

**School of Information, The University of Texas at Austin**

**INF 393C.10 Treatment techniques for flat paper**

**Course meeting times:** Tuesday, 9:00 - 11:45, UTA 1.506B (Paper Lab)

**Course Description**

Basic procedures and techniques for the care and handling of materials found in library and archival collections; setting realistic goals and priorities for collection care; basic concepts of preventive conservation; understanding the nature of materials; practical experimentation. There are no prerequisites.

**Lecturer: Karen L. Pavelka**

Email: [pavelka@ischool.utexas.edu](mailto:pavelka@ischool.utexas.edu)

Lab: UTA 1.506B phone: 512-471-8269 (Much more likely to be here.)

Office: UTA 5.422 phone: 512-471-8286 (Rarely in office.)

Lab hours: Posted on lab door and may change over the course of the semester

**Teaching assistant: Lorrie Dong**

Email: [lorrie.d@gmail.com](mailto:lorrie.d@gmail.com)

**Objectives:**

Techniques that can do a substantial amount of good for the collection, but can be performed with minimal equipment, space, materials and skill will be covered. Additionally, students will learn how to teach techniques to others and how to evaluate and improve technicians' performance. Students will learn to:

- Perform basic conservation treatments including dry cleaning; humidification and flattening; and mending
- Design and build enclosures
- Assess the condition of materials and select appropriate repair techniques
- Allocate collection care resources
- Follow basic laboratory protocol
- Design and evaluate simple experiments

**Tools and materials**

Students will be provided with a tool kit for use during the semester. The tool kit must be returned in good condition at the end of the semester. Treatments will be performed on a variety of collection and non-collection materials, most of which will be provided by the instructor, but students are welcome to bring in materials from their personal collections to augment class assignments. Students will be responsible to supply some materials, such as small books for enclosures.

**Lab use**

Students will be given key card access to 1.506 (Ante room) at all times UTA is open. Please use this room respectfully. Reading materials are not to be taken from the room without the explicit permission of the instructor. (That's me, Karen, and no one else.) However, please do use the room. It is a nice, quiet place to read, study or have small meetings.

Students are welcome to use the paper lab 1.506B during lab hours and office hours. These hours will be posted on the doors to the ante room by the end of the first week of class. The lab has equipment for disaster response, microscopes and tools. Students may use any of these but only with the explicit permission of the instructor. (Again, that's me, Karen, and no one else.) Labs can pose physical and chemical dangers and all rules must be respected.

**Lab rules**

- No food or drink is allowed in the lab. Ever. This is for your own personal safety.
- Do not put your hands in your mouth when working in a lab. Ever.
- Do not touch your face, especially eyes.
- Close toed shoes must be worn at all times in the labs.

- Small children are not allowed in labs. Older, well-behaved, supervised children are allowed in for tours and such.
- Personal protective equipment must be worn as appropriate.
- Eye protection must be worn when working with power tools. Failure to adhere to this rule will result in an F for the course.
- Loose clothing and long hair must be tied back when working with power tools or blades.
- Do not use any equipment unless you have been properly trained and have been given permission.
- The first aid kit is to the right of the utility sink.
- Eyewash stations are mounted on the utility sinks in the paper and book labs.
- Chemical showers are located near the utility sinks in both labs.
- Do not open any cabinet or drawer unless you have been given permission.
- Do not borrow tools without permission.
- All tools must be cleaned and all materials put away before leaving the lab area.
- The lab should be cleaner when you leave it than it was when you arrived.

#### Assignment due dates

January 14:	Complete OH201
January 28:	Design microclimate experiment
January 28:	Evaluate humidified samples
February 11:	Evaluate cleaned samples
February 18:	Evaluate mends
February 25:	Produce four flap box; "pizza" box
April 8:	Results of experiment due
April 15:	All work on collection materials must be completed
May 1:	All work on non-collection materials due

#### Grading

Grade points will be distributed as follows:

Humidification experiment (All four parts)	20%	
Assignment evaluations	15%	
Sample boxes	10%	
Architecture mends	10%	
Collection treatment and housing	15%	15%
Housing prototype	15%	
Class participation	15%	

#### Course Policies

Students with disabilities may request appropriate academic accommodations from the Division of Diversity and Community Engagement, Services for Students with Disabilities, 471-6259,

<http://www.utexas.edu/diversity/ddce/ssd/>

Students are expected to adhere to the University Honor Code. <http://registrar.utexas.edu/catalogs/gi09-10/ch01/index.html>

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By UT Austin policy, you must notify me of your pending absence at least fourteen days prior 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.

