INF 393C: Preservation Science and Practice

Fall 2021

Unique Number: 28955

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Office hours: Wednesdays, 10 AM - noon, by appointment

Canvas:

Course Meeting Times

Wednesdays, 12 PM - 3 PM

Course Description

Ever wondered how libraries and archives safeguard historical materials for future generations? Preservation is the answer. In this course, students learn collections care strategies that enable today's information stewards to protect our growing cultural record. Scientific foundations and practical exercises will address common preservation challenges, such as environmental control, mold, insects, pollutants, and light damage. Modern topics in health, safety, and sustainability will highlight the developing nature of the field. Students will evaluate preservation risks for books, paper, electronic media, and other collections materials.

Learning Objectives

By the end of this course, students should be able to:

- Understand foundational mechanics of HVAC
- Evaluate environmental conditions using a sling psychrometer
- Use the psychrometric chart to assess preservation impact
- Apply current sustainability standards to collections storage environments
- Collect and evaluate data on temperature, relative humidity, and light exposure

- Conduct and report upon integrated pest management
- Understand lifecycle and control of pests and mold
- Assess health and safety issues for preservation practitioners
- Compare and contrast storage needs and preservation risks for books, paper, electronic media, and other collections materials

Course Requirements

There are no prerequisites for this class. Students are expected to attend all classes and complete all reading assignments before each class meeting. There may be one or more off-site class meetings.

Assignments

Please submit all assignments via Canvas unless otherwise instructed. All assignments are due by the beginning of class on the due date. If you have a legitimate reason for an assignment to be late, please discuss it with me as early as possible.

In your assignments, please strive for accurate, concise, and well-organized writing that showcases your understanding of the topics at hand. My primary goal is to assess your mastery of these topics, rather than your writing. However, if your writing hinders the successful communication of your understanding, I will then grade writing by necessity. For writing assistance, please see the University Writing Center.

A few writing tips specific to this class:

- Strive for clear topic sentences and closing statements.
- Ensure that your sentences and paragraphs build sequentially upon one another.
- Use fewer words whenever possible.
- Avoid using scare quotes whenever possible.
- Use single quotes in only one instance: a quote inside a quote.
- Use ellipses only to indicate words or ideas omitted for brevity.
- Use APA Guidelines for citations.
- Use double spacing.
- Include your last name and assignment name in your file title.
- Be precise with the word "they." Regarding pronouns, APA Guidelines tell us the following:
    - "He/him/his" and "she/her/hers" are singular and gendered.
    - "They/their" is plural.
    - "They/their" may also be singular in several special cases:
        - When a singular person identifies with more than one gender. Ex: Casey is a gender-fluid person. They are from Texas and enjoy tacos.
        - When gender is unknown. Ex: The cup of coffee is theirs. (His? Hers? We don't know.)

- When it's bulky and awkward to say "he or she," "him or her," or "his or hers." Ex: Each child played with their (instead of "his or her") parent. Please note, this usage is the least formal, and there's often a way to write around it.

Participation (15 pts)
Students will be responsible for leading class discussion of assigned readings or topics on one class day. Discussion should include brief synopses of readings, relevance within preservation workflows, and several questions to spur engagement among classmates. Your presentation will serve as a springboard for our class discussion. Your participation grade will stem from your discussion leadership and active participation in the class.

Environmental Data Report (5-7 pages) (20 pts)
Use a datalogger to record environmental data over time at five different locations around UTA. Use the psychrometric chart to determine other environmental parameters in these areas. Use the Image Permanence Institute Dewpoint Calculator (online) to determine the materials risks for these areas, including the Preservation Index and risks of mechanical damage, mold risk, and metal corrosion. Report your findings and explain what they mean. Are the areas you measured safe for collections storage? For what kinds of materials? (Cite references as necessary.) What types of damage might you observe in paper-based materials stored in these areas? What other observations can you make? Do you think the same air handler services all the areas you examined? (Hint: consider whether the observed temperatures and RHs point to the same dewpoint. See IPI's *Step-by-step Workbook: Achieving a Preservation Environment for Collections.*)

Exhibit Lighting Recommendations Report (5 pages) (20 pts)
Choose three to five sample collection materials from the lab. Arrange them, half-covered, along with a blue wool card, also half-covered, under the fluorescent lights in the UTA 1.506 exhibit area. Use a light meter to measure the illumination and UV coming from the lamp. Begin the test in Week 1 and let it run through Week 9. Check your samples at least weekly to record the time of first-observable fade.

