Course Description
An introduction to the principles and practices of library and archives preservation, including examination of the composition of paper, book, and non-book materials; agents that contribute to deterioration; current methods for preventing and remediating deterioration, including environmental controls, disaster planning and recovery, binding, digitization and other reformatting technologies, collection maintenance and rehousing; ensuring long-term access to electronic content; the management of preservation efforts, including preservation assessment and decision-making; and the standards and professional ethics that support them.

Course Objectives
• To understand key concepts and terms in preservation, including the major causes of deterioration of library and archival materials in analog and electronic formats.
• To build a conceptual framework for considering the range of issues involved in planning for and carrying out preservation activities.
• To recognize and appreciate preservation as one of the central functions in libraries and archives, and to explore the relationships between preservation and other library functions.
• To become familiar with and evaluate print and online information sources on preservation.

Student Learning Objectives
• Utilize a broad range of systems and technologies to manage and deliver information.

Students will be evaluated on:
  o The written assignments, which require them to apply information from class sessions and readings to solve case studies of real-world preservation situations.
  o The in-class presentation, which requires them to evaluate a technological initiative and explain its strengths and weaknesses to the class.
  o The assigned readings, which students are expected to discuss in class.

Site Visits
Two class sessions will take place at Columbia University
• November 12: Demonstration and discussion of book structure, repairs, special collections conservation conducted by Vasare Rastonis, Special Collections Conservation, in the Conservation Laboratory, Room 109 Butler Library, Columbia University.
• December 17: Tour of the Columbia Preservation and Digital Conversion Division, Rooms 101 and 106 Butler Library, Columbia University.
Office Hours
Office hours are by appointment only. Please make arrangements in class or get in touch with me at gertz@columbia.edu.

Course Requirements and Grading
There is no term paper or final exam. Assignments include are two short and three longer written assignments, and a group in-class presentation. Class grades will be based on participation in classroom discussions, written assignments, and in-class presentations.

- Written assignments 100 points
- In-class presentations 45 points
- Class participation 5 points

- Quality of content, grammar, spelling, following directions, and adherence to length limits all matter.
- The method of grading is as follows:
  - Outstanding, wouldn’t change anything
  - Excellent, there might be a point or two that might be changed, or a style issue, or typos.
  - Very good, some corrections to be made in concepts presented, or numbers of typos, style problems
  - Good, but with major points left out or other conceptual problems.
  - Fair, misconceptions or errors. You may redo the paper (with no penalty on your grade) if you wish.
  - Grossly incomplete or erroneous. After conferring in person you may redo the paper.

- For every paper that is turned in more than a week late, a point will be taken off.

Course Readings
No up to date textbook on preservation is currently in print. Many of our basic readings will come from the Northeast Document Conservation Center’s online course, Preservation 101, at http://unfacilitated.preservation101.org/loggedin.asp. All other readings are available online or on Blackboard. Students are expected to participate in class discussions of readings.
On-Line Resources

ALA Preservation Education Directory
www.al.org/alcts/resources/preservation/educationdirectory

AIC (American Institute for Conservation of Historic and Artistic Works)
http://www.conservation-us.org
In addition to information for professional conservators, includes brochures for the general public on caring for books, photographs, and other objects, and a service to locate professional conservators by specialty and by geographic location.

AMIA (Association of Moving Image Archivists) http://www.amianet.org
A non-profit professional association established to advance the field of moving image archiving by fostering cooperation among individuals and organizations concerned with the acquisition, description, preservation, exhibition and use of moving image materials.

CCI (Canadian Conservation Institution) http://www.cci-icc.gc.ca/main_e.aspx
Among other resources, home of BCIN, the Bibliographic Database of the Conservation Information Network, the Web’s most complete freely available bibliographic resource for the conservation, preservation and restoration of cultural property, at http://www.bcin.ca/English/home_english.html

Center for Book Arts, New York http://www.centerforbookarts.org
Offers classes in papermaking, bookbinding, typography, and related fields.

CLIR (Council on Library and Information Resources) http://www.clir.org
CLIR’s goal is helping to ensuring that information resources needed by scholars, students, and the public are available for future generations. They publish reports and provide links to discussions of preservation, electronic resources, scholarly information, and digital libraries. Includes the DLF (Digital Library Federation), which provides information about developing digital collections and managing networked content for the benefit of scholarship, education, and cultural progress, particularly standards and “best practices” for digital collections and network access and reporting on leading-edge research-and-development in libraries’ use of electronic-information technology.

