INF 385T: Disaster Planning and Response
Fall 2021
Unique Number: 28830

Instructor: Sarah Norris
Email: sarah.norris@ischool.utexas.edu
Lab: UTA 1.506B
Office: UTA 5.422
Phone: (512) 471-8286
Office hours: Mondays 10 AM – 12 PM, by appointment
Canvas: https://utexas.instructure.com/courses/1313483

Course Meeting Times
Mondays, 12 PM - 3 PM

Course Description
Disaster events, like floods and fires, can cause severe damage and loss in cultural heritage collections. How will you respond when disaster strikes? This course introduces students to the fundamental preservation concepts, planning strategies, and applied response techniques that make a difference. The class will evaluate the physical impact of fire, water, soot, mold, and insects on varied media, including books, flat paper, audiovisual materials, and other items. Disaster planning exercises model proactive methods to minimize damage. Hands-on response drills enable students to practice salvage techniques, and to triage and prioritize impacted materials.

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

- Evaluate the causes and results of disasters
- Practice hands-on salvage techniques
- Understand the physical impacts of disaster scenarios on varied library and archival materials
- Prioritize materials for response
- Engage in disaster preparedness planning to minimize impact on collections
- Develop historical perspectives about past disasters and their consequences
- Consider the impact of climate change on disaster preparedness and planning

**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.

**Required Texts**


This succinct and portable handbook is a go-to reference for collections caretakers. We will use it extensively in Week 2 of our class, and you will likely find it to be a useful addition to your professional library. It is your souvenir from the class!

All other course readings are available in the Files section of our Canvas page or online.

**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.

*Assignment: Article Presentation on a Past Cultural Heritage Disaster* (10 pts)
Assigned Week 1; due as scheduled throughout semester
Each student will lead a class discussion on an article of their choice on an assigned date. Articles should describe a past disaster event affecting a cultural heritage institution or collection, as well as the salvage and response for that event. Peer-reviewed articles are encouraged, but substantive popular journalism may also be acceptable given the topic. Be sure that the 2008 Universal Studios Backlot Fire and the Notre Dame Cathedral Fire are covered; other events may be chosen at will.

Please make your article available for your classmates to review at least two days before your presentation. Include in your presentation two or three questions to spur discussion.

*Participation* (15 pts)
Assigned Week 1; completed at close of semester
Students are responsible for participating in class discussions and engaging in hands-on practice. Students should initiate discussions to clarify technical skills and should make efforts to learn from the experiences of fellow classmates who may be working on different physical materials.

Assignment: Risk Mapping for Texas Archives: Sea Level Rise and the Gulf Coast Region (25 pts)
Assigned Week 1; Due Week 4

Part 1
The Repository Data Project, funded by the Society of American Archivists Foundation, has provided centralized access to U.S archival repository location data. https://repositorydata.wordpress.com/

In this assignment, we will use GIS (geographic information system) mapping to evaluate possible climate change risks posed to Texas Gulf Coast archives by 2050. Scenarios we’ll consider are: a one-foot and two-foot sea level rise (both plausible by 2050); and storm surge coverage for Category 1-5 hurricanes. Each scenario is represented by a map layer. By examining these layers together, we develop a sense of which areas will likely experience elevated flood risk in the coming years. (We will not model the interaction between these scenarios in this assignment.)

Using the document “Risk Mapping for Texas Archives – ArcGIS Pro Directions,” create two maps as the foundation of your project. One map will feature archives locations (from the Repository Data Project) and two additional map layers: one-foot sea level rise; and storm surge coverage for Category 1-5 hurricanes. The second map will change only one factor: it will feature a two-foot sea level rise, instead of a one-foot rise.

Examine the maps and look for a confluence of sea level rise and storm surge coverage from hurricanes of varied strength. Archives in these regions are likely to experience increased risk of flooding by 2050.

Part 2
Based on your maps, identify one to three institutions likely to be impacted by increased flooding or related issues by 2050. Write a report to describe potential threats, assess impacted collections materials, and propose six proactive solutions, detailed below.

To describe potential threats, familiarize yourself with your impacted institutions. What unique things about them might be impacted by flooding and sea level rise? Be as specific as you can. (For example, are there historic buildings? Community programs? Outdoor artifacts? Other unique features?)

