

INTRODUCTION TO THE CONSERVATION OF VENICE'S BUILT HERITAGE

(Materials & techniques, decay and conservation)

Columbia Venice Summer Program 2016

INSTRUCTOR

Mieke Van Molle

COURSE SCHEDULE

Thursdays 9:30-11:30 and Fridays 9:30-16:00 (break included) – *unless otherwise notified*

Save Venice component: individual work assignment relating to Save Venice's conservation projects, schedule TBA according to individual course schedules

BACKGROUND

Venice has developed over the centuries into one of the most remarkable cultural patrimonies in the world due to a series of unique historical, geographical, social and political circumstances. The historic city of Venice, together with its Lagoon, has been inscribed on the World Heritage List in 1987 as an extraordinary architectural masterpiece.

The big flood of 1966, which put in evidence the dramatic conservation problems of Venice's historic and artistic heritage, gave rise to a significant international campaign launched by UNESCO collecting and channeling contributions of many private organizations to restore and preserve the buildings of Venice and its art treasures in close collaboration with the local authorities. Over the past 40 years many research and conservation projects have been set up in Venice, functioning as a pilot laboratory for conservation practice, scientific research, experimentation and evaluation of stone conservation treatments.

PROGRAM OBJECTIVES AND CONTENT

The course aims at providing participants with an understanding of the Built Heritage of Venice, its historical development, construction techniques and building materials and at gaining insight in the related conservation problems. Students are first introduced to the particular conservation problems of the city of Venice and its Lagoon environment. The course then addresses the historical growth and architectural development of Venice, its specific construction techniques and its great variety of stone materials, originating from all over the Mediterranean. It subsequently focuses on the conservation process, including the diagnostic survey, the different decay mechanisms and finally offering an overview of the conservation treatment.

The course includes a series of guided walking tours and diversified site visits which will illustrate and complement class lectures. In addition, participants will conduct a diagnostic fieldwork consisting in a condition survey of a historical building in Venice where they will be requested to observe, discuss, describe and document the different constituent materials, their various forms of decay and the related distribution pattern, integrated with historical information on the monument.

Course requirements and grading

Students are required to attend and actively participate in all course activities. They should complete all assigned readings before the related class meeting so as to engage with the topic and are expected to draw also on these source materials for their research papers. Students should be flexible for possible required changes, especially related to site visits, in the scheduled program.

Grading will include active class participation (25%), a written and documented research paper to be completed at mid-term (25%), as well as a documented end-term research (written paper 25% and oral presentation 25%). Detailed information will be given during the course. It is important that students bring their camera for documentation as well as closed comfortable shoes for conservation worksite visits.

Academic Honesty

Please read and carefully review Columbia's University's Undergraduate Guide to Academic Integrity at www.college.columbia.edu/academics/integrity. Academic integrity is expected of all students and plagiarism or any other form of academic dishonesty will not be tolerated. Offenses will result in a failing grade and will be referred to the Dean's Office.

PRELIMINARY CURRICULUM AND READINGS

Useful reference material:

- Glossary of architectural terms and Venetian words:
Deborah HOWARD, *The Architectural History of Venice*, London, 1980: *Glossary of architectural terms and Venetian words*, p. 11-13.
- Biographical notes on the architects of Venice:
Richard GOY, *Venice. The city and its architecture*, London, 1977: *Biographical notes on the architects of Venice*, p. 308-309.
- Short bibliography on Venetian architecture, outdoor sculpture and restorations

WEEK 1

Thursday, June 16

Introduction to Conservation in Venice

Teaching method: PPT presentation

Readings:

- *Venice Restored*, UNESCO, 1978, p. 7-9 and 29-41.
- *UNESCO for Venice. International Campaign for the Safeguarding of Venice (1966-1992). Review of Results*, UNESCO, n.d., p. 3-9.
- Bernard M. FEILDEN, *The Principles of Conservation*, in *Conservation of Historic Stone Buildings and Monuments*, Washington D.C., 1982, p. 22-30.

