



TRAINING OF OPERATORS IN THE FIELD OF RESTORATION OF MONUMENTS

re.i.co. scrl via ottaviano 66 roma 00192
tel . 06 39750796 fax. 06 39750796 e-mail: reico_2008@libero.it
website: www.reico.it

TRAINING COURSES FOR RESTORATION OPERATORS



The restoration is an activity related to the maintenance, reclamation, restoration and preservation of historical artifacts, such as architectures, manuscripts or a paintings. The term, from the Latin restaurare, consisting of re- (again) and staurare with the meaning of making solid, has acquired over time various meanings often in open contradiction, in relation to the culture of the period and to the relationship of this one with the history. The meaning given to the term "restoration" and "conservation" varies greatly as well as the techniques applied on the artifacts, which increased in excess over the time, so it was necessary a deepened study of the different materials used, more and more specific topics and refresher courses. It is obviously necessary the regular practice in order to make the restorer suited to the technical choices, expert in manual skills and able to take sometimes irreversible decisions to be adopted on the works of art.

Here is a selection of applied topics such as:

- **Restoration of mural and stone artifacts**
- **Restoration of paintings on canvas**
- **Restoration of wooden and gilt artifacts**



To this list we should add the variety of other supports on which the different techniques of restoration could be deepen: restoration of archaeological, ceramics, paper, metal artifacts, works on leather and textiles and new supports such as modern and contemporary works , the photographic and audiovisual materials.

Restoration of mural stone artifacts

Fresco – Mezzo Fresco – Secco Paintings

Fresco is an ancient mural painting technique executed upon freshly laid lime plaster. Water is used as the vehicle for the pigments, generally of mineral origins. In this way, once the plaster has completed the process of carbonation, the painting becomes an integral part of the wall acquiring a particular resistance to water and time.

It consists of three elements: support, plaster, color.

- The support is made of stones or bricks.
- The plaster (in Italian intonaco, tonaco or tonachino) is the most important element of the entire fresco. It consists of a dough made with fine river sand, marble powder, sieved pozzolan, lime and water.
- The color, which must be spread on a fresh plaster (hence the name fresco), must belong to the category of oxides, as it should not interact with the chemical reaction of the lime.



Variants of this technique only for the application of color:

Mezzo Fresco or Lime Paint: executed on wet or dry surfaces spread with milk of lime, the painting is executed with colors for fresco and a small amount of lime.

Secco Painting: it is done on dry plaster (secco means "dry" in Italian). The pigments require a binding medium in order to remain attached to the wall.



For these surfaces, a course with specific disciplines of theory, techniques and restoration workshops is provided:

Construction techniques and Fresco technique

Techniques of painting integration (hatching, color selection)