To describe impacted collections materials, research and discuss collections holdings at your impacted institutions. How might flooding and sea level rise affect these materials? Draw specific connections to significant collections; do not give only general statements. (For example, “Archive A specializes in Texas Republic-era manuscripts, which have a high risk of mold after a flood.” NOT: “Paper is prone to mold after a flood.”)
Structure your six proactive solutions as follows:

- Three action items for your individual institutions to enact with limited resources. (For example, should an impacted institution sharpen appraisal? Store materials differently? Institute localized risk levels?)
- Three action items for big-picture, systemic, multi-institutional initiatives. (For example, should SAA, state, or federal organizations foster rapid digitization? Divert floodwaters in some achievable way? Modify architecture? Fund other innovative solutions?)

Please also include an introductory section in your paper that describes climate risk mapping and what it shows us. Briefly describe our technique and summarize what you learned from it. Then, use this information to justify your choice of institutional or regional focus.

Assignment: Risk Assessment Report (25 pts)
Assigned Week 4; Due Week 7
Working in assigned groups, write a risk assessment report based on the ABC Method described in A Guide to Risk Management of Cultural Heritage by Stefan Michalski and Jose Luiz Pedersoli (see Week 4 readings.) Our target collection will be discussed in class. Include the following sections in your report:

Context (see Michalski Pedersoli p20): Describe physical, administrative, legal, political, socio-cultural, and economic environments; relevant people (managers and users; a summary of items and materials in the clxn; and the objective of your work. We will talk through this in class.

Identify Risks (see Michalski Pedersoli p26): Systematically identify collections risks by working through the 10 agents of deterioration and loss; 6 layers of enclosure; and 3 types of risk occurrence. We will brainstorm some of these in class.

Analyze Risks (see Michalski Pedersoli p62): Assign a magnitude of risk (MR) score to identified risks using the ABC method. Then, assess the certainty (or uncertainty) of your scoring by additionally calculating best-case and worst-case MRs for each identified risk. You may wish to use charts to communicate your results. Pay special attention to the Communicating Risks section on p56 as an effective way to formulate descriptions of risk.

Evaluate Risks (see Michalski Pedersoli p92): Use the ABC Method’s priority scale to compare MR scores, evaluate priorities, and decide which risks are and are not acceptable. Choose the most important risks to address (likely 3-4.)

Treat Risks (see Michalski Pedersoli p100): Use the ABC Method’s 6 layers of enclosure and 5 stages of control to systematically identify response actions. Choose a set of priority actions (likely 6-8), and explain your choices.

Last, be sure to include a short self-assessment to report upon your personal role in the project.
Groups, please work independently on this project. Do not share information! When your work is done, we will hold an in-class discussion about similarities and differences in your reports. This will allow us to consider subjectivity and reproducibility of findings with the ABC Method.

**Assignment: Disaster Salvage Report (25 pts)**

Assigned Week 12; Due last day of semester, 12/6

Write a report that summarizes your experiences with our in-class disaster response exercise. Include a narrative of the class’ response; triage activities; and time management. Discuss your specific salvage duties. Evaluate the outcome of the response for the affected materials, focusing on the long-term preservation and accessibility of each of the varied materials (books, paper, audio, etc.) What went well? What would you change? Which materials were saved and which were lost?

**Evaluation and Writing Guidelines**

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.

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:
- Include your last name and assignment name in your file title.
- Use double spacing.
- Use APA Guidelines for citations.
- 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.
- Be precise with pronouns, especially the word “they.” APA Guidelines tell us:
  - “He/him/his” and “she/her/hers” are singular and gendered.
  - “Their/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.
UT Notices and 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.

Official Class Correspondence
E-mail is recognized as an official mode of University correspondence. Please maintain ongoing, current familiarity with class communications via email, and contact me for any needed clarification.

Additionally, our class uses Canvas to host readings, post announcements, submit assignments, and return grades. You are welcome to message me directly through this platform.

Land Acknowledgement
We would like to acknowledge that we are meeting on Indigenous land. Moreover, (I) We would like to acknowledge and pay our respects to the Carrizo & Comecrudo, Coahuiltecan, Caddo, Tonkawa, Comanche, Lipan Apache, Alabama-Coushatta, Kickapoo, Tigua Pueblo, and all the American Indian and Indigenous Peoples and communities who have been or have become a part of these lands and territories in Texas, here on Turtle Island.

