MUSEUM PREVENTIVE CONSERVATION II
Course Data and Syllabus, Spring 2014

General Course Information
AH 6287.80  Preventive Conservation Techniques  CRN 92204
ANTH 6204.80  Museum Preventive Conservation II  CRN 91299
MSTD 6204.80  Preventive Conservation Techniques  CRN 92093

Credit hours:  3.0

Dates and Times
Thursdays  6:10pm–8:00pm
Classes begin  16 January 2014;  Spring Break 13 March 2014
Last class  24 April 2014

Venue
National Museum of Natural History, Smithsonian Institution, 10th and Constitution, Washington, DC.
Students should assemble by 6:00pm in the Constitution Avenue lobby of the National Museum of Natural History. An escort will take you to the classroom as a single group. Please bring a photo ID in case the security guards request one. If you are unable to be present by 6:00 PM, please make arrangements with the instructors for someone to meet you in the lobby.

Course Directors and Primary Instructors
Catharine Hawks
Conservator, NMNH, Smithsonian
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Fax  703.876.9272
E-mail: hawksc@si.edu (preferred) or cahawks@aol.com or chawks@gwu.edu

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*****PRE-REQUISITE COURSE: Museum Preventive Conservation I

Required Texts
Available through GW Bookstore or through alternate sites given below


Purchase directly (not available through GW Bookstore)
  http://www.techstreet.com/cgi-bin/detail?product_id=1801490

Natural History Collections, New York, NY.
http://www.universityproducts.com/cart.php?m=product_list&c=2097
https://www.heritagepreservation.org/catalog/product.asp?IntProdID=34

Available at no charge as downloads
http://www.doernerinstitut.de/downloads/Climate_for_Collections.pdf


*Strang, T. J. 2013 *Studies in Pest Control for Cultural Property.* University of Gothenburg, Gothenburg.
https://gupea.ub.gu.se/handle/2077/31500 (download 3 pdfs for complete text).

*Denotes text required for pre-requisite course, Museum Preventive Conservation I. Additional readings (required and supplemental) are available on course readings CD.***

The CD will be distributed at the first course session. YOUR CD MUST BE RETURNED AT THE END OF THE COURSE TO RECEIVE A FINAL GRADE.

Course Description
Practical applications of preventive conservation for: preservation planning; procedures to facilitate collections care; preparation of grant proposals for collections care initiatives; environmental monitoring; design and maintenance of facilities, exhibits, and collection storage; collections maintenance; emergency management; integrated pest management; security; safety; and use of facilities and collections.

Learning Outcomes
Upon completion of the course, participants will be able to:

- Integrate preventive conservation into museum policies and practices for:
  - Risk assessment
  - Institutional libraries and archives (often not viewed as part of museum collections, but frequently incorporating collection documentation essential to conservation concerns)
  - Facilities, exhibition, and storage design
  - Emergency preparedness, salvage, and response
  - Fire protection (including and understanding of protection systems and equipment maintenance)
  - Physical security of collections
  - Safety of visitors, staff, interns and volunteers
  - Integrated pest management
  - Routine maintenance of grounds and facilities
  - Maintenance of cultural property
  - Use of collections
  - Special events and facilities rentals
  - Packing and moving collections
- Calibrate environmental monitoring equipment
- Navigate preventive conservation and related Web sites
- Describe cleaning methods used to maintain cultural property and know which methods can be used by museum staff with various levels of training
- Identify funding sources available for collection care projects
- Create a grant proposal for a collections care project
- Apply peer review processes for collections care proposals
- Advance collection care concerns with architects and engineers for construction/renovation of facilities
- Identify classes of adhesives used in care of cultural property and evaluate use of adhesives with heritage collections

**Code of Academic Integrity**
All students are expected to comply with the George Washington University Code of Academic Integrity in completing assignments and examinations. The Code is available at http://www.gwu.edu/~ntegrity/code.html

