Fall, 2019 Tuesday, 2:00-4:45

INLS 752: Digital Preservation and Access

The Instructors.

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Class Listserv: inls752.fa19@sakai.unc.edu

Office Hours.

I will be available most of the time if you make an appointment, but will probably not be in in the mornings. Feel free to call me at home in the evening before 9:00 PM and send me email at any time.

Course Timeline.

First Class: Tuesday, August 20, 2019 Last Class: Tuesday, December 3, 2019

Final Project Due: Tuesday, December 10, 2019 (OR BEFORE!!!)

Brief Course Description.

This course focuses on integrating state-of-the-art information technologies, particularly those related to the digital curation lifecycle, digital repositories, and long-term digital preservation, into the daily operations of archives, records centers, museums, special collections libraries, visual resource collections, historical societies, and other information centers. Issues, topics, and technologies covered will include the promise & challenge of long-term digital preservation and curation; creating durable digital objects, approaches to preservation; development of institutional repositories; image processing; selecting materials for digitization and managing digitization projects; resource allocation and costing, risk management, digitization and metadata; rights management and other legal and ethical issues; digital asset management; standards; file formats; quality control; funding for developing and sustaining digitization projects and programs; and trusted repositories.

Goals and Objectives.

By the end of the course, the student should be able to:

- ♣ Identify the key events in the history of digital preservation and access.
- ♣ Define and apply essential terminology related to digital preservation.
- ♣ Distinguish between the concepts underlying digital preservation and digital curation.
- Understand the digital curation lifecycle from conceptualization through disposition.
- Understand the primary issues and challenges with digital preservation and curation activities.
- ♣ Demonstrate familiarity with a variety of digital preservation and curation projects worldwide.
- ♣ Identify standards that are important to the digital curation lifecycle.



- ♣ Identify best practice guidelines and organizations that are creating them for digitization and digital preservation.
- Liscuss the OAIS model and how it fits into the trusted digital repository movement.
- Discuss what makes a repository "trustworthy."
- Identify tools and standards for audit and certification of digital repositories.
- ♣ Be familiar with the development of institutional repositories.
- Lexplain the digitization workflow and all the steps involved in major digitization projects.
- ♣ Be familiar with best practice guidelines and organizations that are creating them for digitization and digital preservation.
- Left Select materials for digitization projects and provide sound justifications for these selections.
- Select and justify standards and benchmarks for a given digitization project.
- Create appropriate metadata for digital objects for access, management, and preservation purposes.
- Determine the costs of digitization projects and plan appropriate facilities and resources.
- Understand how to manage a digitization project including assessing risk and establishing a quality control program.
- Write a well-argued and constructed grant proposal for a digitization, repository building, or digital preservation project.

Assignments & Evaluation.

Assignment	% of Grade	Due Date
Five to Ten Minute Madness Presentation	5%	August 27
Preliminary Report on Grant Application	5%	September 17
Briefing Paper 1: Digital Image Capture & OCR	10%	September 24
Preservation Landscape Presentation	5%	October 1
Briefing Paper 2: Interview Report	15%	October 29
Digital Curation Scenario Presentations	10%	November 5
Grant Presentation	10%	November 19
Grant Proposal	30%	December 10
Class Participation	10%	Ongoing
Total	100%	

A summary of each of the assignments is below; for more detailed descriptions of the Briefing Paper assignments and the overall Grant Assignment (Progress Report, Presentation, and Proposal,), see the Detailed Course Assignments handout.

Five - Ten Minute Madness

This assignment is designed to 1) get you into the day-to-day realities of digital curation issues and see how these apply in the workplace; and 2) give you experience presenting to a group. As a member of the Disco Tech Institutional Repository (DTIR) team you will present on current perspectives in the media regarding



digital preservation to your colleagues. Find an item in the popular press (newspaper, magazine, blog, etc.) that discusses some aspects of digital preservation or curation and create a 5-10-minute presentation/discussion.

Preservation Landscape

Each student will present on a national or international research/development project in digital curation or preservation. Everyone will make 5-10-minute presentation/discussion with a few slides.

Briefing Papers

The Briefing Paper assignments are designed to allow students to apply some of the concepts and challenges discussed in the course:

- For Briefing Paper 1, students will digitally capture two document types and comment on the results and experience.
- For Briefing Paper 2, students will contact a library, archives, or museum professional who is working on digitization, institutional repositories, or other digital preservation and access projects and interview them regarding "lessons learned" and write this up as a brief paper.

Digital Curation Scenarios

The intent of this assignment is to introduce real world, practice-based digital curation challenges and issues. Each entry presents a specific scenario. Several of these are derived from Curate: The Digital Curator Game. Working in groups, students will select a scenario, prepare a brief written response, and present this to the class.

Grant Project

Proposal writing, project design, and project management are some of the most highly sought after skills an information professional can possess today, particularly in the field of digital curation. As a result, this assignment was designed to provide students with experience in project planning and grant writing. Project planning and proposal writing is not an individual task; rather it necessitates a collaborative, team-approach. For this assignment, students will form teams of four or five. A classmate or I will provide proposed projects and each team will prepare a submission-worthy grant proposal. The semester-long, team project will be evaluated at three stages: 1) Progress Report, establishing your work plan and task assignments for completing your team's grant proposal; 2) Grant Presentation, a 20-minute group presentation of your team's grant proposal to your classmates (November 19), with five minutes for Q&A; and 3) your team's completed Grant Proposal (December 10 or before – deposit in Sakai and a hard copy in my SILS office mailbox).

Class Participation

Students are expected to participate in class discussions on the readings and webcasts and to pose questions about those readings and about the course content. The purpose of the discussions is to help students to think critically about issues and challenges related to digital preservation and access, and to address ways that the literature may affect practice. Your responsibilities are to be prepared for class each day through reading and reflecting on the required readings assigned for that particular session. It is also helpful, when preparing for class, to consider how that session's particular theme and readings may apply to your area of professional interest. You are also encouraged to share current news and events you find informative to

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 $^{^1\} For\ the\ game,\ see:\ http://www.digcur-education.org/eng/Resources/CURATE-Game$

issues of digital preservation and access, both in-class as well as on Sakai. See Class Policies, below, for additional guidance on class participation.

Assignment Nomenclature

Please turn in all assignment through Sakai and provide a printed version in class. For all assignments please save your file as "lastname_assignment_752.docx". All assignments should be turned in as word documents if possible. Please put your name on the top of each page of your assignments as well and number the pages.

Grading Scale

Graduate Grading Scale

- H (95-100): "Clear excellence", above and beyond what is required
- P (80-94): Entirely satisfactory; SILS recognizes subtle levels of "satisfactory" since most grades tend to cluster here:
- L (70-79): Low passing
- F (< 70): Failed
- IN: Work incomplete (only given under extreme circumstances, such as serious illness)

Penalty for Late Assignments.

I expect assignments to be passed in on time. This is important for at least two reasons: 1) the need to meet deadlines is a reality of professional life, and 2) giving some people more time for an assignment than others in the class is not equitable. However, life happens to all of us at one time or another. If you cannot meet an assignment deadline, please tell me why PRIOR to class. I will negotiate a new deadline with anyone who has a valid reason for needing this (i.e., NOT "I just didn't get it done."). Otherwise, late assignments will drop 2 points for each day late.

Course Activities & Readings.