Digital Curation Centre (DCC) http://www.dcc.ac.uk/
A UK-based center of expertise in digital information curation with a focus on building capacity, capability and skills for research data management that provides reports, manuals, and other useful information.

IASA (International Association of Sound and Audiovisual Archives)
http://www.iasa-web.org/index.asp
IASA functions as a medium for international co-operation between archives that preserve recorded sound and audiovisual documents. It produces standards for preservation activities.
ICA (International Council on Archives) Photographic and Audiovisual Archives Working Group
Provides useful links and bibliographies.

IFLA (International Federation of Library Associations) Preservation and Conservation Section

IPI (Image Permanence Institute) http://www.imagepermanenceinstitute.org
IPI is a university-based, nonprofit research laboratory devoted to scientific research in the preservation of visual and other forms of recorded information. Areas of interest are research on the stability of information media, environmental monitoring and standards, standards for imaging media preservation, and training of photograph conservators.

Library of Congress:
- Preservation Directorate  http://lcweb.loc.gov/preserv
- NDIIPP (National Digital Information Infrastructure and Preservation Program)
  http://www.digitalpreservation.gov. LC’s program for preserving its digital collections. The site includes reports on research and development into digital preservation.
- NDSA (National Digital Stewardship Alliance)
  A collaboration among government, academic, and business organizations to preserve the distributed national digital collections  http://www.digitalpreservation.gov/ndsa

Lyrasis http://www.lyrasis.org/Preservation.aspx
Network that provides preservation services and online leaflets, links, and bibliographies.

NARA (National Archives) http://www.archives.gov/preservation/index.html
Information on a range of preservation issues, including guidance on digitization standards at http://www.archives.gov/preservation/products/.

NEDCC (Northeast Document Conservation Center) http://www.nedcc.org
NEDCC is the largest nonprofit regional conservation center in the United States. As well as providing disaster recovery assistance, surveys and conservation and reformatting services, it carries on extensive educational activities and provides useful publications online.
Class 1  September 10, 2012  Introduction to Preservation

- Definitions, purposes, elements of preservation.
- Qualities of original materials.

Readings

Topics covered this class:

Read through the all the parts of “What is Preservation”.  
http://unfacilitated.preservation101.org/session1/expl_whatis.asp

http://www.mla.org/primary_records1 (read Statement and Introduction by Tanselle at  
http://www.mla.org/primary_records2. Other sections are optional)

National Archives, Archives Library Information Center. Intrinsic Value In Archival  
Material, Staff Information Paper Number 21 (read up to Application of the Concept)  
http://www.archives.gov/research/alic/reference/archives-resources/archival-material- 
intrinsic-value.html

ALA Policy Manual, section 52.2 Preservation.  
http://www.ala.org/ala/aboutala/governance/policymanual/updatedpolicymanual/section2  
/52libsvcsandrespon.cfm#52.2

Academy of Certified Archivists, Role Delineation Statement: Preamble, General Knowledge  
Statements, and Domain 4: Preservation and Protection, pg. 21-22. 

Topics to be covered next class:

Northeast Document Conservation Center. Preservation 101, Session 2, Deterioration of  
Paper Collections (2006). Read the sections on “Basic Concepts and Inherent Vice  

Shannon Zachary. Mass deacidification and the University of Michigan experience. ARL  

(Go to http://www.niso.org/kst/reports/standards/ and search under designation by  
Z39.78, click on View Details, and then on the link at Final Document (PDF)). Read p.  
vii, 3-12, 20-27.

Joan Stephens, The life expectancy of paperback books in academic libraries. Technical  
services quarterly 15 (1998) pp. 17-25 [n.b. The online version calls this 1997; also  
available on Blackboard if you can’t access it online.]
Class 2  September 17, 2012  Paper, Books, and Binding

- History of paper manufacturing; rag, wood pulp, and machine paper.
- Paper permanence and durability; acidic and acid-free paper.
- Deacidification of acidic paper.
- Library standards.
- Parts of the book; book construction.
- Library binding.

Assignment due next week

View the care and handling websites listed here. Find the homework assignment on Blackboard, fill out an evaluation form for each site, and describe and compare the sites as directed in the homework instructions.