**Accommodation for Religiously Observant Students**
In keeping with University policy, student are to notify faculty during the first week of the semester of their intention to be absent from class on their day(s) of religious observance. These students will be permitted to be absent without penalty on such occasions, including permission to make-up examinations. The full policy is available at: http://registrar.gwu.edu/university-policies

**Support for Students Outside the Classroom**
*Disability Support Services (DSS)*
Any student who may need an accommodation based on the potential impact of a disability should contact the Disability Support Services office at 202-994-8250 in the Marvin Center, Suite 242, to establish eligibility and to coordinate reasonable accommodations. For additional information please refer to: http://gwired.gwu.edu/dss/

**University Counseling Center (UCC) 202-994-5300**
The UCC offers 24/7 assistance and referral to address students' personal, social, career, and study skills problems. Services for students include:
- crisis and emergency mental health consultations
- confidential assessment, counseling services (individual and small group), and referrals
  http://gwired.gwu.edu/counsel/CounselingServices/AcademicSupportServices

**Security**
In the case of an emergency, if at all possible, the class should shelter in place. If the building that the class is in is affected, follow the evacuation procedures for the building. After evacuation, seek shelter at a predetermined rendezvous location. Instructions on evacuation procedures and fire safety will be given at each class venue.

**Grading**
Numerical scores for assignments are posted on the Blackboard site for the course; final grades are based on the BB calculations and given as letter grades.

<table>
<thead>
<tr>
<th>Grade</th>
<th>Score Range</th>
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<tbody>
<tr>
<td>A</td>
<td>95-100</td>
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<td>C</td>
<td>73-76</td>
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<tr>
<td>C-F</td>
<td>70-72</td>
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</tbody>
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**Method of Evaluation**
- Class participation (class discussions; effort) 10%
- Quizzes (2 @ 10%) 20%
- Website critique 10%
Assignments

- **Working in assigned teams**, students will prepare the face sheets, narrative, and budgets (including a budget justification), brief staffing bios, data on supplies and equipment, and any other elements presented in class for a grant proposal for an IMLS Museums for America Conservation Project Support grant to re-house a collection in a small or mid-sized museum. Specific portions of each proposal that must be submitted will be discussed in class.

- **Working as individuals, each student will**
  - Prepare a **one page** (single spaced) critique of a conservation Website to be assigned at first class and be prepared to discuss the review in class.
  - Prepare **written reviews for 2 grants** prepared by other teams, using a peer review form provided by the instructors.
  - Take part in a **peer review panel** to determine whether proposals merit funding. Students should be prepared to describe the projects they reviewed and orally defend their written reviews at the panel session as well as take part in the discussions about other grants.

**CONSULT THE COURSE SCHEDULE FOR INFORMATION ON DUE DATES FOR ASSIGNMENTS AND QUIZZES. ADDITIONAL INFORMATION ABOUT ASSIGNMENTS AND GRADING RUBRICS IS AVAILABLE ON THE COURSE BLACKBOARD SITE**

**Class Sessions and Reading Assignments**

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**Session 1.1** Course overview and Introduction – Sturman
Team assignments for grant proposal project and Website assignments

**Session 1.2** Conservation planning and quantitative risk assessment – Hawks
Scanned Required Readings

**Risk assessment & planning**


Review this Web Site (to understand the range of content)
Risk assessment & planning
Collections Link (Benchmarking)
http://www.collectionslink.org.uk/programmes/benchmarks-for-collections-care

Session 2.1 IMLS Museums for America, Collections Stewardship, and other programs – Mark Feitl, Program Officer, IMLS
Session 2.2 Funding sources for collections care - Hawks

Scanned Required Reading
Risk assessment & planning

Session 2.1 IMLS Museums for America, Collections Stewardship, and other programs – Mark Feitl, Program Officer, IMLS
Session 2.2 Funding sources for collections care - Hawks

Scanned Required Reading
Funding
IMLS Program documents – Reviewer Handbook, Budget Form, Program Information Sheet, and SF-424S.

