 2003*.
<http://www2.sims.berkeley.edu/research/projects/how-much-info-2003/>

OCLC. [2004] "2004 Information Format Trends: Content, Not Containers,"
<http://www.oclc.org/reports/2004format.htm>

O'Toole. [1994] "On the Idea of Uniqueness." *American Archivist*

Powell. [2003] "Mapping the JISC IE [Information Environment] Service Landscape."
<http://www.ariadne.ac.uk/issue36/powell/intro-alternative.html>

Resources:

Digital Library Federation. Registry of Digital Masters. <http://www.diglib.org/collections/reg/reg.htm>

Digital Library Federation. DLF Aquifer. <http://www.diglib.org/aquifer/>

HangingTogether [blog] <http://hangingtogether.org/>

JISC Collections: delivering resources online. <http://www.jisc-collections.ac.uk/>

Week 4 (February 2): Research Agendas

Sometimes it's useful to make lists. Research agendas for digital libraries, digital preservation capabilities, and the management of electronic records provide insight into the shifting perspectives on needs and requirements. This session will explore at least a decade's worth of research agendas against our emerging understanding of what digital libraries are.

Required Readings:

EU-NSF Working Group on Metadata. Metadata for Digital Libraries: a Research Agenda. [1999]
<http://www.ercim.org/publication/ws-proceedings/EU-NSF/metadata.html>

Hedstrom. [2003] *It's About Time: Research Challenges in Digital Archiving and Long-Term Preservation*.

Hedstrom. [2002] "The Digital Preservation Research Agenda."
<http://www.clir.org/pubs/abstract/pub107abst.html>

Snow, et al. [2008] "Considering the User Perspective: Research into Usage and Communication of Digital Information. *D-Lib Magazine*. <http://www.dlib.org/dlib/may08/ross/05ross.html>

Waters and Garrett. [1996] *Preserving Digital Information*. <http://www.clir.org/pubs/abstract/pub63.html>

Resources:

Anderson and Choudhury. [2003] "A Usability Research Agenda for Digital Libraries."
http://dkc.jhu.edu/usability_1.html

National Science Foundation. Digital Libraries Initiative, Phases One and II. <http://www.dli2.nsf.gov/>
<http://www.dli2.nsf.gov/dlione/>

UM Collaboratory Working Groups. http://www.si.umich.edu/UMDL/EU_Grant/home.htm

Week 5 (February 9): Interface and Metadata Infrastructure

What you see isn't necessarily what you get. This session will explore the distinction between the user interface and the underlying structure of information used to describe, structure, and administer a digital archive or repository. We will work with several XML models of digital library metadata infrastructure and explore the elements of interface design that enable or constrain use.

Required Readings:

Borgman. [2000] "Making Digital Libraries Easier to Use," *Gutenberg to Global Information Infrastructure*, pp. 143-163.

Caplan and Guenther. [2005] "Practical Preservation: the PREMIS Experience." *Library Trends*
http://www.loc.gov/standards/premis/caplan_guenther-librarytrends.pdf

Dahlquist, et al. [2005] "Integrating Digital Libraries and Electronic Publishing in the DART Project."
<http://doi.acm.org/10.1145/1065385.1065411>

Gartner. [2008]. "Metadata for Digital Libraries: State of the Art and Future Directions." *JISC TechWatch Report*, TSW0801. <http://www.jisc.ac.uk/whatwedo/services/techwatch/reports/horizonscanning.aspx>

Lavoie. [2004] *Open Archival Information System: Introductory Guide*.
<http://www.dpconline.org/graphics/reports/index.html>

Lynch. [2000] "Authenticity and Integrity in the Digital Environment."
<http://www.clir.org/pubs/reports/pub92/lynch.html>

McDonough [2006] "METS: standardized encoding for digital library objects," *International Journal on Digital Libraries* 6(2):148-158.

Resources:

National Digital Information Infrastructure Preservation Program.
<http://www.digitalpreservation.gov/index.html>

Flecker. [2000] "Harvard's Library Digital Initiative: Building a First Generation Digital Library Infrastructure." *D-Lib Magazine* 6 (November 2000). <http://www.dlib.org/dlib/november00/flecker/11flecker.html>

Higgins and Semple. [2006] *OAIS Five-year Review*. <http://www.dcc.ac.uk/events/oais-fyr-2006/>.