- Preservation Faux Pas  http://www.youtube.com/watch?v=IfegfUyoxQc
- Murder in the Stacks  http://www.youtube.com/watch?v=phyFPJD-CGs
- The FUNDamentals of Book Care in Five Easy Lessons  http://www.youtube.com/watch?v=zX1Eiz7rLwg

Readings for next week


Class 3  September 24, 2012  Handling, Security, Disaster Preparedness

- Proper care and handling of books and other library materials.
- Issues relating to security.
- Nature of library disasters.
- Planning for disaster prevention.

Assignment due in November
Every week in November there will be in-class presentations by 3-person groups. Each group will be responsible for reviewing one digitization project or one digital preservation initiative and presenting the information in class (up to 15 minutes). Groups will also hand in a written summary. See handout for details.

Readings for next week

Northeast Document Conservation Center. Preservation 101, Session 5, Collections Care. Read the sections on “Storage Furniture and Storage Enclosures”
Class 4  October 1, 2012  Environmental Controls and Housing

- Environmental controls: temperature, humidity, light, pollution.
- Housing and protective enclosures.

Reminder: No class next week

Assignment due next class

HVAC report (2-3 pages)
1. Read the HVAC report from a hypothetical library (handed out in class and on Blackboard) and propose a plan to address the environmental problems identified.
2. Some solutions to the problems could be very expensive. Suggest alternatives that could be followed in case budgets are limited.

Readings for next week
Class 5  October 15, 2012  Audio-Visual and Electronic Materials

- Construction and causes of deterioration of photographic media, phonographic disks, magnetic media, and optical media.
- Issues relating to preservation of media.
- Issues relating to preservation of digital information.

Assignment due next week
Develop present a preservation plan for a hypothetical special collection including audio and moving image materials (described in the handout) including:
1. Correct housing for each type of material.
2. Any preservation treatments that might be needed for each type of material.
3. An explanation of which part of the collection is the highest priority for attention, and why.

Readings for next week
http://copyright.columbia.edu/copyright/libraries-and-copyright/copies-for-preservation/
Peter Hirtle. Copyright Term and the Public Domain in the United States. 2011. Take a look at this to get an idea of the complexity of copyright rules.
http://copyright.cornell.edu/resources/publicdomain.cfm
Class 6 October 22, 2012 Copyright, Traditional Reformatting, Digitization

- Nature of copying and retention of the original.
- Copyright issues for preservation.
- Reformatting technologies: microfilming, photocopying, digitization.

Readings for next week
Association for Recorded Sound Collections, Technical Committee. Preservation of Archival Sound Recordings. 2009
http://www.clir.org/pubs/abstract/pub141abst.html
http://www.nedcc.org/resources/leaflets/6Reformatting/07OutsourcingAndVendorRelations.php

Assignment due next week:
In-class reports on JSTOR and Monterey Jazz Archive
Class 7    October 29, 2012    Digitization continued

- Digitization, including audio and moving image.
- In-class presentations.

Readings for next week
    http://www.al.org/ala/mgrps/divs/alcts/resources/preserv/defdigpres0408.cfm
Pauline Sinclair. The Digital Divide: Assessing Organisations’ Preparations for Digital
Cornell University Library. Digital Preservation Management Tutorial, chp. 2 Terms and
concepts; chp. 3 Introduction and File formats section only; chp. 6 Program elements
[The exercises are optional.]
    http://www.icpsr.umich.edu/dpm/dpm-eng/contents.html
Digital Preservation,” Library Hi Tech, Volume 28 Number 2, 2010

Assignment due next week:
In-class reports on LOCKSS/CLOCKSS and Portico.
Class 8 November 5, 2012 Project Management; begin Preservation of Digital Resources

- Project management and vendor relations.
- Preservation of digital resources.
- Importance of metadata for preservation of electronic resources.
- In-class presentations.

reminder: Next week class is in the Conservation Lab at Columbia University. Class will start at 6:45.

To get there: subway #1 or #9; bus #M4 from east side or #M104 from west side; get off at 116th Street, and report to Butler Library. Meet in the lobby. If you are late, go to room 109.

Readings for next week
NEDCC Preservation 101, Session 6, sections on  
http://www.conservation-us.org/index.cfm?fuseaction=page.viewPage&PageID=858&d:\CFusionMX7\verity\Data\dummy.txt  
American Institute for Conservation. How to choose a conservator.  
View two videos: A Conservator Talks about Conservation, and Tour the Conservation Lab  
https://alumni-friends.library.columbia.edu/mellon_conservator.html
Class 9 November 12, 2012 Repair and Conservation

Site visit to Columbia Conservation Lab, conducted by Vasare Rastonis, Special Collections Conservator.

