



SAN GEMINI PRESERVATION STUDIES 2024

Syllabus: WVU **ARHS 456**

Professional Field Experience
Handwritten and Printed Archival materials Restoration Methods*
3 credit hours

SGPS: SG 206B (3 Units)

Summer Semester, 2024 San Gemini, Italy

Session 1 (July 15, July 28)

Meets daily: 10:30-12:30 for lectures and 14:00-18:00 for workshop

Location: Via delle Mura 4 classroom for both lectures and workshop

Lead Instructor: Melania Zanetti

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Office Hours: on site TBA

Note: this is a course that can only be completed in San Gemini, Italy and not on the WVU campus or online. There are flight, meal, and program costs related to the course. Please go to the WVU Education Abroad website for current cost information.

<https://educationabroad.wvu.edu/>

***Must be taken with the following co-requisite:**

ARHS 455: Professional Field Experience — Paper Media and Restoration Methods for Artworks

No prerequisites required

Catalog Description:

The theoretical course is an overview including: focusing on library and archival materials as part of our cultural heritage; theoretical approach to their preservation and conservation; nature and history of paper; traditional methods of paper making and printing; processes of

deterioration; handling and accessing; paper conservation treatments. Workshop includes practice on historic materials from private collections and on documents from the San Gemini Historic Archive.

Additional Information:

This course is aimed at two types of students: those planning to become restorers and those planning to manage paper-based resources in libraries, archives or museums. For those planning on a career as a restorer, this is **a good introduction to the field** to be followed up by further education. For those planning to manage paper-based resources, it is a good overview of the field and offers insight and experience on the safe storage and conservation of paper materials.

The activity in the workshop is actual work conserving original materials that becomes part of the students' professional curriculum.

The course includes some study visits to local libraries and archives and to the historic paper mill in Fabriano (Marche)

Student Learning Outcomes:

Students who successfully complete this course will be able to:

- analyze physical properties of document and create map of the damage.
- apply dry cleaning methods to paper document
- test for, determine and apply appropriate wet cleaning methods
- select appropriate materials and mend tears in paper, infill losses, line weak paper structures and flatten paper documents
- make or choose appropriate mounts and cases to display or protect documents

Recommended Reading

See list below.

Grading:

- Skills gained over course 35%
 - Students knowledge and skills are evaluated all along the course based on implementation of the critical approach to the conservation of cultural artifacts, identification of media, treatment proposals, application of dry and wet cleaning methods, mending techniques employed, etc.

Students care for materials and tools for which they are responsible in the practical sessions are also taken into consideration.

- Participation 35%
 - Attentiveness, debating, asking and answering questions during lectures, proactive working on documents throughout the course.
- Final Exam: mixed format – quiz and essay questions. 30%

Grading scale:

94-100 = A
90-93 = A-
87-89 = B+
84-86 = B
80-83 = B-
77-79 = C+
74-76 = C
70-73 = C-
67-69 = D+
64-66 = D
60-63 = D-
Below 60 = F

Late Assignment Policies

Students may work on more projects simultaneously and projects may be completed in any order as there is no individual deadline for each of the projects, but ALL work must be completed by the final day of class in San Gemini, Italy. The workshop lab is dismantled the following day after the program ends and students will not have access to materials or lab space. No work is accepted after the last day of class.

Schedule 2024

Date	Day	Morning Topic	Afternoon Workshop
7/15	Mon	Lesson of Max Cardillo	Lesson of Max Cardillo

7/16	Tues	<p>Theoretical approach to conservation:</p> <ul style="list-style-type: none"> • Artworks, books and documents as part of cultural heritage to be preserved • Goals in cultural heritage preservation/conservation 	<p>Orientation to lab and modalities for working together</p> <p>Presentation of the personal kit: tools and their use in conservation</p> <p>Approach to paper restoration:</p> <ul style="list-style-type: none"> • condition report for book and archival material • terminology of paper damage, examples of deterioration • conservation treatments (goals and techniques)
7/17	Wed	<p>History of writing supports and their evolution: papyrus, parchment, paper</p> <p>History of papermaking: Handmade paper and paper technology in Far East, Islamic lands, Western Latin world (watermarks and countermarks)</p>	<p>Examination of different paper sheets (reflected, translucent and grazing light) with respect to: pulp characteristics, indentation from the mould, paper hydrophilicity etc.</p> <p>Introduction to dry cleaning of the paper and demonstrations: different cleaning materials (brushes, rubbers, scalpels) and their applications</p> <p>Individual training of dry cleaning of historic paper leaves from a private collection (each student sets up a suitable work surface to collect the dirt during cleaning)</p>
7/18	Thurs	<p>Preservation of paper artifacts in the following steps:</p> <ul style="list-style-type: none"> • object characterization • preventive activities • maintenance intervention • conservation treatment 	<p>Visit to the San Gemini Archive:</p> <ul style="list-style-type: none"> • introduction to the archive (Paolo Petroni) • examination and description of historic materials using the condition report (students work in small groups and present results to the class)