Now, imagine you work with a curator who wants to display materials like these in an upcoming exhibit. Write a report for your curator describing the materials and assessing their lightfastness using the blue wool card and the total calculated light exposure. Make recommendations for acceptable light levels and exhibit duration. Refer to your blue wool test card and light readings to support your case. Use the guidelines from our class readings (Wagner, Colby, UD ASTM, etc.) to supplement your findings. Please check with Sarah if you need help identifying substrates or media in your samples.

Mold Prevention Report (5 pages) (20 pts)
Read the short selection "Case Study Two: A Whiff of Mold? It Can't Be!" from Miriam Kahn's *Disaster Response and Planning for Libraries* (see Canvas.) Acting as an independent preservation consultant, formulate a set of proactive maintenance guidelines for staff at the discussed library to prevent another mold outbreak. Address issues of facilities maintenance and

preservation practice. Include prioritized recommendations to help collections managers assess impact and required resources. Support your recommendations with references as needed.

Final Report: RFP for a Preservation Storage Facility (25 pts)
A Request for Proposals (RFP) is a business document soliciting vendors to bid on contracted work. Students will write an RFP seeking a general construction contractor to build a new library and archives preservation storage facility. The RFP should include specific project description, scope, and goals. It should address environmental controls, HVAC, building envelope, lighting, pest management, and other issues. RFPs will be evaluated for clarity and thoroughness of presentation, assuming an audience of prospective vendors who do not have a background in libraries, archives, or preservation.

For this project, assume your varied collection includes books, manuscripts, photographs, and audiovisual materials. You're seeking a 20,000 square foot facility on land your institution owns in the Austin area.

Sections in the RFP must include the following (and may include others as needed):
Project Introduction: Briefly summarize your institution and project goals
Scope of Services: Provide detailed descriptions of the features you want in your building. You may cite references or draw diagrams as needed to better explain preservation requirements to prospective vendors.
Proposal Requirements: Describe what the vendor's submission should look like. Do you want to see past experience? References? How can the vendor demonstrate they are the best candidate for you?
Evaluation of Proposals: Describe how you will evaluate submitted proposals. You might devise a point system or other evaluation mechanism. Be sure your evaluation scheme accurately reflects your priorities, and that it's clear and transparent enough to protect you from any appearance of favoritism.

Evaluation
I will use the following schedule as the basis for calculating grades: A=95-100, A-=90-<95, B+ = 85-<90, B=80-<85, B-=75-<80, C+=70-<75, C=65-<70, C-=60-<65, F=<60. Grades will be reduced by 2 points for every day they are late unless prior arrangements have been made.

Required Texts

Northeast Document Conservation Center. *Preservation 101: Preservation Basics for Paper and Media Collections, Online Textbook*. Accessed April 2020 at https://www.nedcc.org/preservation101/welcome

This free, online text was developed by NEDCC with funding from IMLS, the Institute for Library and Museum Services. The text is used with NEDCC's "Preservation 101" class. We will use it as a backbone for our course, and supplement its introductory material with additional readings.

Announcements

University of Texas Honor Code

Every student is expected to abide by The University of Texas Honor Code, which should be read and understood before taking any class. It can be found here: http://www.engr.utexas.edu/undergraduate/forms/462-university-of-texas-honor-code

Policy on Academic Integrity

Plagiarism will not be tolerated. You may fail the course, and/or be dismissed from the School of Information and/or the University if you are found plagiarizing. UT has a tutorial describing plagiarism here: http://www.lib.utexas.edu/services/instruction/learningmodules/plagiarism/

Documented Disability Statement

A student with a documented disability who requires academic accommodations should contact Services for Students with Disabilities at 512-471-6259 (voice) or 512-232-2937 (video phone) or http://diversity.utexas.edu/disability/ Please let me know about anything that will help you succeed whether or not it is related to any disability.