Consult these Websites (required)
Funding
IMLS Museums for America grant guidelines (read all carefully, concentrate on those for Collections Stewardship, Provision of Optimum Environment, and review criteria); download budget and narrative forms, and any other forms necessary for preparation of proposals:

Session 3.1 HVAC systems and how they work – Darnell Bell, Building Automation Systems, Smithsonian Institution
Session 3.2 Video on facilities design; Facilities design & renovation – Hawks

Required Texts
Facilities design & renovation; HVAC systems
ASHRAE – Chapter A-23 Museums, Galleries, Archives, and Libraries; Hawks et al. – Chapters 2, 11

Scanned Required Readings
HVAC systems

Facilities design & renovation


Scanned Supplemental Readings
Facilities design & renovation


Session 4.1 Practicum on reading blueprints and other construction documents - Jeffrey Hirsch, AIA, LEED AP, Principal, Director of Cultural Practice, EwingCole

Session 4.2 Historic preservation and facilities maintenance plans – Jeffrey Hirsch

Required Texts
Facilities maintenance
Hawks et al. – Chapters 6, 13

Scanned Required Readings
Facilities maintenance


Scanned Supplemental Readings

**Facilities maintenance**


Consult these Websites (suggested)

**Facilities maintenance**

General Services Administration. [www.gsa.gov/historicpreservation](http://www.gsa.gov/historicpreservation)

National Park Service Preservation Briefs 44. [http://www.nps.gov/tps/index.htm](http://www.nps.gov/tps/index.htm)


**Session 5.1-2** Fire protection – Bryan Stemen, Fire Protection Specialist, CSP, CFPS, F&G Standards and Assurances Lead, BP Exploration (Alaska) Inc.

**Required Texts** Fire protection

Hawks et al. – Chapter 3

**Scanned Required Readings**

Fire protection


**Scanned Supplemental Readings**

Fire protection


Viking Corporation. Automatic Sprinkler System Types.


Consult these Websites (suggested)

Fire protection

Automatic Fire Alarm Association [www.afaa.org](http://www.afaa.org)
Factory Mutual, resource catalog [www.fmglobal.com](http://www.fmglobal.com)
Fire Protection Association, United Kingdom [www.thefpa.co.uk](http://www.thefpa.co.uk)
National Fire Protection Association (NFPA) [www.nfpa.org](http://www.nfpa.org)
National Fire Sprinkler Association [www.nfsa.org](http://www.nfsa.org)
NIST Building and Fire Research Laboratory [www.bfrl.nist.gov](http://www.bfrl.nist.gov)
Underwriter’s Laboratory Inc. [www.ul.com](http://www.ul.com)
US Fire Administration [www.usfa.fema.gov](http://www.usfa.fema.gov)

**Session 6.1** Integrated pest management – Jeremy Jacobs, Collections Manager, Herpetology, NMNH
**Session 6.2** IPM practicum – Jacobs

**Required text**

**IPM**

Strang, pp. 263-284

**Scanned required readings**

**IPM**


**Consult these Websites (required)**

**IPM**


Integrated Pest Management (for museums) [www.museumpests.net](http://www.museumpests.net)

**Scanned Supplemental readings**

**IPM**


**Session 7.1** Storage design - Hawks  
**Session 7.2** Preservation of museum archives – Sturman

**Required Texts**  
**Storage design**  
ASHRAE-Chapter A-23 *Museums, Galleries, Archives, and Libraries*; Hawks et al. – Chapters 12, 15; Landry – Chapter 1  
**Institutional archives**  
Landrey – Chapters 2, 7, 9

**Scanned Required Readings**  
**Storage design**  

**Preservation of institutional archives**  

**Scanned Supplemental Readings**  
**Storage design**  

**Preservation of institutional archives**  
McCormick-Goodhart, M. and H. Wilhelm. 2004. The design and operation of a passive humidity-controlled cold storage vault using conventional freezer technology and moisture-sealed...