7/19	Fri	<p>Special seminar with visiting Professor Mito Matsumaru, Cambridge Colleges' Conservation Consortium</p> <p>Japanese paper: nature, manufacture and use in conservation</p> <p>Wheat starch paste: nature, properties and preparation</p>	<p>Starch preparation (methods, dilutions, cooking time)</p> <p>Adhesion tests using different qualities and combinations of Japanese/Hanji papers</p>
7/20	Sat	No class	No class
7/21	Sun	No class	No class
7/22	Mon	<p>Special seminar with visiting Professor Alfonso Zoleo, Padua University</p> <p>Paper: physico-chemical characterization and properties of both traditionally handmade and industrially made leaves:</p> <ul style="list-style-type: none"> • chemical structure of cellulose, emicellulose, lignin etc. • chemical bonds • other components of the paper sheet (additives, sizing, pigments etc) <p>Iron gall inks: composition and degradation process</p> <p>Investigation techniques and their application in the field of paper conservation</p>	<p>Application of physico-chemical investigation methods to different qualities of papers, inks, colors etc.</p>
7/23	Tue	<p>Research trip to Fabriano: visit to the Paper and Watermark Museum and to the Printing museum.</p> <p>Workshop on papermaking (students make their own sheets of paper according to traditional manufacture and with the assistance of a master paper maker)</p>	<p>Research trip to Fabriano</p>

7/24	Wed	<p>Special seminar with visiting Professor Alfonso Zoleo, Padua University</p> <p>Physico-chemical processes in paper deterioration:</p> <ul style="list-style-type: none"> • Cellulose hydrolysis • Cellulose oxidation 	<p>Introduction to wet treatments and demonstration of different methods (washing by immersion in water, by using special tissues, by application of gel etc)</p> <p>Individual practice of washing and gel application on historic paper leaves from a private collection.</p> <p>Drying paper</p> <p>Preparing adhesives for sizing</p>
7/25	Thurs	<p>Theoretical focus and debate on conservation treatments (goals, materials, procedure, invasiveness, removability etc.):</p> <ul style="list-style-type: none"> • preliminary tests • dry cleaning • wet treatment • drying • sizing 	<p>Follow-up of the previous practical session: paper washing, gel application, drying</p> <p>Demonstration: sizing of washed paper with different sizing agents (starch, gelatine, hydroxyethyl methyl cellulose)</p> <p>Individual practice of sizing on the historic paper leaves previously washed</p>

7/26	Fri	<p>Theoretical focus and debate on paper conservation treatments (continued):</p> <ul style="list-style-type: none"> • sizing/consolidation • reintegration of tears and missing sections • criteria for the choice of materials and techniques for reintegration • coloring the paper • flattening 	<p>Approach to the San Gemini Archive documents selected for the students training:</p> <ul style="list-style-type: none"> • condition report and treatment plan • photographic documentation • individual work on the documents from the SG Archive assigned to students: dry cleaning <p>Students' timelines vary for the remainder of the course depending upon specific object. All students identify problems, follows a treatment plan and take digital pictures of the historic material before, during and after the conservation process. A shared Drive folder is created to collect all the pictures to the benefit of the whole class and of the final report.</p>
7/27	Sat	No class	No class
7/28	Sun	No class	No class

Suggested Bibliography and useful links (more readings will be eventually recommended by the instructor during lectures):

1. Hunter, D. *Papermaking, the history and technique of an ancient craft*. New York: Dover Publication, 1947, reprint 1978
2. Barrett, T. «European Papermaking Techniques 1300–1800». *Paper through Time: Nondestructive Analysis of 14th- through 19th-Century Papers*. The University of Iowa. Last modified November 11, 2021; <http://paper.lib.uiowa.edu/european.php>
3. Bloom, J. M. *Paper before print. The history and impact of paper in the Islamic world*. New Haven and London: Yale University Press, 2001.
4. Gaiscogne, B. *How to identify prints. A complete guide to manual and mechanical processes from woodcut to ink-jet*. Thames and Hudson, 1998.

5. Harvey R., Mahard M. R. *The preservation managements handbook: a 21st century guide for libraries, archives and museums*. New York: Rowman & Littlefield, 2020 (second edition).
6. *Guide for the storage and exhibition of archival materials. Recommendations for the storage and exhibition of archival documents*. London: British Standards Institution, (2012).
7. Kosek, J. M. *Conservation mounting for prints and drawings*. Archetype Publications, 2004.
8. Murray P., Humenuck L., Bennet W., Moon-Schott L. *Contemporary Issues in Book and Paper Conservation*. Archetype Publications, 2022.
9. Daniels, V., Donnithorne, A., Smith, P. *Works of Art on Paper, Books, Documents and Photographs-Techniques and Conservation*. Archetype Publications, IIC 2002 Baltimore Congress.
10. Baglioni, P., Chelazzi, D., Rodorico G. (2015). *Nanotechnologies in the conservation of cultural heritage. A compendium of materials and techniques* (in particular Chapter 1 and Chapter 5). Springer Netherlands.
11. Appelbaum, B. (2007). *Conservation treatment methodology*. Oxford: Butterworth-Heinemann/Elsevier. Reprint 2011.
12. Udina, R. (2021). «Reversibility and the right conservation treatment». *INTACH Heritage India - Conservation Insights 2020' Lectures*, 201-210.
<https://doi.org/10.13140/RG.2.2.26130.58560>
13. **Library of Congress** [*Basic information and simple steps to take for the good care, handling, and storage of collections*] <https://www.loc.gov/preservation/care/index.html>
14. **American Institute for Conservation** [*All about conservation*] https://www.conservaion-wiki.com/wiki/Book_and_Paper_Group_Wiki;
15. **British Library** [*Care for books, manuscripts, documents and ephemera for current and future users*] <https://www.bl.uk/conservation>
16. **National Archives** [*Preservation*] <https://www.archives.gov/preservation>
17. **IADA - International Association of Book and Paper Conservators** <https://iada-home.org/>

18. IIC - International Institute for Conservation of Historic and Artistic Works
<https://www.iiconservation.org/>

19. ICCROM - International Centre for the Study of the Preservation and Restoration of Cultural Property <https://www.iccrom.org>