Course activities include readings, videos, discussion, and assignments. Discussion will take place in the classroom as well as through the class website on Sakai. There is no textbook for class. The assigned readings and webcasts are available on the Web, through UNC Libraries' E-Research Tools, or on the class website on Sakai. While there is no required textbook for this class, the following out of print book has been placed on reserve in the SILS Library: Kenny, Anne R. & Oya Rieger. *Moving Theory into Practice*. Mountain View, CA: RLG, 2000.

All required readings are listed in the Course Outline section of this syllabus, as are optional readings for each class session. Additionally, please see the Course Supplement for additional resources complementing our required course and optional readings. You are expected to read all required readings before the start of the class session for which these readings are assigned; you may choose to read the optional readings for the particular class session as well, though this is not a requirement. Optional readings are provided to encourage and develop understanding of topics of particular interest to you. **Required readings are in bold.**



Honor Code & Class Conduct.

This class follows the UNC Honor Code. Information on the Honor Code can be found at: http://honor.unc.edu/. Students are encouraged to become familiar with the UNC Honor Code to understand the rights and responsibilities defined there. The UNC Honor Code prohibits giving or receiving unauthorized aid on examinations or in the completion of assignments. <a href="https://www.wieners.giving.ungers.giving.g

Class Policies:

- Be considerate of others in using reserve and other materials, returning them promptly and in good condition.
- Be considerate of your classmates by arriving to class on time, with cell phones turned off for the duration of the class period. Unexcused/unexplained tardiness may impact your class participation grade.
- Additionally, be considerate of your classmates by informing instructor of any planned absences. Unexcused/unexplained absences map impact your class participation grade.
- Be prepared for each class by completing the assigned reading, enabling you to ask questions and participate in class discussion.
- Be an active and positive participant in class, characterized as:
 - o Having a clear command of the readings for the day;
 - o Sharing analyses and opinions based on the readings;
 - o Allowing other students the opportunity to participate; and
 - o Freely agreeing and disagreeing with others when warranted.
- Please note: An intellectual exchange of ideas is the cornerstone of education, but any criticism should be limited to an idea and not the person specifically.
- Turn in assignments by or at the beginning of the class session on which the assignment is due.

As the Semester Begins....

1) If you are not familiar with Photoshop, go to the SILS Lab as there are Photoshop books on reserve. It is generally a useful program with which to be familiar if you are digitizing materials and mounting on the Web. We will not, however, cover how to use it in this class. The bookstore has several beginning and advanced books on this topic and there are websites with tutorials (some quite advanced) such as <u>Planet Photoshop</u> and *Smashing Magazine's* list of <u>Photoshop Tutorials</u>.



Weekly Course Calendar

Tuesday, August 20

1. Introduction & Digital Curation.

Objectives:

- Students will be able to identify goals of the course and understand requirements, readings, assignments, and expectations.
- Students will be able to identify the framework for course, based on:
 - Matrix of Digital Curation Knowledge and Competencies: http://ils.unc.edu/digccurr/digccurr-matrix.html
 - o Digital Curation Lifecycle Model: http://www.dcc.ac.uk/docs/publications/DCCLifecycle.pdf
 - Higgins, Sarah. "The DCC Curation Lifecycle Model." International Journal of Digital Curation, Vol 3, No 1 (2008). http://www.ijdc.net/article/view/69
 - o H.R. Tibbo, C. Hank, C.A. Lee, & R. Clemens (Eds.), *Proceedings of DigCCurr2009: Digital Curation: Practice, Promise, and Prospects,* April 3-5, 2009, Chapel Hill, NC, 2-3. Chapel Hill, NC: School of Information and Library Science, University of North Carolina at Chapel Hill. Available as free download at: http://stores.lulu.com/DigCCurr2009. (Browse)
 - o Continuum Model: https://en.wikipedia.org/wiki/Records Continuum Model
 - o OAIS Reference Model:
 - CCSDS 650.0-M-2: Reference Model for an Open Archival Information System (OAIS). Magenta Book. June 2012. [This Recommendation has been adopted as ISO 14721:2003 and is currently under revision.]
 http://public.ccsds.org/publications/archive/650x0m2.pdf.
- Introduction to the class, instructors, and students. We will discuss how we want to conduct the class and the nature of the assignments and the expectations of all of us. What do we value in class participation?
- ➤ View the video, Digital Preservation and Nuclear Disaster: An Animation: http://www.youtube.com/watch?v=pbBa6Oam7-w
- Framework for semester. Lifecycle Approach: Overseeing digital assets across their lifecycles from planning and resource allocation through creation, management, delivery, preservation, and reuse. We will talk about the following today but please read/review before next week.
 - **↓** Continuum Model: https://en.wikipedia.org/wiki/Records Continuum Model.
 - **↓** DCC Curation Lifecycle Model. http://www.dcc.ac.uk/docs/publications/DCCLifecycle.pdf.
 - Higgins, Sarah. "The DCC Curation Lifecycle Model." *International Journal of Digital Curation*, Vol 3, No 1 (2008). http://www.ijdc.net/article/view/69
 - Lee, Christopher. Matrix of Digital Curation Knowledge and Competencies: http://ils.unc.edu/digccurr/digccurr-matrix.html
 - Lee, Christopher A., Helen R. Tibbo, and John C. Schaefer. "Defining What Digital Curators Do and What They Need to Know: The DigCCurr Project." Proceedings of the

The University of North Carolina at Chapel Hill

ACM IEEE Joint Conference on Digital Libraries. June 18-23, 2007: Vancouver, British Columbia, Canada. http://www.ils.unc.edu/digccurr/jcdl2007 paper.pdf

> Watch:

- Library of Congress. "Digital Preservation at the Library of Congress: Past, Present and Future." 2013. https://www.youtube.com/watch?v=BkzWN9t1alk
- Library of Congress. "Why Digital Preservation is Important for Everyone." YouTube. April 1, 2010. http://www.youtube.com/watch?v=qEmmeFFafUs&feature=related
- Edwards, Paul. "How to Read a Book." http://pne.people.si.umich.edu/PDF/howtoread.pdf
- What do we mean by "digital preservation & access" and "digital curation"? See Digital Curation Center (DCC) http://www.dcc.ac.uk/digital-curation/what-digital-curation
- Discuss class focus on policy, technology, and resources. Cornell perspective.
- ➤ Watch and discuss: Rothenberg, Jeff. "Digital Preservation in Perspective How Far Have We Come and What's Next." YouTube http://www.slideshare.net/FuturePerfect /jeff-rothenberg-digital-preservation-perspective
- ➤ **ASSIGNMENT:** You are a member of the Disco Tech Institutional Repository (DTIR) team. This Thursday you need to present on current perspectives in the media regarding digital preservation to your colleagues. Find an item in the popular press (newspaper, magazine, blog, etc.) that discusses some aspects of digital preservation or curation that you will present to your colleagues in the library. Please send me the title ASAP as we would like everyone to have a unique item so it will be first sent to me first claimed. Please prepare 1-2 PowerPoint slides that summarize the main points of the piece and deposit into the Sakai class drop box by 8:00 AM on Thursday, May 16. Everyone will present on their item for no more than 5 − 10 minutes . We will discuss these at the beginning of the next class. (This is a version of a "Minute Madness" session that is part of many conferences today.)

Tuesday, August 27

2A. Disco Tech Library and Institutional Repository.

