1. Name of the subject

Contemporary methods of preservation of historical environment (Teaching on Master level, 4 ECTS)

2. Course objectives:

There is an accepted opinion that conservation is a designed intervention, done when the historical evidence that has reached us is valued. Restoration can be described as an act of respect towards the material and cultural elements. The aim of the presented course is to bring knowledge and professional skills to students through theoretical and practical work in the field of preservation of historical structures. Many standards in the field of restoration / protection have changed over the years. It is no longer possible to define conservation by universal standards and it is necessary to take into account the differences between cultures. The actual structure alone cannot be the only criterion of authenticity: customs, traditions and all historical strata are equally worthy of preservation. Students should be familiar with the complete process of research and detailed analysis of monuments.

3. Expected educational outcomes

The course will be successful if it leads the students to apply all the methods and norms that are accepted today in the field of protection / restoration. The methodology and step-by-step process of the envisioned interventions in the historical environments, monuments, and adjacent structures are described below:

- Research of bibliographic and archival materials.
- Research of the historical environments
- Geometrical survey of monuments.
- Study and documentation of all construction phases in a structure.
- Examination and documentation of all construction materials used in the buildings.
- Research and documentation of all the damage and decay that has been caused over time.
- Design of solutions to prevent, if not eliminate, further degradation.
- Development of a plan for further protection of structures.
- Calculation of expected workloads.

The archival-bibliographic study gives an opportunity to understand what the structure was like, to get acquainted with all the documented changes which the monument has undergone.

On-site examination of construction phases, as well as construction materials, makes it possible to understand the homogeneity of the structure, the structurally endangered parts and all the changes present in the structure.

ICOMOS stone decay dictionary allows to identify all the decays in the structure and to offer solutions to the problems in the future. The use of modern tools will help to identify the problems in the monument.

During this course, students will gain the ability to see and recognize a monument, the ability to design plans within a historical environment, experience working on a monument restoration and gain experience in work on preservation projects.

Upon completion of the training, future professionals should be able to work responsibly in the field of conservation / restoration of cultural heritages, as well as in an environment where there is an historical element.

4. Necessary core knowledge

In order to maintain the standards of the profession, it is beneficial to organize the professional education and training for the conservators and restorers at the level of a university master's degree. It is a developing field, therefore, it is necessary for the future specialist to be informed about the new discoveries that are made in it. In order to guarantee the necessary professional level, it is necessary to be able to observe, collect and critically analyze the information, come to the appropriate conclusion and take measures.

All the skills and knowledge that are required to get acquainted with the restoration / rehabilitation works are presented bellow:

- Theory of the history of architecture and documentation of bibliographical materials.
- Geometrical survey and design.
- Presentation of the design with the appropriate tools.
- Recognition and distinction of construction materials.
- Research of the construction technology of architectural historical structures.
- Ability to test, analyze data and experiences.
- Knowledge of the RA legislation and RA ratified international conventions in the field of cultural heritage.

5. Teaching methods

The process of specialization in the field of conservator / restorer is a balance between theoretical and practical teaching. Today, in the fast-paced rhythm, the fast, easily accessible information available on the Internet cuts students off from the classrooms. However, the seemingly easily accessible information makes it difficult to find and identify the right and reliable facts, the core material. It is necessary to provide knowledge and experience which will be accurate, perceptible and will not be boring.

The initial stage of the course will be carried out by strengthening the theoretical knowledge, supplemented with observational material (photos, videos, slides). Several examples and methods of such projects and works will be presented.

Practical exercises will be planned based on the structures or sections chosen by the students (it can be a facades, other part of a structure, a monument, a statue, etc.). As a start there will be a detailed examination and diagnosis of the chosen structure. The second step will be the assessment of needs, current application and future status. The next step is to select the planned conservation / restoration interventions. It is also necessary for the students to present the bill of quantity of the planned work.

Part of the plan is to make research visits to several monuments that have already been restored, to try to evaluate the work done on the spot, to see, distinguish and note all the changes that the structure has undergone over time. There will also be organised visits to excavation sites, restoration and research laboratories.

The acquired knowledge can also be presented through a separate project. Any selected structure needs to be completely conserve / restore using this methodology. It is also necessary to cooperate with the departments of engineering geodesy, construction materials products, production of structures and construction structures. As a result, it will be possible to comprehensively analyze the monument and find interesting solutions.

The COVID-19 epidemic brings a serious challenge to the teaching process. In a short period of time, the lecturers and students adapted to the situation and found new solutions. Even this situation created some interesting approaches. Cooperation with other international institutions became possible, through remote connection. It is necessary to make this method of teaching continuable. Invite international specialists, share their experience and knowledge to students online.



It will be possible to conduct all the theoretical lessons online. Practical classes will also be possible to conduct online. The student will be given a task, and he / she will complete the research separately by visiting the selected monument / structure.

6. Grading methods

The results of the conservation / restoration course should be evaluated with the perspective of knowledge content, ie quantity and type, as an integral part of the future well experienced professional:

- Memory to remember and to perceive the content of the provided theoretical knowledge.
- Understanding to understand the methodology and the process.
- Application practical application of the acquired knowledge.
- Analysis take a critical approach to the decisions of the selected interventions of the project. Be able to explain and justify the options chosen.
- Evaluation to be able to evaluate the effectiveness of solving the problems of the given project.
- Creation apply creative approaches in design, problem solving and for effective use.

In order to achieve such a grading methodology, it is necessary to choose the practical version of the work. There will be both group work and separate project tasks. The works will be presented in the classroom in the presence of students, the justifications for the work done will be checked and a discourse will be organized on the problems and proposed solutions. Through the presented works and professional discussions it will be possible to assess the knowledge gained from the course.

7. Required literature

Today, there is almost no up to date Armenian literature on modern approaches and methods of recovery. The E.C.C.O publication "Competences for access to the conservation- restoration profession" which has recently been translated to Armenian by the ROCEMP Center and will soon be published, was used to form this program.

It is also necessary to use the illustrated dictionary of ICOMOS stone decay in the formation of the course, it is posted on the website in several languages, and the Armenian translation is in progress.

The course will use slides, which will include approaches from international experience, quotes from conventions and charters. The prepared didactic materials will be provided to the students.