Students are expected to adhere to the University Honor Code. (<http://registrar.utexas.edu/catalogs/gi09-10/ch01/index.html>)

## Course schedule

### January 14      Week 1 Basic lab safety; Papermaking

#### Readings:

- Environmental Health and Safety Office. (2013). Course descriptions. Retrieved January 8, 2014, from <http://www.utexas.edu/safety/ehs/train/courses.html>
- Paperonline. (2014). Retrieved January 8, 2014, from <http://www.paperonline.org/> Read at least the sections on History and Papermaking. The information is from a papermaking company, so take it with a grain of salt.
- Pavelka, K. (2013). Evaluation of a microclimate for a short term loan. Retrieved January 8, 2014, from <https://www.ischool.utexas.edu/~pavelka/buffercomparison.html>
- Quanta Research Cambridge. <http://videoscope.qrclab.com/>

- Log in as: paperlab
- Under *My videos* you will see three files, Bodlien 1, Glassine\_restrained2, and Whatman\_gampi. Click on one of the three videos and it will take you to another page.
- Click on *reload* under *Previous runs* and it will load the magnified video. When the video has loaded hit the play button on the paired images under *Synchronized View*. You may have to let it play through a couple of times before it runs smoothly. You'll see the un-magnified image on the left and the magnified image on the right.
- If you're interested, take a look at the videos under *Public Gallery*. The sleeping baby appears perfectly still before magnification, but after magnification the breathing pattern is almost shockingly visible.
- Please don't delete my videos!

#### Assignments:

Complete OH201, Course from Environmental Health and Safety Office - Due January 14  
Design experiment - Design due January 28

### January 21      Week 2 Humidification and flattening; Work on experimental design

#### Readings:

- Chapter 28: Drying and Flattening. (1995). *Paper Conservation Catalog*. Retrieved January 8, 2014, from [http://www.conservation-wiki.com/index.php?title=BP\\_Chapter\\_28\\_-\\_Drying\\_and\\_Flattening](http://www.conservation-wiki.com/index.php?title=BP_Chapter_28_-_Drying_and_Flattening)
- Chapter 5: Humidification. (1995). *Paper Conservation Catalog*. Retrieved January 8, 2014, from [http://www.conservation-wiki.com/index.php?title=BP\\_Chapter\\_22\\_-\\_Humidification](http://www.conservation-wiki.com/index.php?title=BP_Chapter_22_-_Humidification)
- Chapter 6: Visual examination. (1995). *Paper Conservation Catalog*. Retrieved Retrieved January 8, 2014, from [http://www.conservation-wiki.com/index.php?title=BP\\_Chapter\\_6\\_-\\_Visual\\_Examination](http://www.conservation-wiki.com/index.php?title=BP_Chapter_6_-_Visual_Examination)

#### Assignment:

Evaluate humidified samples - Due January 28 Write a short (one or two pages) summary of the effect of humidification and flattening on the various samples we used in class.

### January 28      Week 3 Implement experimental designs

**February 4      Week 4**  
**Dry cleaning; mold removal; mold prevention**

**Readings:**

- Chapter 12: Mold/fungi. (1995). *Paper Conservation Catalog*. Retrieved January 8, 2014, from [http://www.conservation-wiki.com/wiki/BP\\_Chapter\\_12\\_-\\_Mold/Fungi](http://www.conservation-wiki.com/wiki/BP_Chapter_12_-_Mold/Fungi)
- Chapter 14: Surface cleaning. (1992). *Paper Conservation Catalog*. Retrieved January 8, 2014, from [http://www.conservation-wiki.com/wiki/BP\\_Chapter\\_14\\_-\\_Surface\\_Cleaning](http://www.conservation-wiki.com/wiki/BP_Chapter_14_-_Surface_Cleaning)

**Assignment:**

Evaluate cleaned samples - Due February 11. Write a short (one or two pages) summary of the effects and limitations of dry cleaning on the various samples we used in class.