Use of email for official correspondence

Email is recognized as an official mode of University correspondence. You are expected to maintain ongoing, current familiarity with class communications via email, and to contact me for any needed clarification.

Land Acknowledgement

We acknowledge that the iSchool sits on indigenous land. The Tonkawa lived in central Texas and the Comanche and Apache moved through this area. Today, various indigenous peoples from all over the globe visit Austin and/or call it home. We are grateful to be able to study and learn on this piece of Turtle Island. Since some of our classes are online, you may be contributing from other tribal lands. Here is a map that may help you in identifying the indigenous peoples of the land on which you study: https://native-land.ca/

Religious Holy Days

You must notify me at least 14 days in advance of any absence or accommodation for a religious holy day. We will determine an appropriate substitute on a case by case basis.

Title IX Reporting

Beginning January 1, 2020, Texas Senate Bill 212 requires all employees of Texas universities, including faculty, report any information to the Title IX Office regarding sexual harassment, sexual assault, dating violence and stalking that is disclosed to them. Texas law requires that all employees who witness or receive any information of this type (including, but not limited to, writing assignments, class discussions, or one-on-one conversations) must be reported. If you would like to speak with someone who can provide support or remedies without making an official report to the university, please email advocate@austin.utexas.edu. For more information about reporting options and resources, visit http://www.titleix.utexas.edu/, contact the Title IX Office via email at titleix@austin.utexas.edu, or call 512-471-0419.

Class Recordings
Online class sessions will be recorded if they are hosted in Zoom. Class recordings are reserved only for the use of members of this class (students and the instructor) and only for educational purposes. Recordings should not be shared outside the class in any form. Violation of this restriction could lead to Student Misconduct proceedings.

Sharing of Course Materials is Prohibited
No materials used in this class, including, but not limited to, lecture hand-outs, videos, assessments (quizzes, exams, papers, projects, homework assignments), in-class materials, review sheets, and additional problem sets, may be shared online or with anyone outside of the class unless you have my explicit, written permission. Unauthorized sharing of materials promotes cheating. It is a violation of the University's Student Honor Code and an act of academic dishonesty. I am well aware of the sites used for sharing materials, and any materials found online that are associated with you, or any suspected unauthorized sharing of materials, will be reported to Student Conduct and Academic Integrity in the Office of the Dean of Students. These reports can result in sanctions, including failure in the course.

COVID-19 and Our Class
Pending University policy statements.

Safety and Class Participation/Masks
Pending University policy statements.

COVID Reporting
Pending University policy statements.

Course Schedule https://registrar.utexas.edu/calendars/21-22

Week 1: 8/25 (Please note: each week's readings must be completed before class for discussion during class.)
Introduction to Preservation and Paper-Based Materials
-Introduce class and syllabus
-Become acquainted with lab access and safety
-Select students to lead discussion on each week's readings
-Discuss readings and view relevant archives materials
-Start fade test, to conclude in Week 9

Readings
Northeast Document Conservation Center. *Preservation 101: Preservation Basics for Paper and Media Collections, Online Textbook.* "Session 1: Introduction to Preservation" and "Session 4: Caring for Paper Collections." Accessed May 2020 at https://www.nedcc.org/preservation101/session-1 Within Session 4, focus especially on "Papermaking;" "Inherent Vice: Materials;" "Inherent Vice: Structures;" and "External Factors."