Consult these Websites (required)
Preservation of institutional archives
National Park Service
http://www.nps.gov/museum/coldstorage/html/intro1_1.html
InterPARES (International Research on Permanent Authentic Records in Electronic Systems)
http://www.interpares.org/index.htm
Library of Congress, Preservation Supplies
http://www.loc.gov/preservation/resources/specifications/index.html

Consult these Websites (suggested)
Storage design
Anthropology Conservation Laboratory, NMNH, Smithsonian Institution. Storage for oversize objects. http://www.nmnh.si.edu/anthro/conservation/bigstuff.htm
Preserv'Art information on materials used with collections. http://preservart.ccq.mccf.gouv.qc.ca/index.aspx (or type PreservArt in your browser)

Preservation of institutional archives
Image Permanence - free publications on preservation of photographic materials. www.imagepermanenceinstitute.org
International Federation of Libraries and Archives. www.ifla.org
National Archives and Records Administration. www.archives.gov/preservation/

Session 8.1 Housekeeping in museums - Sturman
Session 8.2 Moving collections - Hawks
Scanned Required Readings
Housekeeping
Consult this Website (required)

Moving collections

Scanned Supplemental Readings
Housekeeping

Moving collections

Consult these Websites (suggested)
Moving collections
National Museum of the American Indian collections move project http://nmai.si.edu/explore/collections/moving/

Session 9.1
Filming in museums – Anthony Wallace, NASM

Session 9.2
Facilities use – Hawks
Use of collections – Sturman

Required Texts
Use of facilities & collections
Hawks et al. Chapters 7, 8, 9, 10, 19

Scanned Required Readings
Filming in museums

Use of facilities & collections


**Scanned Supplemental Readings**

**Filming in museums**


**Use of facilities & collections**


Sample policies/procedures for facilities rentals and other facilities use


**Session 10.1** Health & safety issues in collection care – Dennis Ertel, CIH, CSP, REM, Sandler Occupational Medicine

**Session 10.2** Physical security - Hawks

**Required Texts**

*Health & safety*

Hawks et al. – Chapters 4, 5, 6

**Scanned Required Readings**
Health & safety

Physical security
Consult this Website (required)
Physical security
Scanned Supplemental Readings
Health & safety

Physical security
Consult these Websites (suggested)
Health & safety

Physical security

Session 11.1 Cleaning collections – Sturman
Session 11.2 Practicum: Cleaning objects – Hawks & Sturman
Required Text
Cleaning collections
Hawks et al. – Chapters 8, 9, 10, 12
Scanned Required Readings
Cleaning collections

Scanned Supplemental Readings
Cleaning collections

Session 12.1 Emergency management - Hawks
Session 12.2 Conservation in exhibitions – Sturman

Required Texts
Emergency management
Hawks et al. – Chapters 1, 14
Heritage Preservation, 2006. Field Guide to Emergency Response. DVD and notebook (review to become aware of contents)
Heritage Preservation. 2005. Emergency Response and Salvage Wheel (review to become aware of contents)

Exhibits conservation
Hawks et al. – Chapter 18

Scanned Required Readings
Emergency management

Exhibits conservation


Consult this Website (required)
AIC Exhibits Conservation Guidelines

Scanned Supplemental Readings

Emergency management


Exhibits conservation


Consult these Websites (suggested)

Emergency management
dPlan Emergency management assessments at cultural institutions. http://www.dplan.org
FEMA Web site. www.fema.gov
Session 13.1   Adhesives and consolidants – Hawks
Session 13.2   Environmental monitoring and calibration lab – Virginia Croskey, Lighting Specialist, NMNH; Hawks & Sturman

Required Texts
Environmental monitoring
Hatchfield – Pp. 55-133, Appendix 2; Appendix 3

Scanned Required Readings
Adhesives

Environmental monitoring


Scanned Supplemental Readings
Environmental monitoring
Hawks, C. 2005. Desiccating Microclimates. 2 pp. Adapted from an article by Steven Weintraub, Art Preservation Services, New York, NY.


**Session 14.1-2**  Peer review panel discussion of grant proposals

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