PREMIS: Preservation Metadata Maintenance Activity. <http://www.loc.gov/standards/premis/>

METS: Metadata Encoding and Transmission Standard. <http://www.loc.gov/standards/mets/>

Week 6 (February 16): Representation of Image/Text and Visual Digital Libraries

This session will look closely at theories of representation – particularly through the transformation of visual and textual resources into digital formats. The rapidly emerging interdiscipline of "Digital Humanities" will serve as a framework for testing notions of who digitization influences how users interpret meaning in a digital library/archive context. A project on diagnosing and detecting image representation will be introduced.

Required Readings:

Bolter & Grusin. [1996] "Remediation." *Configurations* 4.
<http://muse.jhu.edu/journals/configurations/v004/4.3bolter.html>

Folsom. [2007] "Database as Genre: The Epic Transformation of Archives." *PMLA* 122.5

Frey and Reilly. [1999] *Digital Imaging for Photographic Collections: Foundations for Technical Standards*.

Sassoon. [1998] "Photographic Meaning in the Age of Digital Reproduction." *LASIE*
<http://www.sl.nsw.gov.au/lasie/prepdf.htm>

Smith. [2001] *Strategies for Building Digitized Collections*.
<http://www.clir.org/pubs/abstract/pub101abst.html>

Schwartz. [2000] "Records of Simple Truth and Precision: Photography, Archives, and the Illusion of Control," *Archivaria*

Resources:

National Archives and Records Administration. [2004] *NARA Guidelines for Digitizing Archival Materials for Electronic Access*. <http://www.archives.gov/research/arc/digitizing-archival-materials.html>

Handout on digital imaging guidelines [on CTools]

Summit on Digital Tools for the Humanities. [2003] <http://www.iath.virginia.edu/dtsummit/>

Text Encoding Initiative <http://www.tei-c.org/index.xml>

SPRING BREAK (February 23)

Week 7 (March 2): Case Studies on Building Collections

This week builds on the theories of representation explored in Week 6 by examining closely three very significant digital library projects. *American Memory* of the Library of Congress and the Online Archive of California represent large general purpose collections; the *Walt Whitman Archive*, built under the auspices of the Institute for Advanced Technology in the Humanities, is a great example of purpose-built collections oriented toward specific digital humanities scholarship.

Required Readings:

Arms [1999] "Getting the Picture: Observations from the Library of Congress on Providing Online Access to Pictorial Images." *Library Trends* [American Memory]

Barney et al. [2005] "Ordering Chaos" *Library and Linguistic Computing*. doi:10.1093/lc/fqi002 [access through Mirlyn] [Whitman]

Chandler. [2002] "Museums in the Online Archive of California (MOAC): Building Digital Collections Across Libraries and Museums," *First Monday* http://firstmonday.org/issues/issue7_5/chandler/index.html [OAC]

Cohen. [2006] "Transgenic Deformation: Literary Translation and the Digital Archive." *MLA Convention Presentation*. <http://www.whitmanarchive.org/about/articles/anc.00165.html> [Whitman]

Dalbello. [2004] "Institutional Shaping of Cultural Memory: Digital Library as Environment for Textual Transmission." *Library Quarterly*. [American Memory]

Gilliland-Swetland. [1998] "Evaluation Design for Large-Scale, Collaborative Online Archives: Interim Report of the Online Archive of California Evaluation Project." *Archives & Museum Informatics* [OAC]

Holz. [2006] "Technologically Enhanced Archival Collections: Using the Buddy System." *Journal of Archival Organization* 6.

Resources:

California Digital Library. Online Archive of California. <http://www.oac.cdlib.org/>

California Digital Library. Online Archive of California. Technical Information. <http://www.cdlib.org/inside/projects/oac/tech.html>

Institute for Advanced Technology in the Humanities. <http://www.iath.virginia.edu/>

Library of Congress. American Memory. <http://memory.loc.gov/ammem/index.html>

Library of Congress. American Memory. Technical Information. <http://memory.loc.gov/ammem/about/techIn.html>

Walt Whitman Archive. <http://www.whitmanarchive.org/>

Walt Whitman Archive. About the Archive. <http://www.whitmanarchive.org/about/index.html>

Week 8 (March 9): Cyberinfrastructure

This session will introduce the concept of “cyberinfrastructure” and explore the concept’s relevance to the technical and policy issues associated with science, social science, and humanities data and users.