Week 2: 9/1
Introduction to Paper Chemistry; Temperature and Relative Humidity
-Lecture & discussion: paper chemistry and analytical techniques (Daniels, *AIC Wiki*)
-Discuss temperature and RH readings (NEDCC; Wilson) - student
-In-class exercise exploring the hygroscopic nature of paper

Readings
Daniels, Vincent. "Paper." In May, Eric, and Mark Jones, eds. *Conservation Science Heritage Materials*. Cambridge, U.K: RSC Pub., 2006.
American Institute for Conservation. *AIC Wiki: Instrumental Analysis*. Accessed December 2020 at: http://www.conservation-wiki.com/wiki/Category:Instrumental_Analysis Skim this page for now, and keep it as a reference for the analytical techniques you'll encounter in readings throughout the semester.
Northeast Document Conservation Center. *Preservation 101: Preservation Basics for Paper and Media Collections, Online Textbook*. "Session 2: The Building and Environment." Accessed May 2020 at https://www.nedcc.org/preservation101/session-2
This chapter introduces many interrelated topics we will explore in further detail in the coming weeks. This week, focus especially on "The Storage Environment."
Wilson, W. NISO TR-01 1995: *Environmental Guidelines for the Storage of Paper Records*. 1995: NISO Press, Bethesda, MD.

Week 3: 9/8
HVAC and Buildings: Creating Controlled Environments
-Lecture and discussion: HVAC mechanics and standards (Padfield; Conrad)
-Discuss readings on preservation issues in building design (NEDCC, Ogden, NARA) - student
-In-class exercise: The class will make a simple air-conditioner. Then we will brainstorm and test design modifications to produce lower RH and/or temperature. This exercise will demonstrate some of the fundamental properties that underlie climate control for preservation.

Readings
Northeast Document Conservation Center. *Preservation 101: Preservation Basics for Paper and Media Collections, Online Textbook*. "Session 2: The Building and Environment." Accessed May 2020 at https://www.nedcc.org/preservation101/session-2 Focus especially on "General Building Issues" and "Controlling the Environment."
Ogden, Barclay. *Collection Preservation in Library Building Design.* 2003: Libris Design Project and Institute of Museum and Library Services.
Conrad, Ernest. "SAA Integrates with ASHRAE." *ASHRAE Transactions* 116 (2010): 203–206. Web.
Padfield, T. (2000). *How air conditioning works*. Retrieved April, 2020, from https://www.conservationphysics.org/aircon/aircon.pdf
National Archives and Records Administration. *Archives II: National Archives at College Park.* NARA Technical Information Paper 13, 1997.

Week 4: 9/15
The Psychrometric Chart: Evaluating Environment the Analog Way
-Lecture & discussion: Using the psychrometric chart
-In-class exercise: student pairs use the psychrometric chart to solve word-problem-style questions.
-Discuss application of environmental parameters (Mecklenburg) - student
-Plan and launch environmental monitors for Environmental Data Report

Readings
Sherif, S. "Overview of Psychrometrics." *ASHRAE Journal* 44.7 (2002): 33.
Traub, Darren A. "The Psychrometric Chart: How to Use it.(Drying Files)." *Process Heating* 10.8 (2003): n. pag.
Gatley, Donald. "Psychrometric Chart Celebrates 100th Anniversary." *ASHRAE Journal* 46.11 (2004): 16–20.
Enthalpy of Air; Sensible Heat of Air; Latent Heat of Air. 2020: Bright Hub PM. Accessed May 2020 at https://www.brighthubengineering.com/hvac/40137-sensible-and-latent-heat-of-air/
Relative Humidity Table (See Canvas.)
Mecklenburg, M.F., 2007. Determining the acceptable ranges of relative humidity and temperature in museums and galleries. Smithsonian Museum Conservation Institute, Suitland, MD.

Week 5: 9/22
HVAC and Psychrometrics in the Real World
Guest Speaker: Joe Reyes, Principal, MEP Engineering
-Joe Reyes will share his experiences designing HVAC at cultural institutions; discuss how preservation staff and HVAC engineers can communicate effectively; and much more.
-Gather environmental monitors; make a plan to share data with class

Week 6: 9/29
Environmental Data Gathering
-Discuss readings - student
-Demonstrate and discuss environmental monitors: hygrometer, sling psychrometer, aspirating psychrometer, dataloggers
-Explore Dewpoint Calculator
-Assign and begin working on Environmental Data Report as time allows.

