



International Course on Stone Conservation

TEACHING NOTE

INTRODUCTION

In many regions of the world stone was historically the predominant material used for building and artistic purposes. Accordingly, the conservation and maintenance of architectural and decorative stone is a core activity in such areas. Factors such as climate change, pollution, use demands, lack of maintenance, and inappropriate past treatments present challenges for the conservation of stone buildings, structures and objects. In addition to these factors, the decline in traditional building techniques, craft practices and repair methods is also threatening our ability to sustain stone structures and objects into the future. These conservation issues require a multidisciplinary approach that involves professionals, craftspeople, policy makers and owners.

The International Course on Stone Conservation was created in Venice in 1976 by ICCROM in collaboration with UNESCO, and 18 courses have been held between then and 2014. The Getty Conservation Institute joined with ICCROM as a lead partner for the course in 2009, and since 2011 the course has taken place in Rome, where participants have access to ICCROM's library and laboratory facilities as well as Rome's distinguished architectural heritage and legacy of stone conservation practice.

COURSE OBJECTIVES AND PROGRAM

The course has been adapted over time and reflects advances in practice, science, and technology, including the integration of practical methodologies for stone conservation on sites, buildings and structures. The course adopts a collaborative and multidisciplinary approach and is designed for mid-career professionals involved in the conservation of historic stone structures and artifacts. The primary goal of the course is to improve the practice of stone conservation internationally by providing participants with a holistic understanding of the decay and deterioration of stone, disseminating effective conservation methodologies, and ensuring a practical understanding of appropriate repair methods and long-term management strategies. Through lectures, discussions, laboratory sessions, demonstrations, site visits and field exercises, participants learn both the fundamental theories of conservation as well as how advances in technology and research have influenced practical approaches as they pertain to all phases of stone conservation.

The course is divided into six modules over twelve weeks. These modules include topics such as:

- History and theory of conservation;
- Science as a tool for identification, analysis, and design of conservation treatments;
- Material characteristics of stone, its geology and use as a building material;
- Deterioration mechanisms, methods of survey, analysis and diagnosis;
- Conservation interventions and the criteria for selecting and implementing treatments;
- Managing a stone conservation project including experience with practical conservation techniques and materials, and work within multidisciplinary teams.



Throughout the course participants apply what they learn in the classroom to conservation problems affecting historic stone tombs at Rome's Non-Catholic Cemetery. There, the participants carry out a conservation project from start to finish including documentation and conditions assessment, materials and structural analysis, treatment testing, and finally a week-long field session devoted to implementing conservation treatments. These interventions range from structural repairs and resetting of lost or broken elements to surface treatments such as mortar integration, poulticing, laser cleaning, and stone consolidation.

The course includes several other opportunities to learn practical techniques in the field including workshops on documentation, mortar formulation and analysis, graffiti removal, and stone carving and repair. These practical experiences are fundamental to the course, and in combination with lectures, give participants a more complete understanding of the hands-on techniques and methods involved in stone conservation practice.

AUDIENCE

The course is designed for mid-career professionals and practitioners. Participants generally include conservators, architects, engineers, conservation scientists, archaeologists, and other professionals involved in the conservation and management of stone buildings and sites.

Though based in Italy, the course and its teaching materials are presented primarily in English.

TEACHING RESOURCES

The International Stone Course teaching resources collected here are derived specifically from the course held in 2013 and are based upon materials originally prepared by the GCI, ICCROM and the instructors of course. The GCI and ICCROM present these materials as a resource for other educators who are teaching and/or developing courses on the conservation of stone. Teachers (from university faculty to professionals teaching in the field) can choose the materials relevant to their teaching needs and either use them as references to create new classroom materials, or adapt the existing materials for their own uses, according to the Creative Commons license (see [TERMS OF USE](#)).

The text and visual materials presented here include the following resources:

- Course schedule
- A list of readings provided to the participants in advance of the course. This is intended to give participants a common understanding of key stone conservation concepts and methods before the course begins.
- A complete bibliography of references used during the course. Essential readings and references that are available online are indicated within the bibliography.
- Session outlines, or summaries, of each lecture or exercise given during the course. A typical session outline includes an abstract, learning objectives and a summary of the content of the lecture or activity, as well as recommended relevant readings. Session outlines for laboratory, fieldwork or other practical exercises generally include worksheets or instructions related to the exercise.
- Images of practical exercises are included in several session outlines to assist in understanding the sequence of activities.



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ACKNOWLEDGEMENTS

The International Course on Stone Conservation teaching materials derive from a collaboration of individuals who have devoted their professional lives to research, education and practice in the study, conservation and management of stone buildings, sites and objects. The generosity of these past and current colleagues in sharing their ideas and experience makes possible these didactic resources.

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