We will discuss the staff positions you have developed and will assume throughout the semester.

2B. Permanence, Terminology, & Fundamental Concepts.

Objective:

• Students will be able to define digital preservation and curation terminology and identify fundamental concepts, with a focus on the notion of "permanence."



Permanence:

> O'Toole, James M. "On the Idea of Permanence." *American Archivist* 52 (Winter 1989): 10-25. [*American Archivist* Online via UNC Libraries]

> Fundamentals:

- **ALCTS.** "Digital Preservation: An Introduction to the Basic Concepts." 2012. https://www.youtube.com/watch?v=-Ndw70MGgB0
- ➡ Digital Preservation Coalition. "Why Preservation Matters." Digital Preservation
 Handbook. https://www.dpconline.org/handbook/digital-preservation/why-digital-preservation-matters
- **↓** Digital Preservation Coalition. "Preservation Issues." *Digital Preservation Handbook*. https://www.dpconline.org/handbook/digital-preservation/preservation-issues
- **↓** Digital Preservation Services Collaborative. "Digital Preservation Declaration of Shared Values." 2017. https://dpscollaborative.org/ (click on English).
- ♣ Dunning, Alastair, Madeleine de Smaele, and Jasmin Böhmer. "Are the FAIR Data Principles Fair?" IJDC 12/2 (2017):177-195. http://www.ijdc.net/article/view/567/493
- ♣ Glossary of Terms (on Digital Curation) Digital Curation Centre. Browse.

 http://www.dcc.ac.uk/resource/glossary/
- **★** Moving Theory into Practice Digital Imaging Tutorial, Chapter 8: Digital Preservation. http://preservationtutorial.library.cornell.edu/preservation/preservation-01.html
- ➡ University of Michigan Library. "What is Digital Preservation?"

 https://www.lib.umich.edu/preservation-and-conservation/what-digital-preservation

2C. Five to Ten Minute Madness.

Students will present to their peers at Disco Tech re preservation and curation issues.

Tuesday, September 3

3A. History of Information and Communication Technologies.

Objective:

- Students will be able to identify milestones in information and communication technology development, and the emerging call for digital preservation solutions.
- Cornell University. "Digital Preservation Management Tutorial: Implementing Short-term Strategies for Long-term Problems." https://dpworkshop.org/dpm-eng/eng index.html
 Please read "Setting the Stage," look at the timeline, and take the timeline quiz.
- Data's Shameful Neglect." *Nature* 461/7261 (September 10, 2009). http://www.nature.com/nature/journal/v461/n7261/full/461145a.html
- ♣ "Digital Archiving: History Flushed." The Economist April 28, 2012.

 http://www.economist.com/node/21553410



3B. Digital Preservation and Curation Challenges and Opportunities.

Objective:

- Let Students will become familiar with some of the risks involved with digital content and some of the opportunities in the digital preservation field.
 - ♣ National Research Council. *Preparing the Workforce for Digital Curation*. Chapter 1: "New Imperatives in Digital Curation and Its Workforce" and Chapter 2: "The Current State of Digital Curation." 2015. https://www.ncbi.nlm.nih.gov/books/NBK293667/
- ➤ Break into DTIR subgroups and come up with a list of key challenges and opportunities (as portrayed in the "popular" press) based on what you found and what you heard. Each group will present their top 3 items in each category.
- Read any 3 of the following before class today (most items are short) or find a new item and bring to class:
 - Computer History Museum. "Digital Dark Age Revolution Preview." YouTube http://www.youtube.com/watch?v=PSlMzirvsFc
 - ♣ Dionne, Mimi. "Partnerships New and Old: Preservation in the 21st Century #saa12." CSM Wire August 10, 2012. http://www.cmswire.com/cms/information-management/partnerships-new-and-old-preservation-in-the-21st-century-saa12-016899.php
 - ➡ Ditum, Sarah. "Why We Are in Danger of Entering a Digital Dark Age, Losing Huge Amounts of Online Information." New Statesman (March 12, 2019).

 https://www.newstatesman.com/science-tech/internet/2019/03/why-we-are-danger-entering-digital-dark-age-losing-huge-amounts-online
 - Houghton, Bernadette. "Preservation Challenges in the Digital Age." *D-Lib Magazine*. 22-7/8 (July/August 2016). http://www.dlib.org/dlib/july16/houghton/07houghton.html
 - ♣ Gartner Research. "Healthcare's Digital Data Dexterity Demands a Data Curation and Enrichment Hub." (June 9, 2019).

 https://www.gartner.com/en/documents/3938635/healthcare-s-digital-data-dexterity-demands-a-data-curat
 - ♣ Open Future. "We Must Fight to Preserve Digital Information." The Economist (Feb 21, 2019) https://www.economist.com/open-future/2019/02/21/we-must-fight-to-preserve-digital-information
 - ♣ Patrizio, Andy. "IDC: Expect 175 zettabytes of data worldwide by 2025." (Dec. 3, 2018). https://www.networkworld.com/article/3325397/idc-expect-175-zettabytes-of-data-worldwide-by-2025.html
 - Walters, Tyler and Katherine Skinner. New Roles for New Times: Digital Curation for Preservation. Washington, DC: Association of Research Libraries, March 2011. http://www.arl.org/storage/documents/publications/nrnt_digital_curation17mar11.pdf Read pages 4 − 29.
 - Wernik, Adam and Christopher Intagliata. "Scientists Warn We May be Creating a 'Digital Dark Age," *Science Friday* (Jan. 1, 2018). https://www.pri.org/stories/2018-01-01/scientists-warn-we-may-be-creating-digital-dark-age
- ➤ Watch:

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↓ IDCC15: Tony Hey - Digital Curation: Past, Present and Future. https://www.youtube.com/watch?v=c1j1qMJJ64E

Tuesday, September 20

4A. Grant Writing and Funding Sources.

Objective:

• Students will be able to describe the attributes and requirements for creating a compliant grant proposal, focused on four major areas: defining the project; planning the project; doing the project; and writing the grant application.

REQUIRED:

- Flanders, Julie. "Grant Writing on the Web: Resources for Finding and Securing Funding." College & Research Libraries News 71/9 (Oct 2010): 472-475, 479.
- ♣ Institute of Museum and Library Services (IMLS). Sample Applications.

 http://www.imls.gov/applicants/sample applications.aspx

RECOMMENDED:

- National Archives and Records Administration, National Historic Publications and Records Commission, funding program. http://www.archives.gov/nhprc/apply/program.html.
- ♣ National Endowment for the Humanities. http://www.neh.gov.

REFERENCE:

- ♣ Carpenter, Julie. Library Project Funding: A Guide to Planning and Writing Proposals. Oxford: Chandos, 2008. SILS Z683.C37 2008. On reserve.
- ♣ Carr, Cynthia E. The Nuts and Bolts of Grant Writing. Los Angeles: Sage, 2015. SILS HG177.5.U6 C37 2015.
- ♣ MacKellar, Pamela H. Writing Successful Technology Grant Proposals: A LITA Guide. New York: Neal-Schuman Publishers, Inc., 2012. SILS Z678.9.A4 U648 2012. On reserve.
- ➡ Miner, Jeremy T. *Models of Proposal Planning & Writing*. Westport, CT: Praeger, 2005. SILS HG177.5.U6 M558 2005. On reserve.
- ♣ Miner, Lynn E., Jeremy T. Miner, & Jerry Griffith. *Proposal Planning and Writing*. 2nd ed. Phoenix, AZ: Oryx, 2005. Browse entire book. HG177.5.U6 M56 2005. On reserve.
- ♣ Pequegnat, Willo, Ellen Stover, & Cheryl Anne Boyce, eds. How to Write a Successful Research Grant Application: A Guide for Social and Behavioral Scientists. [electronic resource]. New York: Springer, 2011. Full text available via the UNC-Chapel Hill Libraries.
- → There are several other books available in the UNC Libraries on grant and proposal writing and in the Bullshead Bookstore (Amazon too!).