Required Readings:

American Council of Learned Societies. [2006] *Our Cultural Commonwealth*. <http://www.acls.org/cyberinfrastructure/cyber.htm>

Arms et al. [2006] “A Research Library Based on the Historical Collections of the Internet Archive.” <http://www.dlib.org/dlib/february06/arms/02arms.html>

Association of Research Libraries. [2006] “Long-term Stewardship of Digital Data Sets in Science and Engineering.” <http://www.arl.org/info/frn/other/ottoc.html>

Berman and Brady [2005] “Final Report: NSF SBE-CISE Workshop on Cyberinfrastructure and the Social Sciences,” <http://vis.sdsc.edu/sbe/>

Messerschmitt. [2003] “Opportunities for Research Libraries in the NSF Cyberinfrastructure Program,” <http://www.arl.org/resources/pubs/br/br229/>

National Science Foundation. [2003] *Revolutionizing Science and Engineering Through Cyberinfrastructure*. <http://www.nsf.gov/od/oci/reports/toc.jsp>

NSF Cyberinfrastructure Council. [2006] *NSF’s Cyberinfrastructure Vision for 21st Century Discovery*. <http://www.nsf.gov/od/oci/ci-v7.pdf>

Resources:

National Science Foundation. Cyberinfrastructure Office. *Reports and Workshops Relating to Cyberinfrastructure and Its Impacts*. <http://www.nsf.gov/od/oci/reports.jsp>

Data Document Initiative. <http://www.ddalliance.org/index.html>

Economic and Social Data Services. [2005] *Guide to Good Practice: Data Management*. <http://www.esds.ac.uk/support/guides/A4.pdf>

Lord and Macdonald. [2003] *e-Science Curation Report*. http://www.jisc.ac.uk/uploaded_documents/e-ScienceReportFinal.pdf

Week 9 (March 16): Scholarly Communication and Digital Library Use

Models of scholarly communication (which vary somewhat by discipline) provide a framework for exploring access and use issues in digital libraries. This and next week's sessions together will force us to confront the ongoing tensions between the idealization of digital libraries and the barriers presented by the technical, organizational, and policy constraints.

Required Readings:

Borgman. [2003] "Designing Digital Libraries for Usability," *Gutenberg to Global Information Infrastructure*, pp. 117-168.

Campbell. [2000] "The Case for Creating a Scholars Portal to the Web." <http://www.arl.org/resources/pubs/br/br211.shtml>

Farb. [2006] "Libraries, licensing and the challenge of stewardship." http://www.firstmonday.org/issues/issue11_7/farb/index.html

Levy. [1998] "Heroic Measures." <http://www.acm.org/pubs/citations/proceedings/dl/276675/p152-levy/>

Rusbridge. [2005] "Information Life Cycle and Curation." PowerPoint. [CTools]

Waters. [2006] "Managing Digital Assets in Higher Education." <http://www.arl.org/resources/pubs/br/br244.shtml>

Resources:

First Monday. [2006] Openness: Code, Science, and Content. Website. http://www.firstmonday.org/issues/issue11_7/index.html

Association of Research Libraries. New Models for Scholarly Communication. Website. <http://www.arl.org/sc/models/index.shtml>

Create Change. Website. <http://www.createchange.org/>

Week 10 (March 23): Institutional Repositories and Trust

This session will look closely at emerging models of institutional repositories, their relationship to emerging preservation requirements, including data modeling and trust systems.

Required Readings:

Crow. [2002] "The Case for Institutional Repositories: A SPARC Position Paper."

<http://www.arl.org/sparc/IR/ir.html>.

Green and Gutmann. [2006] "Building Partnerships Among Social Science Researchers, Institution-based Repositories and Domain Specific Data Archives." [preprint on CTools]

Lavoie and Dempsey. [2004] "Thirteen Ways of Looking at...Digital Preservation."

<http://www.dlib.org/dlib/july04/lavoie/07lavoie.html>

Lynch. [2003] "Institutional Repositories: Essential Infrastructure for Scholarship in the Digital Age."

<http://www.arl.org/resources/pubs/br/br226/br226ir.shtml>

Lynch and Lippincott. [2005] "Institutional Repository Deployment in the United States as of Early 2005."

<http://www.dlib.org/dlib/september05/lynch/09lynch.html>

Markey et al. [2007] Census of Institutional Repositories in the United States: MIRACLE Project Research Findings. CLIR pub 140. See, particularly, Executive Summary and Literature Review.

<http://www.clir.org/pubs/abstract/pub140abst.html>

Rusbridge. [2006] "Excuse Me... Some Digital Preservation Fallacies?"

<http://www.ariadne.ac.uk/issue46/rusbridge/>

Wheatley. [2004] *Institutional Repositories in the Context of Digital Preservation*.

