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EDICULA

Educational Digital Innovative Cultural heritage related Learning Activities

Project Code: 2020-1-EL01-KA203-079108

Intellectual Output:	02 EDICULA Curricula Reformation
Deliverable:	D2.3 - Evaluation report of the reformed courses
Lead Organization:	Sapienza University of Rome
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1 | INTRODUCTION

1.1 | OUTPUT 2

EDICULA project aims to reform the curricula of three post graduate programs in the field of Cultural Heritage, to permit their graduates, despite their discipline, to commonly respond to the need to face grand challenges and risks in complex environments. The parallel and complementary approach of the reformation of specific courses in these Master Programs, promotes the need for harmonization for the future creation of a Joint transdisciplinary Master Degree in the field of Monument Rehabilitation and Conservation.



Fig. 1.1 | EDICULA Project Structure (EDICULA Kick-off Meeting 21.10.2020 Presentation)

The second output is (hereafter O2) – **EDICULA Curricula Reformation** requires the participation of the Executive Boards of the three participating Post Graduate Master:

NATIONAL TECHNICAL UNIVERSITY OF ATHENS (NTUA) Post Graduate Program in "Protection

of Monuments"

- **SAPIENZA UNIVERSITY OF ROME (UNIROMA1)** Post Graduate Program in "Science and Technology for the Conservation of Cultural Heritage"
- BEZALEL ACADEMY OF ARTS AND DESIGN (BEZ) Post Graduate Program in "Urban Design"

together with the Conservation Unit in the Department of Architecture"

In particular,

NTUA Post Graduate Program in "Protection of Monuments" is focused on Methodologies for the conservation and interventions.

It consists of two directions :

- (A) Conservation and restoration of historic buildings and sites", organized by the NTUA School of Architecture , and
- (B) Materials and conservation intervention", organized by the NTUA School of Chemical Engineering.

The interdepartmental character of the program has been very decisive for its interdisciplinary character.

UNIROMA1 Post Graduate Program in **"Science and Technology for the Conservation of Cultural Heritage" is focused on the scientific approach in the analysis of CH.** The course aims at training researchers and experts in the field of CH conservation and archaeometry to analyze conservation problems and to detect deterioration processes, based on the physical, chemical and structural properties of materials, as well as to identify any possible remedies.

BEZ Post Graduate Program in **"Urban Design"** is focused on documentation and knowledge based design. It is a multi-disciplinary program, building on the knowledge based design project, with the objective of enriching the quality of the environment in cities through innovative design that relates to the theoretical study of the spatial structure of the form of the city.

In addition, WP2 is connected with Multiplier Event E4 and the Teaching Activity.

The final goal of O2 is to blend the different competences of these Master Programs, through the **REFORMATION OF DIVERSE, YET COMPLIMENTARY, EXISTING MASTER COURSES**, in order to address the needs of students from different scientific backgrounds and different professional dynamics.

O2 also aims to cover the EDUCATIONAL NEEDS FOR EMERGING PROFESSIONAL PROFILES OF SCIENTISTS IN THE PROTECTION OF MONUMENTS since new roles and responsibilities among diverse disciplines (i.e., architects, engineers, archaeologists, conservators and natural scientists) are required in the post industrial era for sustainable development

1.2 | TASK 2.1

O2 of the EDICULA Project consists of three tasks:

Task 2.1	Postgraduate reformation
Task 2.2	Doctoral reformation
Task 2.3	Dissemination activities of the curricula reformation

The task duration is reported in the following table:

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Task 2.1																		
Task 2.2																		
Task 2.3																		

Task 2.1 **Postgraduate reformation** in its turn is divided to three stages:

Task 2.1	Postg	raduate reformation
	Stage 1	The design phase for each Master Program (M1 M12)
	Stage 2	The implementation phase of the reformed courses in the curricula of the three MSc (M13 M24),
	Stage 3	The evaluation phase to assess the level of trans disciplinarity and the complementarity of the nine reformed courses, so that the reformed courses will lead to the promotion of a Joint Master Degree in the field of monuments' rehabilitation (M13 30)

1.3 | DELIVERABLES

Seven Deliverables are assigned for O2:

D2.1	Design of the curricula reformation for each Master Program
D2.2	Outcomes of the nine (3x3) reformed courses
D2.3	Evaluation report of the reformed courses
D2.4	Assignment of the three doctoral theses
D2.5	Annual progress reports on the three doctoral theses
D2.6	TMM_CH21 Special Educational Session
D2.7	Proceedings of the TMM_CH21 Special Session

2 | DELIVERABLE 2.2 EVALUATION REPORT OF THE REFORMED COURSES

Reformed courses from UNIROMA1 have been evaluated using the **Student opinion survey (OPIS)**. Each teacher, after 2/3 of the lessons scheduled in the semester, has to dedicate a time in the classroom of at least 15 minutes for filling the survey, by the use of mobile devices. As a further possibility of compilation, for students who had not previously completed the assessment, the system requires the filling after the registration of the exam.