ASSIGNMENT: Create groups of 3-4 for term grant writing project. Select what you would like to do as a group for the project.



4B. Digital Preservation & Longevity: Part I.

Objective:

- Students will be able to describe seminal works describing the historical impetus for programmatic, digital preservation approaches, and recommendations for planning and implementation.
 - ➡ Digital Preservation Coalition. "Mind the Gap: Assessing Digital Preservation Needs in the UK." 2006. http://www.dpconline.org/advocacy/mind-the-gap.
 - ♣ Garrett, John & Donald Waters. "Preserving Digital Information: Report of the Task Force on Archiving of Digital Information." The Commission on Preservation and Access and RLG, 1996. http://www.clir.org/pubs/reports/pub63.

 - ➡ Hedstrom, Margaret, et al. "It's About Time: Research Challenges in Digital Archiving and Long-term Preservation." Washington, DC: NSF & LOC, 2003. http://www.digitalpreservation.gov/multimedia/documents/about_time2003.pdf
 - ➡ Hedstrom, Margaret & Seamus Ross. "Invest to Save: Report and Recommendations of the NSF-DELOS Working Group on Digital Archiving and Preservation." (Washington, DC: NSF & DELOS, 2003). http://eprints.erpanet.org/48/01/Digitalarchiving.pdf Read executive summary, pp. 1-10.
 - ➡ Hirtle, Peter B. "The History and Current State of Digital Preservation in the United States." In: Metadata and Digital Collections: A Festschrift in Honor of Thomas P. Turner. Ithaca, NY: Cornell University, 2010, pp., 121-140.

 http://cip.cornell.edu/DPubS/Repository/1.0/Disseminate?view=body&id=pdf 1&handle=c ul.pub/1238609304.
 - Ross, Seamus. "Changing Trains at Wigan: Digital Preservation and the Future of Scholarship." 2000. http://www.bl.uk/blpac/pdf/wigan.pdf.

September 17

5A. Digital Preservation & Longevity: Part II.

Objective:

- Students will be able to identify and discuss key works describing the contemporary issues and challenges of digital preservation.
 - ♣ Gallinger, Michelle. "Trends in Digital Preservation Capacity and Practice: Results from the 2nd Bi-annual National Digital Stewardship Alliance Storage Survey." DLib Magazine. Vol. 23, No. 7/8. July/August 2017.
 http://www.dlib.org/dlib/july17/gallinger/07gallinger.html
 - Library of Congress. Preserving Our Digital Heritage: The National Digital Information Infrastructure and Preservation Program 2010 Report: A Collaborative Initiative of the Library of Congress. Washington, DC: LOC, 2010.



- http://www.digitalpreservation.gov/documents/ndiipp_plan.pdf Read Executive Summary.
- **♣** NDSA. National Agenda. 2015. https://ndsa.org/documents/2015NationalAgenda.pdf Scan entire document and read executive summary.
- ♣ Rieger, Oya Y. "The State of Digital Preservation in 2018: A Snapshot of Challenges and Gaps." October 29, 2018. https://sr.ithaka.org/wp-content/uploads/2018/10/SR-Issue-Brief-State-Digital-Preservation-20181022.pdf

5B. Authenticity.

- Adam, Sharon. "Preserving Authenticity in the Digital Age." *Library Hi Tech* 28, no. 4 (2010): 595-604.
- ♣ Bradley, Rachael. "Digital Authenticity and Integrity: Digital Cultural Heritage Documents as Research Resources." portal: Libraries and the Academy 5, no. 2 (2005): 165-175.
- ♣ Cain, Mark. "Being a Library of Record in a Digital Age." The Journal of Academic Librarianship 29, no. 6 (2003): 405-410. http://www.dlib.org/dlib/june98/06bearman.html.
- ↓ CLIR. Authenticity in a Digital Environment. Washington, DC.: Council on Library and Information Resources, 2000. http://www.clir.org/pubs/reports/pub92/pub92.pdf. Scan all; read Lynch.
- ♣ Gorzalski, Matt. "Archivists and Thespians: A Case Study and Reflections on Context and Authenticity in a Digitization Project." The American Archivist Spring/Summer 2016, Vol. 79, No. 1, pp. 161-185. https://americanarchivist.org/doi/abs/10.17723/0360-9081.79.1.161?=
- ♣ Integrity and Authenticity of Digital Cultural Heritage Objects. Digicult Thematic Issue #1, 2002.

 http://www.digicult.info/downloads/thematic issue 1 final.pdf
 Read Ross essay, pp. 7-8, and scan remainder.

5C. Institutional Repositories.

- Albanese, Andrew Richard. "Institutional Repositories: Thinking Beyond the Box." *Library Journal.com* (March 1, 2009). http://www.libraryjournal.com/article/CA6639327.html
- ♣ Duranti, Luciana. "The Long-term Preservation of the Digital Heritage: A Case Study of Universities' Institutional Repositories." *Italian Journal of Library & Information Science*, Vol. 1 Issue 1 (June 2010): p157-168. Find through LISA database at: <a href="http://ehis.ebscohost.com.libproxy.lib.unc.edu/ehost/pdfviewer/pdfviewer?sid=ae9d6191-95e7-4323-9c6c-7361cf8c4091%40sessionmgr12&vid=8&hid=120
- ↓ Jones, W. Reed. "Institutional Repositories and Usage: Thoughts on Realized and Potential Value." *Public Services Quarterly* 14/4 (March 2019): 386-391. https://www.tandfonline.com/doi/abs/10.1080/15228959.2018.1522989
- ↓ Joo, S., D. Hofman, and Y. Kim. "Investigation of Challenges in Academic Institutional Repositories: A Survey of Academic Librarians." Library Hi Tech (Nov. 2018).

 https://www-emerald-com.libproxy.lib.unc.edu/insight/content/doi/10.1108/LHT-12-2017-0266/full/html



- Lynch, Clifford. "Institutional Repositories: Essential Infrastructure for Scholarship in the Digital Age," *ARL Bimonthly Report*, 226 (2003). http://www.arl.org/resources/pubs/br/br226/br226ir.shtml
- ♣ Registry of open Access Repositories. http://roar.eprints.org/ Scan.
- ♣ Salo, Dorothea. "Innkeeper at the Roach Motel." Library Trends 57:2 (Fall 2008).

 Available at: http://digital.library.wisc.edu/1793/22088.

 SPARC. "Repository Resources." http://www.arl.org/sparc/repositories/
- Witt, Michael. "Co-designing, Co-developing, and Co-implementing an Institutional Data Repository Service. *Journal of Library Administration*, Vol. 52 Issue 2 (Feb. 2012): 172-188.

Meeting with instructor regarding term projects. Preliminary project report due at time of meeting.