<http://www.dpconline.org/graphics/reports/index.html>

Resources:

TRAC: Trustworthy Repositories Audit & Certification: Criteria and Checklist.

<http://www.crl.edu/content.asp?l1=13&l2=58&l3=162&l4=91>

DRAMBORA: Digital Repository Audit Method Based on Risk Assessment. <http://www.repositoryaudit.eu/>

NESTOR: Network of Expertise in Digital Long-term Preservation (Germany)

<http://www.langzeitarchivierung.de/index.php?newlang=eng>

NEDCC. [2007] "Digital Preservation Readiness Webliography."

<http://www.nedcc.org/resources/leaflets/6Reformatting/08DigitalPreservationReadiness.php>

Week 11 (March 30): Case Study of UM Deep Blue and Blue Stream

This session takes a close look at two technologies at the University of Michigan that support the university's digital repository efforts, including the ingest and processing of digital multi-media resources. The case study

explores the extent to which multiple technologies are and are not yet integrated from the perspective of infrastructure and interface.

Required Readings:

Deep Blue <http://deepblue.lib.umich.edu/>

Blue Stream <http://sitemaker.umich.edu/bluestream/home>

Week 12 (April 6): Sustaining Digital Libraries

Sustainability could turn out to be one of the principal challenges of digital libraries (an open question). This final session will explore a variety of incentive mechanisms associated with designing, building, and using digital libraries/archives and their use.

Required Readings:

Keller, Reich, and Herkovic. [2003] "What is a library anymore, anyway?"
http://www.firstmonday.org/issues/issue8_5/keller/index.html

Lynch. [2005] "Where Do We Go from Here? The Next Decade in Digital Libraries."
<http://www.dlib.org/dlib/july05/lynch/07lynch.html>

Lagoze. [2005] "What Is a Digital Library Anymore, Anyway? Beyond Search and Access in the NSDL."
<http://www.dlib.org/dlib/november05/lagoze/11lagoze.html>

Lavoie. [2008] "The Fifth Blackbird: Some Thoughts on Economically Sustainable Digital Preservation." *D-Lib Magazine* 14. <http://www.dlib.org/dlib/march08/lavoie/03lavoie.html>

Lavoie. [2003] The Incentives to Preserve Digital Materials: Roles, Scenarios, and Economic Decision-Making. OCLC Office of Research. <http://www.oclc.org/research/projects/digipres/incentives-dp.pdf>

Rusbridge et al. [2005] "The Digital Curation Centre: A Vision for Digital Curation." [CTools]

Resources:

Digital Curation Center. <http://www.dcc.ac.uk/index>

Week 13 (April 13): Wrap-up and Research Paper Reports

This and the final session will provide opportunities for synthesis across seminar topics, taking as a point of departure the issues explored in student research papers. Project reports will be grouped conceptually into panels; each project will be allotted roughly five minutes for a succinct presentation on the core concept and key findings of the project.

Week 14 (April 20): Research Paper Reports

Completion of project reports.

ASSIGNMENTS

Class Participation (25%)

The overall success of the seminar depends on the active participation of all members of the class. Class participation is a sizable portion of the grade. Students should attend all classes and be prepared to enter into class discussions and to raise questions reflecting their reading and interests. Students are also expected to complete all required readings in advance of class. This is especially important since a portion of the class sessions will be discussions about the readings.

On the first class, each student will sign up with two or three other students to lead the discussion on the required readings for a given week. This is an opportunity to read one set of assigned readings more deeply than average, to work collaboratively on identifying themes or critical ideas, and to demonstrate understanding of one component of the course.

Literature Scan (15%)

The purpose of the individual project is to explore and find relevant published literature on digital libraries/archives and report on experiencing three important but quite different research resources.

- Use the search and browse tools of three resource collections on a particular topic of your choosing.
- Identify ten items of relevance to the topic (at least two from each source) from *ACM Digital Library* <http://portal.acm.org/> [access via UM Library Search Tools]; *D-Lib Magazine* <http://www.dlib.org/>; and *PADI – Preserving Access to Digital Information* <http://www.nla.gov.au/padi>.
- Prepare full and consistent bibliographic citations for all ten items (using MLA, Chicago, or other appropriate format).
- Write between one- (1) and five- (5) sentence description/summary of each source.
- Write up to 1,000 words that states the topic of your search, describes the scope of the resources available on digital libraries, assesses their strength and weaknesses for digital library research, and reports on your experience using the resources,.

