



SAN GEMINI PRESERVATION STUDIES

**(WVU) Syllabus ARHS 455:  
Professional Field Experience  
Paper Media and Restoration Methods for Artworks \***  
3 credit hours  
(SGPS) SG 206A -3 Units

Summer Semester, 2024

San Gemini, Italy Session 2 (July 15 – August 9 )

Meets daily: 10:30-12:30 for lectures and 3:00-7:00 for workshop

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

Lead Instructor Prof. 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:**

Students gain hands-on experience the basic skills required for restoration of paper media and original archival materials. Students learn and apply basic conservation and restoration skills on original engravings and, having acquired sufficient skill, restore unique manuscript documents from the San Gemini Historic Archive and the National Archive of Genova (13<sup>th</sup>-19<sup>th</sup> centuries).

**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 work done in the workshop is actual work conserving original materials (13<sup>th</sup>-19<sup>th</sup> centuries) from these archives that becomes part of the students' professional curriculum.

The course includes some study visits to local libraries and archives.

### **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

### **Summary Lectures**

#### **Materials**

- Cellulose
- Observation with microscope and reflected, translucent and grazing light
- Testing to identify adhesives and additives used in paper during manufacturing and mounting artworks
- Measuring pH and deacidification
- Adhesives used in paper restoration.

#### **Techniques and methods to identify artworks:**

- Print techniques
- Xylography
- Etching
- Lithography
- Silk-screen printing
- Photography
- Techniques of drawing (charcoal, pencil, ink etc.)
- Techniques of watercolor, tempera, oil and acrylic on paper.

#### **Approach to paper artworks restoration:**

- Scheduling restoration
- Process of restoration
  - Equipment
  - Techniques
  - Results.

#### **Deterioration of artworks on paper:**

- Main causes for the deterioration of artworks on paper
- Common damage in artworks on paper (foxing, mould, oxidation, incorrect mounting and mechanical damage etc.)
- Terminology of paper damage
- Processes and examples of deterioration.

#### **Methods of restoring artworks on paper**

- Dry cleaning (with brush, rubber, scalpel)
- Backing removal techniques (local humidification, gels etc.)
- Washing (if necessary, locally by using vacuum table, blotting papers, or using a screen)
- Sizing/consolidation
- Drying paper
- Reintegration of tears and missing sections
- Criteria for the choice of materials and techniques for reintegration
- Coloring the paper
- Flattening with presses and weights or on panel (similar to Karibari)
- Handling, mounting and housing techniques for storage or exhibitions.

### **Recommended Reading**

See list below.

### **Grading:**

- Skills gained over course 35%
  - Students are evaluated at the beginning of the course for knowledge and skills and again at the end of the course based on implementation of: identification of media, application of dry and wet cleaning methods, mending & restoration techniques employed, etc.
- Participation 35%
  - Attentiveness, note-taking, asking and answering questions during lectures but mainly graded on continually working on documents throughout the course with an average number of 5-7 completed depending upon complexity of projects.
- 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 work on projects simultaneously as they wait for various stages to dry. 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