Each student must evaluate only the courses provided in their study plan, for which they have not yet taken the exam.

The questionnaire is composed of 23 questions, only 18 are available for the professor of the course.

- 1. Was the background sufficient to understand the topics discussed during the lectures?
- 2. Was the required study comparable to the ECTS?

- 3. Was the didactic material available and adequate?
- 4. Was the typology of the exam clearly defined?
- 5. Were lectures, laboratories and other didactic activities developed during the planned hours?
- 6. Did the professor stimulate the attention?
- 7. Did the professor clearly explain the topics?
- 8. Were laboratories and hands-on activities useful to understand the topic?
- 9. Was the course developed according to that reported on the web site?
- 10. Was the professor available for clarification?
- 11. Are you interested in the topic discussed during the course?
- 12. Are you satisfied with the course?
- 14. Is the information about the online attendance adequately explained?
- 16. Is the information about the online exam clear?
- 17. Are online activities available?
- 18. Was the didactic material available and adequate for the study?
- 19. Is the professor able to use online resources and to involve both students face to face and online?
- 23. Are the tools adequate to attend online classes?

UNIROMA1 has started the two reformed compulsory courses for the academic year 2021/22 (each with 9 ECTS): "Applied geosciences and bioconservation laboratory" and "Plant biology and conservation for cultural heritage" (9 ECTS)

Only one optional course "Introduction to thesis and practical seminars" (6 ECTS) has started as the second one "Climate risk assessment" (6 ECTS) is planned for the second semester.

As reported in the diagram in Figure 2.1, "**Applied geosciences and bioconservation laboratory**" (blue line) shows the mean values of answers usually above the mean values registered for the Master in Science and Technology for the Conservation of Cultural Heritage (green line) the Faculty of Mathematic, Physic, Natural Sciences and (red line) the other Master degree of Sapienza (yellow line).



Fig. 2.1 | Report Questionnaire course "Applied geosciences and bioconservation laboratory"

Similar information is reported in Figure 2.2 line, where the colours described above are used.



Fig. 2.2 | Report Questionnaire course "Applied geosciences and bioconservation laboratory"

Particular attention has to be given to question number 8 ("Were laboratories and hands-on activities useful to understand the topic?"). The course "Applied geosciences and bioconservation laboratory" reached the highest score, confirming the importance of **hands-on activities in the learning process**. High scores have been observed also in the course **"Plant biology and conservation for cultural heritage"**. As reported in Figure 2.3 the mean values of this course (blue line) are generally high respect to data of the Master in Science and Technology for the Conservation of Cultural Heritage (green line) the Faculty of Sciences Mathematics Physics and naturals (red line) and the other Master degree of Sapienza (yellow line), highlighting the high value of the course.

Also in this case, question number 8 shows high value pointing out the importance of hands-on activities in the course.



Fig. 2.3 | Report Questionnaire course "Plant biology and conservation for cultural heritage"

Similar information is reported in Figure 2.4, where the colours described above are used.



Fig. 2.4 | Report Questionnaire course "Plant biology and conservation for cultural heritage"

Finally, the course of "Introduction to thesis and practical seminars" shows high scores. As reported in Figure 2.5 the mean values of this course (blue line) are higher than those of the Master in Science and Technology for the Conservation of Cultural Heritage (green line) the Faculty of Mathematic, Physic, and Natural Sciences (red line) and the other Master degree of Sapienza (yellow line), highlighting the high value of the course

Similar information is reported in Figure 2.6, where the colours described above are used. Also in this case, question number 8 shows high values. Hands-on activities and laboratories are positively evaluated by students as important tools to better understand the topics discussed during lectures.



Fig. 2.5 | Report Questionnaire course "Introduction to thesis and practical seminars"



Fig. 2.6 | Report Questionnaire course "Introduction to thesis and practical seminars"

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