Image Representation Database (25%)

The purpose of this project is to explore the various ways that photographic images are represented through digital library interfaces and to become adept at recognizing such variation. A secondary purpose of the project is to begin compiling a reference and research collection of digitized images that illustrates representation variation systematically. The mechanism we will use to complete the project is the collaborative construction of a database of image elements following a fairly complex scheme. The scheme captures descriptive information about each image, codes each image for its representation style, annotates the image in ways that connect the visual product with its associated metadata, and codes the image for the “significant properties” that it displays (or contains).

Each student will be responsible for identifying and coding data in the database for a random sample of 100 images identified through broad but purposeful searching. Half of the images will be chosen from collections in one of ten possible large scale digital libraries [a list will be distributed in class]. Half of the images may be chosen from any online collection of digitized photographs anywhere in the world, as long as certain criteria are met relating to the scale of the undertaking and the organizational source of the images. Prior to the start of the project, the instructor will provide definitions of key terms, illustrative examples of various representation styles, and detailed coding instructions for building the database. The deliverables for this assignment are coded data on an Excel template and a brief report describing the search strategy used to identify the 100 images, including a list of the digital library collections consulted. The results of the exercise will be presented in class at the end of the course.

Grading will be based on quantitative and qualitative assessments. Quantitative scores will be assigned based on the number of images completed and the completeness of the data compiled. A qualitative score will be assigned based on the level of judgment exercised in coding representation style and other subjective elements of the combined database.

Research Report (35%)

The research report for the course is an opportunity to break new conceptual ground on the nature and development of digital libraries. The basic research question is “Are Digital Libraries and Digital Archives the same thing?” The report will examine a particular facet of a digital library program or service and then describe that aspect in the larger context of the archival principles explored in the course, grounding the work on relevant published and informally posted information on the digital library. The paper will be between 5,000 and 8,000 words in length, will be properly documented with references and a bibliography, and will conform to a common structure. During the second week of the course, a list of digital library and archive programs will be distributed and discussed. Each student will choose one digital library/archive program to examine. All of the students who choose a particular digital program will constitute one or more teams varying in size from 3 to 6 individuals. You will do a much better job with your report if you work together as a team on your overall analysis. To encourage this collaboration, each analysis team is required to prepare and submit a single document listing published and unpublished documentation on the digital library/archive.

Students will negotiate within their respective teams over the choice of particular topic to investigate in greater detail. Copyright and intellectual property issues are **out of scope** for this research paper.

Topics relevant to this investigation include the following areas:

- **Content development**, including, accession and selection criteria, digitization guidelines or collection development focus
- **Access systems**, including metadata standards, processes, and products, end user interface design, productivity tools, usability assessment, revision history
- **Infrastructure**, including underlying repository system design, including software architecture, database design, etc.
- **Preservation and collaboration**, including repository/archive development, data sharing, perspectives on digital preservation versus digital access, staffing, cost analysis, benefit analysis, and other economic/budgetary issues.

Depending upon the size and individual interests of the group, the final report may parse the project in any number of ways. The final report must include at least the following five components:

- Executive summary with critical findings (1 to 2 paragraphs)
- Description of the origins, history, and purposes of the digital program (may be done collaboratively by the team for all reports from that team)
- Report on the issue investigation, with the following components
 - Definition of the issue and the underlying archival principle(s) involved
 - Assessment of state of the art for the issue
 - How the issue is represented in the digital program
 - Reconciling ideals with reality
 - Trends and directions for the issue either in the digital library or more broadly
 - Challenges you faced in your investigation (e.g., lack of documentation, outdated interface, etc.)

In pursuing your research, you may use any published or posted information available on the digital library and you may interview or correspond with appropriate staff who may have information to share. I encourage a strategy of broad “detective work” to investigate a given digital library program.

DEADLINES and DUE DATES

January 12		First Class – Read required readings in advance
January 19		Martin Luther King Holiday – no class
January 26	5:00 pm	Literature Scan Due
February 2	5:00 pm	Individual DL Review Topics Due
February 19		Form Digital Library Review Teams
February 20	5:00 pm	Digital Library Review Bibliography Due
February 23		Spring Break
March 13	5:00 pm	Working outline of final report Due, if advice desired from instructor
March 22	5:00 pm	Image Representation Database Entries Complete
April 13		Final Report Presentations (clustered by investigation topic)
April 20		Final Report Presentations (clustered by investigation topic)
April 22	11:45 pm	Final Reports Due