Date	Day	Morning Topic	Afternoon Workshop
8/1	Mon	<p><b>Disaster Preparedness</b></p> <ul style="list-style-type: none"> <li>• Main sources of disasters               <ul style="list-style-type: none"> <li>- earthquakes</li> <li>- flood</li> </ul> </li> <li>• What to do beforehand               <ul style="list-style-type: none"> <li>- have a disaster plan</li> <li>- have a disaster kit</li> <li>- organization and management</li> </ul> </li> <li>• Salvage of paper based material</li> <li>• Ways to minimize disasters</li> </ul>	<p><b>Research trip to Santo Chiodo,</b> in Spoleto the hospital of the works of art damaged by the earthquake</p>
8/2	Tues	<p><b>Methods of restoring documents on paper: Continued from previous weeks</b></p> <p><b>Technical approach to specific item chosen by each student</b></p> <p><b>In collaboration with Manuela Belli</b></p>	<p><b>Practicum: paper conservation projects</b></p> <p>Students' projects and timelines vary for the remainder of the course depending upon specific object. All students identify problem, make a treatment plan, photograph before/after treatment, conduct conservation steps such as dry cleaning, wet cleaning, mending tears/hole, consolidating surfaces using Japanese paper or other methods, write reports on process</p> <p>Repairs, flattening, lining on documents started previous week</p> <p><b>In collaboration with Manuela Belli</b></p>
8/3	Wed	<p><b>Research trip to San Gemini Archive (dates to 1400s-1945)</b></p> <p><b>Handling, mounting and housing techniques for storage or exhibitions (Manuela Belli)</b></p>	<p>Dismantling an original framing</p> <p>Mat cutting by hand</p> <p>Case studies on conservation treatments (Manuela Belli)</p>
8/4	Thurs	<p><b>Methods of restoring documents on paper: Continued from previous weeks</b></p>	<p>Frame mounting for conservation</p> <p>Mat cutting by machine</p>

		<b>Technical approach to specific item chosen by each student</b>	
8/5	Fri	<b>Methods of restoring documents on paper: Continued from previous weeks</b>  <b>Technical approach to specific item chosen by each student</b>	Repairs, flattening, lining on documents started previous week  Specific Tips and Tricks on demand
8/6	Sat	No class	No class
8/7	Sun	No class	No class
8/8	Mon	<b>Archival &amp; Library Materials</b> <ul style="list-style-type: none"> <li>• Ancient and modern archival materials (documents, letters, posters, photographs etc.)</li> <li>• Materials used in bookbinding: cardboard, decorated paper, fabrics, leather, strings, natural fibers etc.</li> <li>• Ornamentation and other materials besides paper, seals, stamps, colors and adhesives</li> <li>• Collection structure of unbound or simply sewed documents (manuscripts, files, folders, maps, albums, rolls, etc.)</li> </ul>	Analytical observation of original documents from Historic Museum of Bergamo and National Archive of Genova  Parchment humidification with Gore-Tex and flattening  Repairs on San Gemini documents  Specific Tips and Tricks on demand
8/9	Tues	<b>Mountings for Conservation and Exhibitions, Folders and Sleeves</b> <ul style="list-style-type: none"> <li>• Risks: unsafe storage and bad handling</li> <li>• Protective containers for cultural heritage</li> <li>• Materials and usages of housing products</li> </ul>	Handling, mounting and housing techniques for storage or exhibitions with examples from suppliers catalogues  Making folders and sleeves  Specific Tips and Tricks on demand
8/10	Wed	<b>Special seminar with Visiting Professor Lara Androvandi</b> <ul style="list-style-type: none"> <li>• Decorated Papers history and workshop</li> </ul>	<b>Research trip to San Gemini Archive (dates to 1400s-1945)</b>  Paper Marbling practice  Japanese simple sawing
8/11	Thurs	<b>Iron Gall Ink</b> <ul style="list-style-type: none"> <li>• History and use</li> </ul>	Conclusion of the works on documents

		<ul style="list-style-type: none"> <li>• Recipe and Chemical Composition</li> <li>• How to recognize it</li> <li>• Conservation treatments</li> </ul>	Repairs on ancient parchments and modern newspapers (only for interested students)  Specific Tips and Tricks on demand
8/12	Fri	<b>Evaluation quiz</b>  <b>Methods of restoring documents on paper: Continued from previous weeks</b>  <b>Technical approach to specific item chosen by each student</b>	<b>Submit Final projects and Project Reports</b>  Case studies on conservation treatments  Final discussion

For all WVU Academic Policies and Syllabus Statements Please go to:

<https://tlcommons.wvu.edu/syllabus-policies-and-statements>

#### Suggested Bibliography and useful links:

- D. Hunter, ***Papermaking: The History and Technique of an Ancient Craft***,  
 Dover Publications Inc., 1978  
 (This is now available as a PDF and we will share this with participants)
- C. James ***Old Master Prints and Drawings: A Guide to Preservation and Conservation***  
 C. Corrigan  
 M. C. Enshaian  
 1997 M .R. Greca  
 Amsterdam University Press,  
 Translated by M. B. Cohn  
 (Available the Italian original edition:  
 "Manuale per la conservazione e il restauro di disegni e stampe antichi",  
 Leo S. Olschki Ed., 1991)
- R. Reed ***The Nature and Making of Parchment***  
 The Elmete Press, 1975
- R. Harvey ***The preservation managements handbook (Second edition)***  
 M. R. Mahard  
 Rowman & Littlefield, 2020

5. B. Gascoigne      ***How to Identify Prints, A complete guide to manual and mechanical processes from woodcut to ink-jet,***  
Thames and Hudson, 1998  
(This is now available as a PDF and we will share this with participants)
  
6. J. Rayner,  
J. M. Kosek,  
B. Christensen      ***Art on Paper: Mounting and Housing,***  
Archetype Publications, 2005
  
7. J. M. Kosek,      ***Conservation Mounting for Prints and Drawings,***  
Archetype Publications, 2004

8. P. Murray                    ***Contemporary Issues in Book and Paper Conservation***  
L. Humenuck                 Archetype Publications, 2022  
W. Bennet  
L. Moon-Schott
  
9. V. Daniels                    ***Works of Art on Paper, Books, Documents and Photographs -  
Techniques and Conservation***  
A. Donnithorne             Archetype Publications, IIC 2002 Baltimore Congress  
P. Smith
  
10. K. Brett                     ***Making Traditional Marbled Papers***  
The Crowood Press Ltd., 2021
  
11. C. Crespo                    ***The preservation and restoration of paper records and books:  
a ramp study with guidelines***  
V. Viñas                      *General Information Programme and UNISIST UNESCO -  
Paris, 1984*  
(This is now available as a PDF and we will share this with participants)
  
12. V. Daniels                    ***The chemistry of paper conservation***  
Chemical Society Reviews, 1996
  
13. A. F. Clapp                 ***Curatorial Care of Works of Art on Paper***  
The Lyons Press, 1987
  
14. H. K. Stratis                 ***The Broad Spectrum***  
B. Salvesen                   Archetype Publications, 2002
  
15. BSI - British Standards Institution  
***Conservation and care of archive and library collections***  
BS 4971:2017
  
16. **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>**



17. **American Institute for Conservation** [*All about conservation*]  
[https://www.conservation-wiki.com/wiki/Book\\_and\\_Paper\\_Group\\_Wiki](https://www.conservation-wiki.com/wiki/Book_and_Paper_Group_Wiki)  
[https://www.conservation-wiki.com/wiki/Photographic\\_Materials](https://www.conservation-wiki.com/wiki/Photographic_Materials)
18. **British Library** [*Care for books, manuscripts, documents and ephemera for current and future users*]  
<https://www.bl.uk/conservation>
19. **The National Archives** [*Collection care*]  
<https://www.nationalarchives.gov.uk/about/our-role/collection-care/>
20. **IADA - International Association of Book and Paper Conservators**  
<https://iada-home.org/>
21. **IIC - International Institute for Conservation of Historic and Artistic Works** <https://www.iiconservation.org/>
22. **ICCROM - International Centre for the Study of the Preservation and Restoration of Cultural Property**  
<https://www.iccrom.org/it>
23. **National Archives** [*Preservation*]  
<https://www.archives.gov/preservation>
24. **The Society of American Archivists**  
<https://www2.archivists.org/>
  - M. L. Ritzenthaler *Preserving archives and manuscripts*, 2<sup>nd</sup> ed., 2010
  - L.J. & L.L. Bellardo *A Glossary for Archivists, Manuscript Curators, and Records Managers*, 1992