Readings
Northeast Document Conservation Center. *Preservation 101: Preservation Basics for Paper and Media Collections, Online Textbook*. "Session 2: The Building and Environment." Accessed May 2020 at https://www.nedcc.org/preservation101/session-2 This week, focus especially on "Monitoring the Environment."

Image Permanence Institute. *Step-by-Step Workbook: Achieving a Preservation Environment for Collections. August 2005:* Rochester, NY. Please read for concepts and workflow; you may disregard any dated graphics and software references!

Arenstein, R. and S. Alderson. *Comparing Temperature and Relative Humidity Dataloggers for Museum Monitoring.* September 2011: National Parks Service Conserve-O-Gram 3.3

Iowa Department of Transportation. *Determining Relative Humidity with a Sling Psychrometer.* See Canvas.

Week 7: 10/6

Assignment Due: Environmental Data Report

Pollutants and Acidity

-Discuss pollutant and dust readings (Wilson; Grzywacz; Lloyd) - student

-Lecture and discussion: acid degradation (Dupont & Shahani)

-In-class exercise: investigate the acidity of varied collection materials and collection storage materials.

Readings

Wilson, W. NISO TR-01 1995: *Environmental Guidelines for the Storage of Paper Records*. 1995: NISO Press, Bethesda, MD. Revisit this source from Week 2 and focus on Section 2.3, Gaseous Contaminants; Section 2.4, Particulates; and Section 5, Air Contaminants.

Grzywacz, C. M. (2006). *Tools for conservation. Monitoring for gaseous pollutants in museum environments*. Los Angeles: Getty Conservation Institute. Focus on Chapter 1, Gaseous Pollutants in Museum Environments: Overview; Chapter 2, The Effects of Gaseous Pollutants on Objects; and Appendix 1, Major Gaseous Pollutants of Concern to Museums, Their Sources, and At-Risk Materials

Lloyd, Helen, Peter Brimblecombe, and Katy Lithgow. "Economics of Dust." *Studies in Conservation* 52.2 (2007): 135–146.

Dupont, A.-L. & J. Tetreault (2000) "Cellulose Degradation in an Acetic Acid Environment," *Studies in Conservation*, 45:3, 201-210, DOI: 10.1179/sic.2000.45.3.201

Shahani, Chandru & Gabrielle Harrison (2002) SPONTANEOUS FORMATION OF ACIDS IN THE NATURAL AGING OF PAPER, *Studies in Conservation*, 47:sup3, 189-192, DOI: 10.1179/sic.2002.47.s3.039

Week 8: 10/13

Fundamentals of Light, Color, and Fading

-Lecture and discussion: color science and the blue wool standard

-In-class exercise: The Light and Color Petting Zoo

Readings

Saunders, David. *Museum Lighting: A Guide for Conservators and Curators.* Los Angeles: The Getty Conservation Institute, 2020. Chapters 1 & 2. https://muse-jhu-edu.ezproxy.lib.utexas.edu/book/78777

Michalski, Stefan. *Agent of Deterioration: Light, Ultraviolet, and Infrared.* Canadian Conservation Institute. Accessed February 2021 at https://www.canada.ca/en/conservation-

institute/services/agents-deterioration/light.html Start at the section "Deterioration by Light, UV, and IR."

Week 9: 10/20
Assessing and Preventing Light Damage
-Discuss readings - student
-View previous fading tests
-Practice cumulative light exposure calculations
-In-class exercise: evaluate fade testing results (started Week 1.) Record light levels at test site.
Assign and begin work on Exhibit Lighting Recommendations Report.

Readings
Conn, Donia. *Protection from Light Damage.* 2012: NEDCC Preservation Leaflet 2.4.
Wagner, Sarah, Connie McCabe, and Barbara Lemmen. (2007). *Guidelines for Exhibition Light Levels for Photographic Materials.* Retrieved April 2020 from http://download.aaslh.org/AASLH-Website-Resources/ccaha-guidelines-for-exhibition-light-levels.original.pdf (See Canvas.)
Colby, Karen. "A Suggested Exhibition Policy for Works of Art on Paper." *Journal of the International Institute for Conservation - Canadian Guild* 17. 1992.
University of Delaware Materials Information and Technical Resources for Artists. "ASTM and Lightfastness of Media." Accessed December 2020. See Canvas.
Venosa, Andrea, Daniel Burge, and Douglas Nishimura. "Effect of Light on Modern Digital Prints: PHOTOGRAPHS AND DOCUMENTS." *Studies in Conservation* 56, no. 4 (2011): 267-80.