Tuesday, September 24

6A. Institutional Readiness for Repositories.

- **↓** Cornell University Library. "Digital Preservation Management: Implementing Short-Term Strategies for Long-Term Problems." http://www.dpworkshop.org/dpm-eng/challenges/index.html. Please complete 5: Challenges; 6: Program Elements; and Conclusion.
- ♣ Dollar, Charles and Lori Ashley. "Digital Preservation Capability Maturity Model© (DPCMM)."
 https://static1.squarespace.com/static/52ebbb45e4b06f07f8bb62bd/t/55a7ed87e4b016f840ba 1adb/1437068679137/DPCMM+Background+and+Performance+Metrics+v2.7 July+2015.p df
- ♣ Dooley, Jackie M. 2011. "The OCLC Research Survey of Special Collections and Archives." LIBER Quarterly, 21,1. <u>URN:NBN:NL:UI:10-1-113615.</u> http://liber.library.uu.nl/index.php/lq/article/view/8011.
- Heritage Preservation. A Public at Risk: The Heritage Health Index Report on the State of America's Collections; a project of Heritage Preservation and the Institute of Museum and Library Services, 2005. http://www.heritagepreservation.org/HHI/HHIsummary.pdf.
- ♣ JISC. "Organisational Digital Capability in Context."

 https://www.jisc.ac.uk/guides/developing-organisational-approaches-to-digital-capability/organisational-digital-capability-in-context
- Kenney, A.R. and Buckley, E. "Developing Digital Preservation Programs: the Cornell Survey of Institutional Readiness, 2003-2005." RLG DigiNews, 9, no. 4 (Aug. 15, 2005). http://worldcat.org/arcviewer/1/OCC/2007/08/08/0000070511/viewer/file3612.html#article0
- Kilbride, William. "Certification and Institutional Readiness Digital Preservation." (Slides)
- NEDCC. "Surveying Digital Preservation Readiness: Toolkit for Cultural Organizations." http://www.nedcc.org/resources/digtools.php
- Russell, A. "Surveying the Digital Readiness of Institutions." *First Monday,* 12, no. 7 (2007). https://journals.uic.edu/ojs/index.php/fm/article/view/1921/1803

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6B. Best Practices for Creating Digital Objects.

Objectives:

- Students will be able to identify best practices and standards for creating durable digital objects.
- Students will be able to discuss motivations for digitization projects, as well as challenges.
 - American Library Association. The Association for Library Collections and Technical Services Preservation and Reformatting Section. "Minimum Digitization Capture Recommendations." 2013. http://www.ala.org/alcts/resources/preserv/minimum-digitization-capture-recommendations.

 - Conway, Paul. "Preservation in the Age of Google: Digitization, Digital Preservation, and Dilemmas." *Library Quarterly* 80, no. 1 (2010): 61-79.
 - ♣ Conway, Paul. "Tec(h)tonics: Reimagining Preservation." College & Research Libraries News 69, no. 10 (2008): 598-601. http://crln.acrl.org/content/69/10/598.full.pdf+html
 - **★** Federal Agencies Digitization Guidelines Initiative (FADGI). http://www.digitizationguidelines.gov/

DUE: Briefing Paper #1: Digital Image Capture. Submit digital and print versions.

Tuesday, October 1

7A. Digital Preservation Landscape: Research and Practice.

- Library of Congress. "NDIIPP and NDIIPP Partner Publications." http://www.digitalpreservation.gov/multimedia/publications.html
- **Ross, Seamus.** Keynote speech at the European Conference on Digital Libraries (ECDL) 2007.
 - https://www.researchgate.net/publication/31869610_Digital_Preservation_Archival_Science_a nd_Methodological_Foundations_for_Digital_Libraries
- Ross, Seamus and Margaret Hedstrom. "Preservation Research and Sustainable Digital Libraries." *International Journal of Digital Libraries* (2005) 5: 317–324. https://deepblue.lib.umich.edu/handle/2027.42/47875
- Stephan Strodl, Petar Petrov, and Andreas Rauber. "Research on Digital Preservation within Projects Co-funded by the European Union in the ICT Programme." May 2011. http://collections.internetmemory.org/haeu/20161215122208/http:/cordis.europa.eu/fp7/ Read Executive Summary and browse remainder.
- ➤ Students will each present on one of these projects 1-2 slides; 5 minutes.
 - ➤ NSF-funded DataNet projects:



- 1. Data Conservancy http://dataconservancy.org/
- 2. DataOne https://www.dataone.org/
- 3. DataNet Federation Consortium (DFC) UNC-Chapel Hill http://datafed.org/ (Talk with Drs. Rajasekar and Moore)
- 4. TerraPopulus (A global population/environment data network) University of Minnesota http://www.terrapop.org/
- 5. SEAD (Sustainable Environment Actionable Data) University of Michigan http://sead-data.net/
- European Commission-funded digital preservation projects:
 - 6. 3D Digitisation of Icons of European Architectural and Archaeological Heritage http://3dicons-project.eu/
 - 7. AXES http://www.axes-project.eu/
 - 8. Europeana http://www.europeana.eu/portal/
 - 9. Planets http://www.planets-project.eu/ and Open Planets Foundation. http://www.openplanetsfoundation.org/
 - 10. 4C: Collaboration to Clarify the Costs of Curation. http://4cproject.net/
 - 11. DAVID Digital AV Media Damage Prevention and Repair. http://david-preservation.eu/
 - 12. DIACHRON Managing the Evolution and Preservation of the Data Web. http://www.diachron-fp7.eu/
 - 13. meSch Material Encounters with Digital Cultural Heritage. http://mesch-project.eu/
 - 14. Presto4U European Technology for Digital Audiovisual Media Preservation. https://www.prestocentre.org/4u/about
 - 15. tranScriptorium. http://transcriptorium.eu

7B. Standards.

Objective:

- Students will be able to identify key standards for creating durable digital objects.
- Higgins, Sarah. "DCC DIFFUSE Standards Frameworks: A Standards Path through the Curation Lifecycle." *The International Journal of Digital Curation* 2/4 (2009). http://www.ijdc.net/index.php/ijdc/article/viewFile/118/136.
- Waibel, Günter. "Like Russian Dolls: Nesting Standards for Digital Preservation." RLG DigiNews 7/3 (June 2003). http://worldcat.org/arcviewer/1/OCC/2007/08/08/0000070511/viewer/file674.html#feature2

7C. OAIS.

- > The Standard.



- Using and Understanding the Standard.