**February 11      Week 5**  
**Mending**

**Readings:**

- Appelbaum, B. (2007). *Conservation Treatment Methodology* (Monograph). London: Butterworth Heinemann. (Located in 1.506.)
- Baker, W., Dube, L. (2010). *Identifying Standard Practices in Research Library Book Conservation*. LRTS 54 (1). Retrieved January 8, 2014, from <http://kuscholarworks.ku.edu/dspace/handle/1808/5818>
- Chapter 25: Mending. (1995). *Paper Conservation Catalog*. Retrieved January 8, 2014, from [http://www.conservation-wiki.com/w/index.php?title=BP\\_Chapter\\_25\\_-\\_Mending](http://www.conservation-wiki.com/w/index.php?title=BP_Chapter_25_-_Mending)
- ICON. *Introduction to conservation reports: Treatment reports*. Retrieved January 8, 2014, from <http://www.conservationregister.com/PIcon-ConservationReports.asp>
- NPS. *Museum Handbook*. Chapter 8. Retrieved January 8, 2014, from <http://www.nps.gov/museum/publications/mhi/chap8.pdf>
- Tedone, M. *Conservation condition report & treatment proposal*. Retrieved January 8, 2014, from <http://www.melissatedone.info/papertreatments/WrittenDoc/GoodRoads1915.pdf>

**Assignment:**

Evaluate mends - Due February 18. Write a short (one or two pages) summary critiquing the mends we did in class and exploring how you would improve them.

**February 18      Week 6**  
**Protective enclosures**

**Readings:**

- Dartmouth College Library (2010) *A simple book repair manual*. Retrieved January 8, 2014, from <http://www.dartmouth.edu/~library/preservation/repair/index.html>
- Ellis, M. H. (1995). *The care of prints and drawings* (Monograph). Walnut Creek, CA: Altamira Press. pp. 1-144. (Located in 1.506)
- Harrison, G. (n.d.). *Repair and enclosure treatments manual*. Retrieved January 8, 2014, from <http://www.indiana.edu/~libpres/manual/mantoc.html>
- Maudie. (2012, February 3). *Tape and adhesive removal*. Retrieved January 8, 2014, from <http://www.maudiemade.com/tape-adhesive-removal/> (I have some real cautions here!)
- National Park Service. (n.d.). *Conserv O Grams*. Retrieved January 8, 2014, from [http://www.nps.gov/museum/publications/conservoogram/cons\\_toc.html](http://www.nps.gov/museum/publications/conservoogram/cons_toc.html)
- River Campus Libraries, University of Rochester. (n.d.). *General collections book repair manual*. Retrieved January 8, 2014, from <http://www.lib.rochester.edu/index.cfm?PAGE=3242>
- PACCIN. Retrieved January 8, 2014, from <http://www.paccin.org/content.php>
- Rose, C. L., Hawks, C. A., & Genoways, H. H. (Eds.). (1995). *Storage of natural history collections*. (Monograph). Washington, D.C.: Society for the Preservation of Natural History Collections. In 1.506 Ante Room

**Assignment:**

Produce four flap box; "pizza" box - Due February 25

**February 25      Week 7**

**Assign all collection materials; Discuss experiments**

**Assignment:**

Produce plan to accomplish work for rest of semester; coordinate lab use with classmates. Parameters for all treatments and enclosures will be discussed in class. All work on collection materials must be completed by April 15. Non-collection materials are due May 1. This assignment seems simple, but is actually quite difficult.

**March 4              Week 8**  
**Open labs**

**March 11            Spring Break**

**March 18            Week 9**  
**Deacidification**

**Readings:**

Baty, J.W., Maitland, C.L., Minter, W., et al. (2010). Deacidification for the conservation of paper based works: A review. Bioresources. Retrieved January 8, 2014, from [http://ojs.cnr.ncsu.edu/index.php/BioRes/article/view/BioRes\\_05\\_3\\_a\\_Baty\\_MMHJ\\_Deacidification\\_Paper\\_Review](http://ojs.cnr.ncsu.edu/index.php/BioRes/article/view/BioRes_05_3_a_Baty_MMHJ_Deacidification_Paper_Review)

**March 25            Week 10**  
**Open labs**

**April 1      Week 11**  
**Open labs**

**April 8      Week 12**  
**Discuss experiments**

**April 15            Week 13**  
**Open labs**

**April 22            Week 14**  
**Open labs**

**April 29            Week 15**  
**Compare prototypes**  
**Wrap-up; Return tools; Clean labs**