Personal Pronoun Preference
Professional courtesy and sensitivity are especially important with respect to individuals and topics dealing with differences of race, culture, religion, politics, sexual orientation, gender, gender variance, and nationalities. Class rosters are provided to the instructor with the student’s legal name, unless they have added a “preferred name” with the Gender and Sexuality Center, which you can do so here: http://diversity.utexas.edu/genderandsexuality/publications-and-resources/. I will gladly honor your request to address you by a name that is different from what appears on the official roster, and by the gender pronouns you use (she/he/they/ze, etc). Please advise me of any changes early in the semester so that I may make appropriate updates to my records. For instructions on how to add your pronouns to Canvas, visit https://utexas.instructure.com/courses/633028/pages/profile-pronouns.
Religious Holy Days
By UT Austin policy, you must notify me of your pending absence as far in advance as possible to the date of observance of a religious holy day. If you must miss a class, an examination, a work assignment, or a project in order to observe a religious holy day, you will be given an opportunity to complete the missed work within a reasonable time after the absence.

Title IX Reporting
Title IX is a federal law that protects against sex and gender-based discrimination, sexual harassment, sexual assault, sexual misconduct, dating/domestic violence and stalking at federally funded educational institutions. UT Austin is committed to fostering a learning and working environment free from discrimination in all its forms. When sexual misconduct occurs in our community, the university can:
1. Intervene to prevent harmful behavior from continuing or escalating.
2. Provide support and remedies to students and employees who have experienced harm or have become involved in a Title IX investigation.
3. Investigate and discipline violations of the university’s relevant policies.

Faculty members and certain staff members are considered “Responsible Employees” or “Mandatory Reporters,” which means that they are required to report violations of Title IX to the Title IX Coordinator. I am a Responsible Employee and must report any Title IX-related incidents that are disclosed in writing, discussion, or one-on-one. Before talking with me or with any faculty or staff member about a Title IX-related incident, be sure to ask whether they are a responsible employee. If you want to speak with someone for support or remedies without making an official report to the university, email advocate@austin.utexas.edu For more information about reporting options and resources, visit the Title IX Office or email titleix@austin.utexas.edu.

Class Recordings
Class recordings are reserved only for students in this class for educational purposes and are protected under FERPA. The recordings should not be shared outside the class in any form. Violation of this restriction by a student could lead to Student Misconduct proceedings.

Online Class Components
All students must use a UT Zoom account in order to participate in classes, office hours, and any UT affiliated events.

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 without explicit, written permission of the instructor. Unauthorized sharing of materials promotes cheating. It is a violation of the University’s Student Honor Code and an act of academic dishonesty. The University is well aware of the sites used for sharing materials, and any materials found on such sites that are associated with a specific student, 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 of the course.

Classroom Safety and COVID
To help preserve our in-person learning environment, the university recommends the following.

- Adhere to university mask guidance. Masks are strongly recommended inside university buildings for vaccinated and unvaccinated individuals, except when alone in a private office or single-occupant cubicle.
- Vaccinations are widely available, free and not billed to health insurance. The vaccine will help protect against the transmission of the virus to others and reduce serious symptoms in those who are vaccinated.
- Proactive Community Testing remains an important part of the university’s efforts to protect our community. Tests are fast and free.
- The university has determined that all students coming to campus for the fall semester must receive a viral COVID-19 test in their local community within 72 hours prior to arrival in Austin for move in. If they already reside in Austin, they must test within 72 hours of moving into the residence where they will reside for the academic semester. Finally, individuals who are already living in the residence in Austin where they will reside this academic semester should test within 72 hours (3 days) prior to the start of class on Aug. 25.
- We encourage the use of the Protect Texas App each day prior to coming to campus.
- If you develop COVID-19 symptoms or feel sick, stay home and contact the University Health Services’ Nurse Advice Line at 512-475-6877. If you need to be absent from class, contact Student Emergency Services and they will notify your professors. In addition, to help understand what to do if you have been had close contact with someone who tested positive for COVID-19, see this University Health Services link.
- Behavior Concerns and COVID-19 Advice Line (BCCAL) remains available as the primary tool to address questions or concerns from the university community about COVID-19.
- Students who test positive should contact BCCAL or self-report (if tested off campus) to University Health Services.
- Visit Protect Texas Together for more information.

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

Week 1: 8/30 (Please note: each week’s readings must be completed before class for discussion during class.)
Introduction; Flooding and Climate Change
- Course overview
- Assign article presentation weeks
- Begin collecting paper, photos, bound materials for disaster salvage exercises in Weeks 6 and 7.
- Introduce Repository Data Project
- Assign Risk Mapping for Texas Archives (due Week 4)

Readings


Repository data project https://github.com/RepoData/RepoData

9/6: Labor Day Holiday

Week 2: 9/13
Disaster Response at the Macro Level: Administration & Strategy
- Article presentation on a past cultural heritage disaster
- Disaster response role-playing exercise, using the Field Guide as our guide

Readings

Week 3: 9/20
Disaster Issues at the Micro Level: Materials Impacts
- Article presentation on a past cultural heritage disaster
- Fire, soot, water, and mold; their impacts on varied collections materials
- Slideshow discussion: A Gallery of Horrors!
- Class activity: water’s impact on varied papers and media

Readings
This is a resource for conservators, though I have omitted the parts specifically about conservation treatment. You do not have to memorize or understand every concept. Rather, work toward a general understanding that moisture impacts paper in very fundamental ways.