 - Lavoie, B. "The Open Archival Information System Reference Model: Introductory Guide." DPC Technology Watch Report Series 04-01. 2004. https://www.dpconline.org/docs/technology-watch-reports/1359-dpctw14-02/file.
 - Tufts and Yale: Fedora and the Preservation of University Records. Section 1.5: "Requirements for Trustworthy Recordkeeping Systems and the Preservation of Electronic Records in a University Setting." 2006. http://dca.lib.tufts.edu/features/nhprc/

Tuesday, October 8

8. Project Planning, Policies, and Work Flows.

Objective:

- Students will be able to identify and describe critical steps in digital preservation project planning, as well as be able to discuss best practices in designing project workflows.
 - ♣ Beagrie, Neil; Najla Semple; Peter Williams; and Richard Wright. "Digital Preservation Policies Study. Part 1: Final Report October 2008." http://www.jisc.ac.uk/media/documents/programmes/preservation/jiscpolicy_p1finalreport.pdf.
 - ♣ Bishoff, Liz. "Planning for Digital Preservation: A Self-Assessment Tool." NEDCC. 2007. http://nedcc.org/resources/digital/downloads/DigitalPreservationSelfAssessmentfinal.pdf
 - → Davis, Susan E. "Electronic Records Planning in 'Collecting' Repositories." The American Archivist. Vol 71, No. 1 (Spring-Summer 2008).
 - ➡ DigitalPreservationEurope. PLATTER.

 http://www.digitalpreservationeurope.eu/publications/reports/Repository_Planning_Checklist_and_Guidance.pdf.
 - IMLS Forum. "A Framework of Guidance for Building Good Digital Collections." 2nd Ed. December 2004. http://www.niso.org/framework/Framework2.html.
 - **♣** NDLP Project Planning Checklist; http://lcweb2.loc.gov/ammem/prjplan.html
 - ➡ NINCH Guide to Good Practice. Chapter 2. "Project Planning."

 http://www.nyu.edu/its/humanities/ninchguide/II/.

 - ♣ National Library of Australia. Digital Preservation Policy, 3rd ed. (2008). http://www.nla.gov.au/policy/digpres.html.



♣ Reiger, Oya Y. Chapter 8: "Project to Programs: Developing a Digital Preservation Policy," In: Kenney, Anne R. & Oya Reiger. *Moving Theory into Practice*. Mountain View, CA: RLG, 2000, 135-152. On reserve in SILS Library.

9. Tuesday, October 15: No class. I will be at DLF/NDSA Conference.

Please work on your projects this week.

Tuesday, October 22

10. Metadata for Access, Management, and Preservation.

Objective:

- Students will gain awareness of a variety of metadata standards essential to digital preservation and understand how information professionals are using them.
- ➤ Review of various standards (MARC, MODS, METS, DCMI, PREMIS)
 - **↓** Caplan, Priscilla. "Understanding PREMIS." Library of Congress PREMIS Website. 2009. http://www.loc.gov/standards/premis/understanding-premis.pdf
 - ♣ Dappert, Angela and Markus Enders. "Using METS, PREMIS and MODS for Archiving eJournals," *D-Lib Magazine* September/October 2008. http://www.dlib.org/dlib/september08/dappert/09dappert.html
 - ➡ Gilliland-Swetland, Anne. "Introduction to Metadata: Setting the Stage," Getty Research Institute, Online Edition. Version 2.1. http://www.getty.edu/research/publications/electronic_publications/intrometadata/
 - Library of Congress. PREMIS Website. (PREservation Metadata Implementation Strategies). http://www.loc.gov/standards/premis/
 - Moving Theory into Practice Digital Imaging Tutorial, Chapter 5.
 http://www.library.cornell.edu/preservation/tutorial/metadata/metadata-01.html.
 - **♣** OCLC Website for Dublin Core materials: http://purl.org/DC/
 - Understanding Metadata. NISO Press, 2004. http://www.niso.org/standards/resources/UnderstandingMetadata.pdf.

NOTE: See supplement for listing of standards bodies and file format registries.

Tuesday, October 29

11A. File Formats & Storage.



Objective:

• Students will be able to identify key file format and storage media considerations for creating durable digital objects.

File Formats.

- Brown, Adrian. "Selecting File Formats for Long-Term Preservation." Digital Preservation Guidance Note 1. London: The National Archives, August 2008. http://www.nationalarchives.gov.uk/documents/selecting-file-formats.pdf.
- CENDI Digital Preservation Task Group. Formats for Digital Preservation: A Review of Alternatives and Issues.
 - http://www.cendi.gov/publications/CENDI_PresFormats_WhitePaper_03092007.pdf
- ↓ InterPARES. Selecting File Formats for Long-Term Preservation.

 http://www.interpares.org/display-file.cfm?doc=ip2_file_formats(complete).pdf
- Library of Congress. National Digital Stewardship Alliance. http://www.digitalpreservation.gov/ndsa/
- National Archives of Australia. "Digital Preservation: Guiding the Past, Illuminating the Future." (June 2006). http://www.naa.gov.au/images/xena_brochure%5B1%5D_tcm2-918.pdf
- Office for Information Systems Harvard University Library. "File Formats & Guidelines." http://hul.harvard.edu/ois/digpres/guidance.html.
- ** "Recommended Data Formats for Preservation Purposes in the FCLA Digital Archive." http://www.fcla.edu/digitalArchive/pdfs/recFormats.pdf.
- Rog, Judith and Caroline van Wijk. "Evaluating File Formats for Long-term Preservation."
 White Paper: National Library of the Netherlands, 2007.
 http://www.kb.nl/hrd/dd/dd links en publicaties/publicaties/KB file format evaluation method 27022008.pdf
- Rosenthal, D. (2010). Format Obsolescence: Assessing the Threat and the Defenses. *Library Hi-Tech, 28*(2), 195-210. http://dx.doi.org.libproxy.lib.unc.edu/10.1108/07378831011047613
- Thompson, D. (2010). A Pragmatic Approach to Preferred File Formats for Acquisition. Ariadne, 63. Accessed August 19, from http://www.ariadne.ac.uk/issue63/thompson/
- ♣ Todd, Malcolm. (2009). Technology Watch Report: File Formats for Preservation. DPC Technology Watch Series Report 09-02. London: Digital Preservation Coalition. http://www.dpconline.org/component/docman/doc_download/375-file-formats-for-preservation
- Responses to the Technology Watch Report: http://dablog.ulcc.ac.uk/2009/12/03/ffods/ Read the comments, too!
- Lechich, Roy. "File Format Identification and Validation Tools." 2007. http://www.library.yale.edu/iac/DPC/FileIDandValidate.pdf
- Library of Congress. Sustainability of Digital Formats. http://www.digitalpreservation.gov/formats/index.shtml

> Storage.

■ Baker, Mary, Kimberly Keeton, and Sean Martin. "Why Traditional Storage Systems Don't Help Us Save Stuff Forever." HP Laboratories Palo Alto, 2005. http://www.hpl.hp.com/techreports/2005/HPL-2005-120.pdf.



- ♣ Brown, Adrian. "Selecting Storage Media for Long-Term Preservation." London: The National Archives (August, 2008). http://www.nationalarchives.gov.uk/documents/information-management/selecting-storage-media.pdf.
- ♣ Farmer, Jacob. "Storage Design for High Capacity and Long Term Storage: Balancing Cost, Complexity and Fault Tolerance." PowerPoint Slides. http://www.diglib.org/forums/spring2009/presentations/Farmer.pdf
- Library of Congress. Designing Storage Architectures for Digital Preservation. http://www.digitalpreservation.gov/news/events/other_meetings/storage10/
- ➡ The Science and Technology Council of the Academy of Motion Picture Arts and Sciences. The Digital Dilemma: Strategic Issues in Archiving and Accessing Digital Motion Picture Materials. (November 2007).

 http://www.dmclab.jp/~kaneko/dmcsympo20081024/pdf/Maltz-20081024.pdf Please read chapters 5 & 6 and browse remainder.
- Wright, Richard, Ant Miller, and Matthew Addis. "The Significance of Storage in the "Cost of Risk" of Digital Preservation." The International Journal of Digital Curation 3/4 (2009). http://www.ijdc.net/index.php/ijdc/article/viewFile/138/173

DUE: Briefing Paper #2: Interview Paper. Submit digital and print versions.