Week 10: 10/27
Assignment Due: Exhibit Lighting Recommendations Report
Eek: Mold!
Guest Speakers: Tonia Wood (Reference Archivist,) Peggy Price (Education & Outreach Officer,) and Heather Hamilton (Conservator) from the Texas State Library and Archives Commission: 1:30 PM, at TSLAC if they're open to the public, or via Zoom.
-Discuss readings - student
-TSLAC speakers will share their preservation and access strategies for mold-damaged materials
-Assign Mold Prevention Report

Readings
Sterflinger, K. "Fungi: their role in deterioration of cultural heritage." *Fungal Biological Reviews* 24 (2010): 47–55. doi:10.1016/j.fbr.2010.03.003.
Brokerhof, A. W., Zanen, W. B., Teuling, A. J. M. *Fluffy Stuff: Integrated Control of Mould in Archives.* Amsterdam: Netherlands Institute for Cultural Heritage (ICN) and IADA, 2007a.
National Park Service. Conserve O Gram 3/4: *Mold and Mildew: Prevention of Microorganism Growth in Museum Collections*. 2007.
U.S. Environmental Protection Agency. *Introduction to Mold and Mold Remediation for Environmental and Public Health Professionals.* Chapters 1, 2, 3, and 9. Accessed May 2020 at https://www.epa.gov/mold/mold-course-chapter-1; also available on Canvas.

Week 11: 11/3
Eek: Pests!
Guest Speaker: Alan Van Dyke, Senior Preservation Technician, Harry Ransom Center
-Discuss readings - student
-Alan Van Dyke will discuss his experiences with IPM and facilities management

Readings

Integrated Pest Management Working Group. *MuseumPests.net.* Accessed May 2020. Focus on three sections of this website:

- Pest Fact Sheets: https://museumpests.net/identification/identification-pest-fact-sheets/
- Identification Image Library: https://museumpests.net/identification/identification-image-library/
- The Dirty Dozen of Museum Pests: https://museumpests.net/wp-content/uploads/2015/04/Insects-LImited-Museum-Dirty-Dozen-single-sheet-A4.pdf

Brokerhof, A. W., Zanen, W. B., Watering, K., Porck, H. *Buggy Biz: Integrated Pest Management in Collections*. Amsterdam: Netherlands Institute for Cultural Heritage (ICN) and IADA, 2007b.

Parker, Thomas. *Preservation Leaflet 3.10: Integrated Preventive Pest Management*. 2015: Northeast Document Conservation Center.

Ryder, Suzanne, and Armando Mendez. "Using Risk Zones in Museums as Part of an IPM Programme: Does It Work?" *Studies in Conservation* 64.4 (2019): 203–207.

Week 12: 11/10
Assignment Due: Mold Prevention Report
Health & Safety
-Lecture and discussion: understanding chemical labels and guidelines; respirators & PPE
-Demonstrate lab health and safety features; proper use of PPE
-Discuss readings (Pettigrew; Bolstad-Johnson; Tedone) - student
-In-class exercise: Adopt-A-Chemical - use labels and guidelines to assess risks

Readings

Occupational Safety and Health Administration. *Hazard Communication Standard: Labels and Pictograms*. DSG BR-3636 2/2013.

Occupational Safety and Health Administration. *Hazard Communication Standard: Safety Data Sheets*. DSG BR-3514 2/2012.