**Week 4: 9/27**
**Collections Risk Assessment**

*Assignment Due: Risk Mapping for Texas Archives: Sea Level Rise and the Gulf Coast Region*
- Article presentation on a past cultural heritage disaster
- Small-scale risk assessment: class practice on two student collections using CPRAM method
- Scaling up: ABC and Quisk Scan methods (lecture)

*Readings*


**Week 5: 10/4**
**Health & Safety Issues**
- Article presentation on a past cultural heritage disaster
- Program planning, mold sensitivity, and PPE
- Interacting with local emergency officials
- Guest speaker: Eric Carter, Chief Emergency Management Coordinator, Travis County Emergency Services

*Readings*


“How to Properly Put on and Take Off a Disposable Respirator.” US Department of Health and Human Services; Centers for Disease Control; National Institute for Occupational Safety and Health (nd). DHHS NIOSH Publication No. 2010-133. See Canvas.

“How to Remove Gloves.” Workers’ Compensation Board of BC (nd.) Publication CS 245759-A. See Canvas.

**Week 6: 10/11**

**Water Response: Flat Paper and Photos**
- Discuss document salvage case study (Kibe) and drying case study (Kaplan & Ludwig)
- Demo and practice: handling and drying wet paper and photos

**Readings**


University of Delaware Art Conservation. “How to Restore Flood-Damaged Photos.” Accessed July 2020 at: [https://www.youtube.com/watch?v=XrtF2e3I2sI](https://www.youtube.com/watch?v=XrtF2e3I2sI)
Week 7: 10/18

Assignment Due: Risk Assessment Report

Water Response: Books, AV Materials, and Artifacts
- Student discussion of similarities and differences in risk assessment reports. How reproducible is the ABC Method?
- (as possible) Discuss book salvage case study: 1966 Florence Flood
- Demo and practice: handling and drying wet books, artifacts, electronic media
- Possible freezing demonstration

Readings

**Week 8: 10/25**  
-Mold Remediation  
-Article presentation on a past cultural heritage disaster  
-Mold ID slideshow  
-Demo HEPA vacuuming, mechanical removal, working in a fume hood  
-Hands-on practice with PPE

**Readings**  


Of special relevance here are the images and descriptions of tenting and quarantine. Other practices – such as oxygen deprivation, dry ice dusting, and bioluminescence – go beyond the scope of this class, but may be of interest all the same!

**Week 9: 11/1**  
Fire demo  
-Class will meet at Austin Fire Academy, 4800 Shaw Lane

**Readings**  


**Week 10: 11/8**

**Fire Response**
- Article presentation on a past cultural heritage disaster
- Fire planning and response (discuss readings)
- Demo: Cleaning soot and ash
- View burned materials
- Hands-on practice

*Readings*


**Week 11: 11/15**

**Earthquakes**
- Article presentation on a past cultural heritage disaster
- Structural and institutional concerns
- Shelving and restraints
- Guest speaker on vibration and earthquakes: Dr. Lee Norris, Engineering Consultant / Dad
- Demo: shake table and mitigation strategies

*Readings*


Week 12: 11/22
Disaster Salvage
-Assign Disaster Salvage Report, due last day of semester, 12/6
-Collaborative disaster response drill

This week, the class will respond to a disaster event staged in the Conservation Lab. I will be in class to advise as needed, but students should plan and enact their group’s salvage activities. Details of the disaster and affected materials will not be provided in advance - knowing the date is already more information than you’ll get in real life! Be sure to cooperate, triage materials, and prioritize response to do the most good for the most items. Also remember to maintain intellectual control over your collections.

Thanksgiving Holidays, 11/24 – 11/26

Week 13: 11/29
Disaster Plans
-Review outcomes of disaster salvage
-Article presentation on a past cultural heritage disaster (1 & 2, if needed)
-Discuss disaster plan templates
-Evaluate examples of disaster plans

Readings

New York State Archives. Sample Disaster Plan. (n.d.) See Canvas


Week 14: 12/6
Assignment Due: Disaster Salvage Report
Modern and Manmade Disasters
- Article presentation on a past cultural heritage disaster
- Warfare
- Terrorism
- Biological attack
- Pandemic

Readings