Tuesday, November 5

12A. Selection and Appraisal

- ➤ Why Digitize?
 - Harvey, Ross. "Appraisal and Selection." *DCC Digital Curation Manual.* (2007). http://www.dcc.ac.uk/webfm_send/121.
 - ♣ ICPSR. "Selection and Appraisal."

 https://www.icpsr.umich.edu/icpsrweb/content/datamanagement/lifecycle/selection.html

 ml
 - ↓ Johnson, Richard K. "In Google's Broad Wake: Taking Responsibility for Shaping the Global Digital Library." ARL: A Bimonthly Report 250 (2007): 1-15. http://www.arl.org/bm~doc/arlbr250digprinciples.pdf.
 - ♣ Prescott, Andrew and Lorna Hughes. "Why Do We Digitize? The Case for Slow Digitization." Archive Journal (September 2018). https://www.archivejournal.net/essays/why-do-we-digitize-the-case-for-slow-digitization/
 - ➡ Tanner, Simon. "Democratisation of Collections through Digitisation," (talk at Trinity College Dublin, January 2015), posted February 4, 2015, at https://www.slideshare.net/KDCS/tanner-trinity-jan-2015.
 - ➡ Tanner, Simon. "Measuring the Impact of Digital Resources: The Balanced Value Impact Model." London: King's College, 2012.

 https://www.kdl.kcl.ac.uk/fileadmin/documents/pubs/BalancedValueImpactModel SimonTanner_October2012.pdf

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Overview of Selection Principles.

- ♣ Gertz, Janet. "Preservation and Selection for Digitization." NEDCC. 2007. https://www.nedcc.org/free-resources/preservation-leaflets/6.-reformatting/6.6-preservation-and-selection-for-digitization
- Work through the "Moving Theory into Practice Digital Imaging Tutorial," Chapter 2. http://www.library.cornell.edu/preservation/tutorial/selection/selection-01.html
- ♣ National Information Standards Organization, Framework Advisory Group. 2004. *A Framework of Guidance for Building Good Digital Collections*. 2nd edition. http://www.niso.org/framework/framework2.html
- Rieger, Oya Y. Preservation in the Age of Large-Scale Digitization A White Paper. CLIR Report 141 (February 2008). http://www.clir.org/pubs/abstract/pub141abst.html,

12B. Preservation Scenario Presentations.

12C. Budgeting - How Much Does This All Cost?

- Curation Costs Exchange. http://www.curationexchange.org/
- Rosenthal, David S. H. et al. "The Economics of Long -Term Digital Storage." In L. Duranti & E. Shaffer (Eds.), The Memory of the World in the Digital age: Digitization and Preservation: An international conference on permanent access to digital documentary heritage, Vancouver, Canada, 26-28 September 2012 (pp. 513-528). Vancouver, Canada: UNESCO. Retrieved from http://www.unesco.org/webworld/download/mow/mow_vancouver_proceedings_en.pdf

12D. Making the Case for Value.

- **♣** DPC. Business Case Studies http://wiki.dpconline.org/index.php?title=Case studies
- ♣ DPC. Digital Preservation Business Case Toolkit. http://wiki.dpconline.org/index.php?title=Digital Preservation Business Case Toolkit.
 http://wiki.dpconline.org/index.php?title=Digital Preservation Business Case Toolkit.
 <a href="http://wiki.dpconline.org/index.php?title=Digital Preservation Business Case Toolkit.
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 <a href="http://wiki.dpconline.
- ♣ DPC. Digital Preservation Handbook. "Business Cases, Benefits, Costs, and Impact." http://www.dpconline.org/handbook/institutional-strategies/business-cases-benefits-costs-and-impact

12E. Project Budgets.

http://www.library.cornell.edu/preservation/tutorial/management/management-05.html

Tuesday, November 12



13A. Trustworthy Repositories and Evaluation.

- Center for Research Libraries. Trustworthy Repositories Audit & Certification: Criteria and Checklist. Version 1.0. February 2007.
 <a href="http://catalog.crl.edu/search~S1?/Xtrusted+repositories&searchscope=1&SORT=R/Xtrusted+repositories&searchscope=1&SORT=R&SUBKEY=trusted%20repositories/1,15,15,B/1856~b2212602&FF=Xtrusted+repositories&searchscope=1&SORT=R&6,6,1,0.</p>
- **♣** DRAMBORA. http://www.repositoryaudit.eu/
- **↓** CCSDS. Audit and Certification of Trustworthy Digital Repositories. 2011. Magenta Book, http://public.ccsds.org/publications/archive/652x0m1.pdf
- ♣ Ferriero, David. "ISO Standards for Certifying Trustworthy Digital Repositories."

 NARAtions: Blog of the Archivist of the United States. (March 15, 2011)

 http://blogs.archives.gov/online-public-access/?p=4697
- Ross, Seamus and Andrew McHugh. "The Role of Evidence in Establishing Trust in Repositories." *D-Lib Magazine* 12 7/8 (July/August 2006). http://www.dlib.org/dlib/july06/ross/07ross.html.
- ♣ Trust in digital repositories
- ➡ Yakel, Elizabeth, Ixchel M. Faniel, Adam Kriesberg, and Ayoung Yoon. "Trust in Digital Repositories." International Journal of Digital Curation 8/1 (2013)

 http://www.ijdc.net/index.php/ijdc/article/view/8.1.143

13B. Approaches to Preservation: Migration, Emulation & Beyond.

- Anderson, David, Janet Delve, and Dan Pinchbeck. "Toward a Workable Emulation-based Preservation Strategy: Rationale and Technical Metadata." New Review of Information Networking (November 2010): 110-131. https://www-tandfonline-com.libproxy.lib.unc.edu/doi/full/10.1080/13614576.2010.530132
- ♣ British Library. "British Library Digital Preservation Strategy." (2006). http://www.bl.uk/aboutus/stratpolprog/ccare/introduction/digital/digpresstrat.pdf
- ← Cornell University. Digital Preservation Management Tutorial: Implementing Short-term Strategies for Long-term Problems. "Digital Preservation Strategies."

 http://www.library.cornell.edu/iris/tutorial/dpm/terminology/strategies.html.
- **↓ DataONE. "DataONE Preservation Strategy."**http://mule1.dataone.org/ArchitectureDocs-current/design/PreservationStrategy.html.
- ➡ Hedstrom, Margaret L., Christopher A. Lee, Judith S. Olson, and Clifford Lampe. "The Old Version Flickers More:" Digital Preservation from the User's Perspective. *The American Archivist 69* (Spring/Summer 2006): 159-187.

 http://www.metapress.com/content/1765364485n41800/fulltext.pdf.
- **♣** POWRR. Preserving (Digital) Objects With Restricted Resources. http://digitalpowrr.niu.edu/ See tool grid.
- Rothenberg, Jeff. "Ensuring the Longevity of Digital Documents." *Scientific American* 272 (January 1995): 42–47.
- ♣ Software Preservation Network. EaaSI.

 http://www.softwarepreservationnetwork.org/eaasi/



- Thibodeau, Kenneth. "Overview of Technological Approaches to Digital Preservation and Challenges in Coming Years." In *The State of Digital Preservation: An International Perspective. Conference Proceedings.* Washington, D.C., Documentation Abstracts, Inc. Institutes for Information Science, April 24-25, 2002. Council on Library and Information Resources, Washington, D.C. http://www.clir.org/pubs/reports/pub107/thibodeau.html.
- ➡ von Suchodoletz, Dirk and Jeffrey van der Hoeven. "Emulation: From Digital Artefact to Remotely Rendered Environments." The International Journal of Digital Curation ³/₄ (2009) http://www.ijdc.net/index.php/ijdc/article/viewFile/141/177.