Friday, June 17

Venetian Perspectives: Historical Development of Venice and its Architecture

Guest lecturer: Paola Modesti, Architectural Historian, Università degli Studi di Trieste

Teaching method: PPT presentation + walking tour

Readings:

- Richard GOY, *Venice. An Architectural Guide*, New Heaven, 2010: *Introduction*, p. 3-19.
- Deborah HOWARD, *Venetian Architecture*, in *A Companion to Venetian History 1400-1797 (Brill's Companions to European History)*, 2013, p. 743-778.
- Deborah HOWARD, *The Architectural History of Venice*, London, 1980: Chapter III, *The Mediaeval City. Building Materials and Techniques*, p. 55-60.

WEEK 2

Thursday, June 23

Visit to Save Venice and the Rosand Library & Study Center

Palazzo Contarini Polignac, Dorsoduro 870

Meeting at the Accademia boat stop

Readings:

- *Save Venice Inc. Four decades of Restoration in Venice*, Venezia, 2011, p. 11-13.
- *Rosand Library and Study Center at Save Venice*, in *Save Venice Inc Newsletter*, 2015/16, p. 12-13.

Friday, June 24

Characteristics of Venetian Construction Techniques

Guest lecturer: Edoardo Danzi, Architect, Consultant Lecturer, Università IUAV di Venezia

Teaching method: PPT presentation

Readings:

- Mario PIANA, *Lagoon Building and Safeguarding Problems*, from: *Venice and its Lagoons. World Heritage, a Dialogue between Cultures: which Future?*, n.d., 5 p.
- John McANDREW, *Venetian architecture of the early Renaissance*, Cambridge (Massachusetts), 1980: Appendix A. *Building methods and materials*, p. 548-551.
- Mario PIANA, *Marmorino Plasters in Venice between the XVI and XVII Centuries*, in *Scientific Research and Safeguarding of Venice 2005. CORILA Research Program 2004-2005*, IV, Venezia, 2006, p. 71-90.

Visit to the ongoing conservation worksite of the S. façade of St. Mark's Basilica

Make sure to wear trousers & closed comfortable shoes (e.g. sneakers)!

Readings:

- Deborah HOWARD, *The Architectural History of Venice*, London, 1980: *The Basilica of San Marco*, p. 27-35.
- Richard GOY, *Venice. An Architectural Guide*, New Heaven, 2010: *The Basilica of San Marco*, p. 197-204.

WEEK 3

Thursday, June 30

Overview of Stone Deterioration Processes

Teaching method: PPT presentation

Readings:

- Giorgio TORRACA, *Porous Building Materials. Materials Science for Architectural Conservation*, Rome 1988: Chapters II – III, p. 19-47.
- *Air Pollution and Conservation. Safeguarding our Architectural Heritage. Introductory information on an Interdisciplinary Symposium held in Rome October 1986*, Gothenburg, 1986, p. 14-16.
- Vasco FASSINA, Monica FAVARO and Andrea NACCARI, *Principal Decay Patterns on Venetian Monuments*, in *Geological Society London Special Publications*, 2002, 205, p. 381-391.

Friday, July 1

The Stones of Venice and their Decay

Visit to the LAMA Laboratory for the Analysis of Ancient Materials, Università IUAV di Venezia

Visit to St. Mark's Square and Basilica

Guest lecturer: Lorenzo Lazzarini, Petrographer, Università IUAV di Venezia

Teaching method: Lecture & visits

Readings:

- L. LAZZARINI, *General Issues on the Deterioration of Stone*, in *Proceedings of the Interdisciplinary Workshop "The Building Stone in Monuments"*, Athens, 2002, p. 149-160.
- Lorenzo LAZZARINI, *The Marbles of the Palace*, in *I Marmi del Doge. Design e ospitalità*, Consorzio Marmisti Chiampo, 2009, p. 29-55 (including catalogue of stones and marbles)
- Giorgio TORRACA, *The Application of Science and Technology to Conservation Practice*, in *Science, Technology and European Cultural Heritage, Proceedings of the European Symposium, Bologna 1989*, Butterworth-Heinemann, Oxford, 1991, p. 221-232.