History of painting techniques

Mural painting and trompe l'oeil

Restoration of mural paintings, plaster and stucco

Cleaning, consolidation and grouting

Drawing and painting techniques

History of Art and History and Theory of Restoration

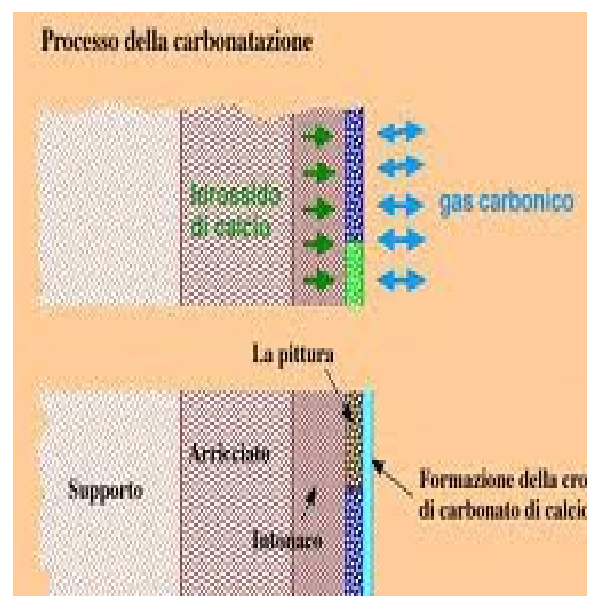
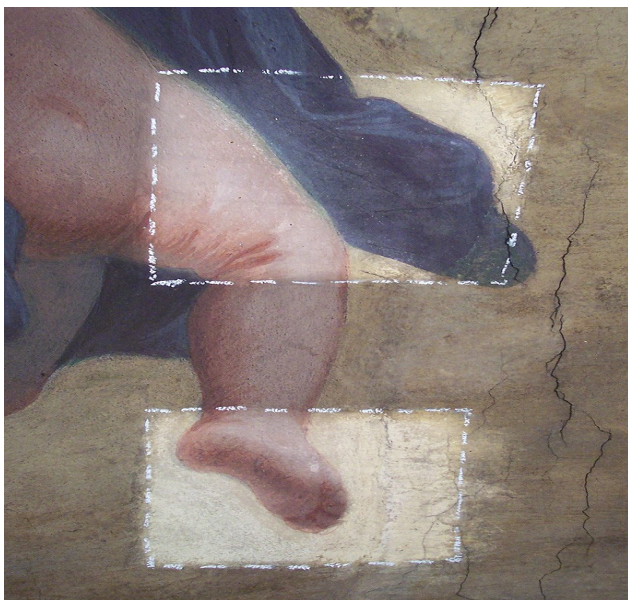
Chemistry, Biology Climatology

Techniques of photographic documentation

Scientific analysis and diagnostic techniques

Information Technology applied to restoration

Health and safety in the workplace



Concerning the stone works, that is all-round sculptures, stone wall-coverings, decorative plates, high and bas-reliefs and paintings on such supports, a course with specific disciplines of theory, techniques and restoration workshops is provided:

Consolidation and cleaning of stone

Integrations with mortars

Biocide treatments

Dry-cleaning and absorbent compresses

Removing existing grouting

Grouting of joints, cracks, micro-cracks, sealing

Consolidation of degraded surfaces with steel pins, glass or carbon fiber

Application of reversible protective elements

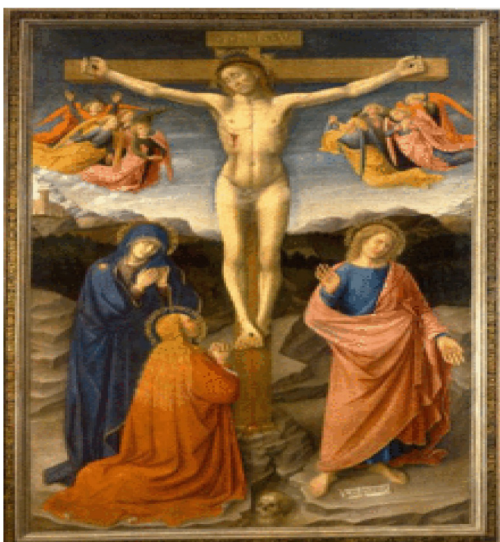


The training course includes visits to exhibitions, companies, building sites, seminars, conferences and participation of expert and visiting professor, research and documentation work in the library or outside.

Restoration of paintings on canvas



The origin of the use of canvas as pictorial support is lost in antiquity, while remaining a marginal technique. Traditionally it is made of interlacing of linen fibers, hemp or jute, but with the modern age is also widely firmly established the use of cotton and synthetic fibers. The different material wefts have a significant influence on the painting effect: subtle wefts such as linen allow more detailed finish, hemp or jute are suitable for free painting executions or big works. Originally the canvas was stuck on by glue on wooden boards, only since the Renaissance the canvas had begun to be nailed and stretched over movable looms provided with keys to ensure the tension, creating the kind of support that is still the most widely used among the artists. This system ensures a constant tension of the canvas, allows to replace the loom in the case of deformation over time and facilitates the transport of the works, since the canvas can be easily removed from the loom and rolled considerably reducing its size. Before being painted the canvas needs (with the exceptions related to the experimentalism typical of modern art) two operations: bonding, which stabilizes the weft of the canvas and removes any hairs present on the surface, and fixing which is the first material base adapted to receive the paint.