American Chemical Society. *National Fire Protection Association Hazard Identification System.* Accessed January 2021 at: https://www.acs.org/content/acs/en/chemical-safety/basics/nfpa-hazard-identification.html#:~:text=The%20NFPA%20diamond%20provides%20a,red%2C%20yellow%2C%20and%20white.&text=The%20white%20field%20is%20used%20to%20convey%20special%20hazards

Centers for Disease Control and Prevention. *NIOSH Pocket Guide to Chemical Hazards.* Accessed January 2021 at: https://www.cdc.gov/niosh/npg/default.html
Colton, Craig. *A Conservator's Guide to Respiratory Protection.* 2016: American Institute for the Conservation of Historic and Artistic Works, Washington, D.C.
Centers for Disease Control and Prevention. *PPE Sequence*. CS250672-E.
Pettigrew, H. et al. "Mold and Human Health: Separating the Wheat from the Chaff." *Clinical Reviews in Allergy & Immunology* 38.2-3 (2010): 148–155.
Bolstad-Johnson, Dawn. "The Hidden Hazards of Fire Soot." *AIC News* 35:5. September 2010: American Institute for Conservation of Historic and Artistic Works, Washington, D.C. pp. 1, 3-5.
Tedone, Melissa. "Poison Book Project." Accessed April 2020 at http://wiki.winterthur.org/wiki/Poison_Book_Project

Week 13: 11/17
Sustainability
-Discuss readings - student
-In-class exercise: using hairdryers to explore environmental impacts of insulation and buffering
-Assign RFP

Readings
Henry, Michael. *What Will the Cultural Record Say About Us? Stewardship of Culture and the Mandate for Environmental Sustainability*. 2007: Gray Areas to Green Areas Conference at the University of Texas. Accessed May 2020 at https://www.ischool.utexas.edu/kilgarlin/gaga/proceedings2008/GAGA07-henry.pdf See Canvas.
Image Permanence Institute. *Implementing Sustainable Energy-Saving Strategies in Collections Environments.* IPI: 2017. Energy-Saving Strategies, pp 96-145.
Ryhl-Svendsen, Marten, Lars Aasbjerg Jensen, Poul Klenz Larsen, and Tim Padfield. *Does a Standard Temperature Need to Be Constant?* 2010: Going Green Conference at the British Museum. Accessed May 2020 at http://www.conservationphysics.org/standards/standardtemperature.php See Canvas.
Romano, Christine, et. al. *Sustainable Practices Wiki*. American Institute for Conservation. Accessed May 2020 at http://www.conservation-wiki.com/wiki/Sustainable_Practices. Please look through all sections: Introduction to Sustainability; Sustainable Material Use and Disposal; Information about Specific Materials; Sustainable Energy Use; Sustainability Case Studies.

Thanksgiving Holiday, 11/24 – 11/28

Week 14: 12/1
Varied Media, Varied Risks
-Lecture and discussion: Plastics in Archives Storage Media
-Discuss readings (preservation and storage for photos, audio, film, and plastic artifacts) - student

-In-class exercise: student teams assume curatorial roles over varied collections materials in a fictional institution. Through a group decision-making exercise, the teams formulate facilities and storage priorities for their institution's director.

Readings

Northeast Document Conservation Center. *Preservation 101: Preservation Basics for Paper and Media Collections, Online Textbook*. "Session 5: Care and Handling of Photographs" and "Session 6: Media Collections." Accessed May 2020 at https://www.nedcc.org/preservation101/session-5 and https://www.nedcc.org/preservation101/session-6

Hess, Richard. "ARSC Conference Paper - Tape Degradation Factors and Challenges in Predicting Tape Life." *ARSC Journal* 39.2 (2008): 240–274. Web.

Bereijo, Antonio. "The Conservation and Preservation of Film and Magnetic Materials (1): Film Materials." *Library Review* 53.5/6 (2004): 323–331. Web.

Shashoua, Yvonne. *Conservation of Plastics: Materials Science, Degradation and Preservation.* 1st ed. Amsterdam, Netherlands: Elsevier, 2008. Print. Chapter 7: Conservation of Plastics. (See Canvas.)

12/6: Last Class Day

Assignment Due: Final Report: RFP for a Preservation Storage Facility.