13C. Disaster Planning.

- ♣ Dearborn, Carly and Sam Meister. "Failure as Process: Interrogating Disaster, Loss, and Recovery in Digital Preservation," Alexandria: The Journal of National and International Library and Information Issues r27, no. 2 (2017): 83-93. http://journals.sagepub.com/doi/pdf/10.1177/0955749017722076
- ➡ Disaster Planning. NEDCC Preservation Leaflet.

 http://www.nedcc.org/resources/leaflets/3Emergency_Management/03DisasterPlanning.php
- ♣ Disaster Planning for Digital Preservation. ICPSR.

 http://www.icpsr.umich.edu/icpsrweb/ICPSR/curation/disaster/dp-planning.jsp

 | Disaster Planning for Digital Preservation. ICPSR.

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 | Disaster Planning for Digital Preservation. ICPSR.
 | Disaster Planning for Digital Preservation. ICPSR.
 | Disaster Planning for Digital Preser
- Contingency Planning Guide for Information Technology Systems. NIST. http://nvlpubs.nist.gov/nistpubs/Legacy/SP/nistspecialpublication800-34r1.pdf

Tuesday, November 19

14A. Presentation of Grant Proposals.

14B. Providing Access.

- > Access, Discovery, Users
 - Libraries to Digital Preservation Research: The Importance of Users and Context." *Journal of Documentation* 66, no. 2 (2010): 207-223.
 - Hedstrom, Margaret L., Christopher A. Lee, Judith S. Olson, and Clifford Lampe. "The Old Version Flickers More:" Digital Preservation from the User's Perspective. *The American Archivist* 69 (Spring/Summer 2006): 159-187.
- Social Networking and Crowdsourcing
 - ♣ Social Networking in Libraries. ALA. 2011. http://www.ala.org/news/mediapresscenter/americaslibraries/socialnetworking
 - ♣ Owens, Trevor. "The Crowd and the Library." 2012. http://www.slideshare.net/tjowens/the-crowd-and-the-library
- **▶** Web Analytics
 - ♣ Google Analytics, http://support.google.com/analytics/?hl=en; and AWStats, http://awstats.sourceforge.net/
 - ♣ Prom, Chris. "Using Web Analytics to Improve Online Access to Archival Resources."
 American Archivist 74/1 (2011): 158-184.



Tuesday, November 26

15A. Projects to Programs: Policies, Sustainability, and New Directions.

- ➡ The Blue Ribbon Task Force on Sustainable Digital Preservation and Access.

 "Sustainable Economics for a Digital Planet: Ensuring Long-Term Access to Digital Information." 2010. http://brtf.sdsc.edu/biblio/BRTF Final Report.pdf Read Exec. Summary. See also the BRTF website: http://brtf.sdsc.edu/about.html
- ♣ Bradley, Kevin. "Defining Digital Sustainability." Library Trends 56/1 (Summer 2007): 148-163. https://muse.jhu.edu/article/223247/pdf
- ➡ Eakin, Lori, Amy Friedlander, Roger Schonfeld, & Sayeed Choudhury. "A Selective Literature Review on Digital Preservation Sustainability." December 2008. http://brtf.sdsc.edu/biblio/Cost Literature Review.pdf
- ★ Kristin R. Eschenfelder, Kristin R, et al. "What Are We Talking about When We Talk about Sustainability of Digital Archives, Repositories and Libraries? Proceedings of the Association for Information Science and Technology (December 27, 2016).
 https://asistdl.onlinelibrary.wiley.com/doi/full/10.1002/pra2.2016.14505301148
- ★ Kitchin, R., S. Collins, and D. Frost, "Funding Models for Open Access Digital Data Repositories." Online Information Review 39 (2015) .664–681. https://www-emerald-com.libproxy.lib.unc.edu/insight/content/doi/10.1108/OIR-01-2015-0031/full/html
- **Knowledge Exchange Sustainability Index. (2014).** http://www.knowledge-exchange.info/projects/project/open-access/sustainability-oa-services
- LaVoie, Brian and Lorcan Dempsey (2004) "Thirteen Ways of Looking at...Digital Preservation." *D-LibMagazine* 10(7/8). http://www.dlib.org/dlib/july04/lavoie/07lavoie.html.
- Library of Congress. "Sustainability of Digital Formats Planning for Library of Congress Collections." http://www.digitalpreservation.gov/formats/sustain/sustain.shtml.
- Walters Tyler O. and Katherine Skinner. "Economics, Sustainability, and the Cooperative Model in Digital Preservation." 28/2 Library Hi Tech (2010): 259-272. https://doi.org/10.1108/07378831011047668

15B. Copyright and Rights Management.

- Besek, June M. "Digital Preservation and Copyright." WIPO Magazine (May 2008). https://www.wipo.int/wipo_magazine/en/2008/05/article_0010.html
- ♣ Coyle, Karen. "Rights in the PREMIS Data Model: A Report for the Library of Congress." Washington, D.C.: Library of Congress, December 2006. http://www.loc.gov/standards/premis/Rights-in-the-PREMIS-Data-Model.pdf.
- ♣ Gasaway, Laura N. "America's Cultural Record: A Thing of the Past?" Houston Law Review, 2003. http://www.unc.edu/%7Eunclng/America%27s%20cultural%20record.htm

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- ➡ Hirtle, Peter. "Copyright Term and the Public Domain in the United States" (table). (January 2018). https://copyright.cornell.edu/sites/default/files/2018-01/copyright_term_and_the_public_domain2018.pdf
- ➡ Hirtle, Peter B. "Digital Preservation and Copyright." Stanford University Libraries. Copyright and Fair Use.

 http://fairuse.stanford.edu/commentary_and_analysis/2003_11_hirtle.html
- Leary, Heather, Kacy Lundstrom, and Pamela Martin. Copyright Solutions for Institutional Repositories: A Collaboration with Subject Librarians." *Journal of Library Innovation* Vol. 3 Issue 1 (2012): 101-110.
- Library of Congress et al. "International Study on the Impact of Copyright Law on Digital Preservation." A joint report of The Library of Congress National Digital Information Infrastructure and Preservation Program, the Joint Information Systems Committee, the Open Access to Knowledge (OAK) Law Project, and the SURFfoundation. (July and September 2008).

 http://www.digitalpreservation.gov/library/resources/pubs/docs/digital-preservation-final-report2008.pdf Read Parts 1, 5, and 6.
- ♣ Section 1098 Study Group. Executive Summary. March 2008. http://www.section108.gov/docs/Sec108ExecSum.pdf

Tuesday, December 5

- 16A. Funding Results for Your Projects.
- 16B. Culminating DTIR Exercise.
- 16C. Course Recap and Lessons Learned Summary.
- 16D. Class Evaluations.

Tuesday, December 10: Written Grant Proposals Due.