For these surfaces, a course with specific disciplines of theory, techniques and restoration workshops is provided:

History of painting techniques, oil and tempera drawing and painting techniques

History of Art

History and Theory of Restoration

Chemistry, Biology Climatology

Techniques of photographic documentation

Scientific analysis and diagnostic techniques

Information Technology applied to restoration

Health and safety in the workplace

Cultural Heritage Legislation

Techniques of painting integration (hatching, color selection)

Transport of color, Tissue-paper application, Lining

Assembling new expansion frame,

Cleaning, grouting, consolidation and painting

Disinfestation and disinfection from microbiological attacks



The training course includes visits to exhibitions, companies, building sites, seminars, conferences and participation of expert and visiting professor, research and documentation work in the library or outside.

Restoration of wooden and gilt artifacts



In this type of material, we recognize:

Wooden sculptures

Paintings on wood

Carved and inlaid furniture

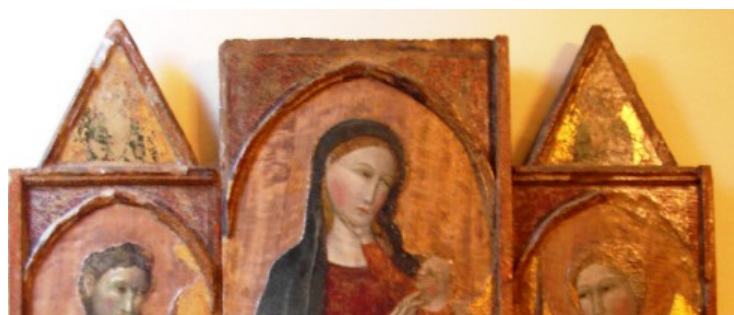
Wooden objects covered with silver and gold foils

The polychrome wooden statue represents the typical expression of the cult from the thirteenth century until the Renaissance.

Painting on panels was already popular in ancient Greece, Rome and Ancient Egypt, even if in the Byzantine world this kind of painting had a great diffusion and returned to be popular in Europe in the twelfth century. Between the thirteenth and fourteenth centuries in Italy there was the golden age of painting on wood. In the fifteenth century, with the Humanism and the Renaissance, the traditional patterns were overcome: the gold background disappears and remains only occasionally for light objects such as processional banners.

The carved and inlaid wood has a long history through the artistic technique in which ornaments are made in groove or relief on wooden surfaces. The carved objects can be painted or gilded directly or after being covered with a layer of cloth or gypsum. You can also leave the wood with its natural appearance merely polishing it.

Gilt objects such as picture frames and sacred elements reflect the style and taste of the period and are enriched by the quality of their finish.



For these surfaces, a course with specific disciplines of theory, techniques and restoration workshops is provided:

History of the techniques of panel painting and gilding

Drawing and painting techniques

History of Art

History and Theory of Restoration

Chemistry, Biology Climatology

Techniques of photographic documentation

Scientific analysis and diagnostic techniques

Information Technology applied to restoration

Health and safety in the workplace

Cultural Heritage Legislation

History and Technique of Laying on of Parquet Floor

Techniques of painting integration (hatching, color selection)

Study of wood, carving and inlay techniques, Polishing

Disinfestation and disinfection from microbiological attacks

Transport of color

Cleaning, remediation of the support, consolidation and painting

Gouache gilding and silvering, mission and decalcomania



Workshops



Each training course includes workshops for learning and manual knowledge of materials and works of art and where possible participation in external building sites.