- Demonstration of book repairs for general, circulating collection materials.
- Ethics of special collections conservation and working with a conservator.
- Making repair and conservation decisions.

Readings for next week


Center for Research Libraries. Trustworthy Repositories Audit and Certification (TRAC). 2007. Read Introduction and Appendix 1 (Glossary). Skim the rest, noting the three categories to be measured by the tool http://www.crl.edu/sites/default/files/attachments/pages/trac_0.pdf


Assignment due next week:

In-class reports on MetaArchive and HathiTrust.
Class 10  November 19, 2012  Preservation of Digital Resources continued

- Digital repositories.
- In-class presentations.

Readings for next week

Christopher Prom. Preserving Email, Digital Preservation Coalition, 2011, pp. 8-37
http://www.dpconline.org/publications/technology-watch-reports (click on report 11-01)

Assignment due next week:

In-class report on the Human Rights Web Archive.
Class 11  November 26, 2012  Preservation of Digital Resources completed

- Preservation of ejournals, websites, etc.
- In-class presentations.

Readings for next week

NEDCC Preservation 101, Introduction to Preservation, section on Assessing Collections
http://unfacilitated.preservation101.org/session1/prac_assessing.asp

NEDCC Preservation 101, Building a Preservation Program, sections on Preservation Planning and Program Management
http://unfacilitated.preservation101.org/session8/expl_plan.asp

NEDCC Self Survey Guide. Look through this to see the sort of information a self-survey collects – no need to read the whole thing

NEDCC Planning for Digital Preservation: A Self-Assessment Tool. Again, look through it but no need to read it.


netpreserve.org/publications/Kalev2012.pdf

Example of grant proposal, posted on Blackboard in Readings section
Class 12  December 3, 2012  Preservation Assessment, Surveys, & Planning

- Elements of preservation programs.
- Institutional assessments and condition surveys.
- Developing a preservation plan based on the surveys.
- Preservation policies.

Assignment for next week:
Class presentation and written assignment (2 pages).
1. Locate 4 books (from any circulating library collection) that differ in their physical condition and need different sorts of preservation treatment. Bring them to class with for discussion.
2. Identify the library and briefly describe its collections and the main types of people it serves.
3. Describe each book and the most appropriate treatment for it and why. Treatments can include anything we’ve discussed this year, including binding, repair, boxing, creating a new copy by one of the technologies we’ve discussed, replacement, or discarding without replacement. If you decide on replacement, check to see if a copy is available for purchase, and what condition it is in. If you decide on access to an existing digital copy, look at the digital version and explain why it is a valid replacement. Your choices of treatments should be based on the mission of the library, the type of use the books have had and are likely to have in future, the type of damage they have suffered, and whether the paper is brittle.

Assignment due IN TWO weeks (hand in at last class):
1. Read the Map Collection condition survey and using the data presented, the readings, and the principles and techniques we’ve discussed throughout the semester, draw conclusions from the results that have been presented.
2. Suggest a preservation plan including both short-term and long-term actions. What actions do you recommend? In what priority order? What resources will these actions require?

Readings for next week
Digital Preservation Coalition. Decision tree, from their Handbook. 2006 http://www.dpconline.org/advice/preservationhandbook/decision-tree and click on PDF of Decision Tree (also on Blackboard)
Class 13  December 10, 2012  Selection for Preservation

- Making preservation decisions.
- Criteria for preservation selection.
- Preservation of the original/preservation of content.
- In-class presentations.

Assignment due next week:
Map Collection condition survey.

Reading for next week
Background description of Columbia University Libraries Preservation & Digital Conversion Division, posted on Blackboard

reminder: The last class will be held at Columbia. Class will start at 6:45.
To get there: subway #1 or #9; bus #M4 from east side or #M104 from west side; get off at 116th Street, and report to Butler Library. Meet in the lobby. If you are late, go to room 101. Does anyone need a copy of the map?
Class 14  December 17, 2012  Preservation Tour; Review and Wrap-up

- Site visit to Columbia’s Preservation Division.
- Review of main concepts covered during the course.

Hand in final homework.