WEEK 4

Thursday, July 7

Visit to the San Sebastiano Church and the ongoing Save Venice conservation project

Readings:

- *Churches of Venice. The museum in the city*, ed. Chorus, Venezia, 2002: *San Sebastiano*, p.121-122.
- David ROSAND, *San Sebastiano: The Church of Paolo Veronese*, in *The Stories of Esther Revealed*, ed. G. MANIERI ELIA, Venice, 2011, p. 21-29.
- *Sponsorship opportunities in the Church of San Sebastiano*, ed. Save Venice Inc. , 2013 (?)

Friday, July 8

The Diagnostic Process and Morphology of Stone Decay

Teaching method: PPT presentation

Readings:

- Marisa LAURENZI TABASSO, *Stone Conservation in the Last Few Decades: Conceptual & Technical Developments*, in *Proceedings of the Interdisciplinary Workshop "The Building Stone in Monuments"*, Athens, 2002, p. 309-317.
- NORMAL Recommendation 20/85, *Conservation of Stone Material: Project Development, Execution and Preliminary Evaluation*, Rome, 1987, p. 1-6.

Diagnostic Fieldwork at the Church of S. Maria della Salute

Glossary on the forms of stone alteration:

- UNI-Beni Culturali 11182 /2006, *Cultural Heritage. Natural and Artificial Stone. Description of the Alteration – Terminology and Description*, Italian Glossary with English translation

Readings on the Church of S. Maria della Salute:

- Richard GOY, *Venice. The City and its Architecture*, London, 1977: *Baldassare Longhena and the Salute*, p. 197-202.
- Deborah HOWARD, *The Architectural History of Venice*, New Haven & London, 2002, Chapter 7: *Baldassare Longhena*, p. 213-227.
- Mario PIANA, *The Dome of Santa Maria della Salute in Venice: its construction and restoration*, in *Domes in the World* (a cura di G. Tampone). Atti del congresso internazionale di Firenze 19-23 marzo 2012.
- *Venice Restored*, ed. UNESCO, Paris, 1973: *Church of Santa Maria della Salute*, p.39-40.
- *Venice Restored*, ed. UNESCO, Paris, 1978: *Church of Santa Maria della Salute*, p. 74-75
- *Venice Restored 1966-1986. The UNESCO Campaign and the contribution of the private organizations*, Milano, 1986: *The Church of Santa Maria della Salute*, p. 114-116.
- *Venti anni di restauro a Venezia*, ed. Soprintendenza ai Beni Ambientali e Architettonici di Venezia, Venezia, 1987: *Chiesa di S. Maria della Salute*, p. 176. (for those students reading italian)

Further documentation on the Church of S. Maria della Salute:

- Short bibliography
- Historical drawings and maps (1500 – 18th century)
- Measured drawings by Carlo Santamaria (1955)
- Additional documentation will be distributed during the course

WEEK 5

Thursday, July 14

Diagnostic Fieldwork at the Church of S. Maria della Salute

Readings & documentation: see Friday, July 8

Friday, July 15

Overview of Stone Conservation Practice / Materials & Methods

Teaching method: PPT presentation

Readings:

- Marisa LAURENZI TABASSO, *Materials for Stone Conservation*, In *Actes du Congrès International sur la conservation de la pierre et autres matériaux*, Paris, 1993, p. 54-58
- Giorgio TORRACA, *Porous Building Materials. Materials Science for Architectural Conservation*, Rome 1988: Chapter VII, *Conservation of Stone*, p. 83-95.
- NORMAL Recommendation 20/85, *Conservation of Stone Material: Project Development, Execution and Preliminary Evaluation*, Rome, 1987, p. 6-16.

Diagnostic Fieldwork at the Church of S. Maria della Salute

Readings & documentation: see Friday, July 8

WEEK 6

Thursday, July 21

Participants' Presentations on the findings of the diagnostic fieldwork at Save Venice's office, Dorsoduro 870

Friday, July 22

Visit to a conservation project/worksite - depending on availability and authorization

Related readings will be distributed during the course