



# UNIVERSITÀ DEGLI STUDI DI PALERMO

DEPARTMENT	Culture e società
ACADEMIC YEAR	2021/2022
BACHELOR'S DEGREE (BSC)	CULTURAL HERITAGE: KNOWLEDGE, MANAGEMENT, ENHANCEMENT
SUBJECT	COMPUTER APPLICATIONS FOR CULTURAL HERITAGE
TYPE OF EDUCATIONAL ACTIVITY	F
AMBIT	10787-Abilità informatiche e telematiche
CODE	18558
SCIENTIFIC SECTOR(S)	
HEAD PROFESSOR(S)	LIMONCELLI MASSIMO    Ricercatore a tempo determinato    Univ. di PALERMO
OTHER PROFESSOR(S)	
CREDITS	3
INDIVIDUAL STUDY (Hrs)	0
COURSE ACTIVITY (Hrs)	25
PROPAEDEUTICAL SUBJECTS	
MUTUALIZATION	
YEAR	3
TERM (SEMESTER)	2° semester
ATTENDANCE	Mandatory
EVALUATION	Pass/Fail
TEACHER OFFICE HOURS	LIMONCELLI MASSIMO Monday    09:30    12:30    Viale delle Scienze, Edificio 15, stanza 104bis

**DOCENTE:** Prof. MASSIMO LIMONCELLI

<b>PREREQUISITES</b>	Conoscenze di base delle discipline curriculari in piano
<b>LEARNING OUTCOMES</b>	Knowledge of research tools and methods in the field and in the laboratory; knowledge of the main applications IT in the area of pertinence: further linguistic knowledge; knowledge of specific areas and problems of work context Ability to apply knowledge and understanding Ability to correctly use research methods and tools on the finds e artifacts or in field activities, in museum environment, etc. Ability to operate in an inherent working context the field of cultural heritage and cultural tourism.
<b>ASSESSMENT METHODS</b>	final practice exercise at the end of the activity- aims to verify and evaluate the degree of achievement of the learning outcomes of the course, according to the following grid: level of knowledges and competences barely adequate- sufficient level adequate, but with failures- good level satisfactory, with a few flaws- very good level fully satisfactory- excellent
<b>EDUCATIONAL OBJECTIVES</b>	The activities could be laboratories, archaeological excavations, survey, practical activities (even stage), seminar lessons with an active engagement of the students. The students will gain competences and abilities in the use of the means and methods current in the fieldwork and laboratory, and/or in the main computer applications, foreign languages competences, or work practice.
<b>TEACHING METHODS</b>	practice exercises, laboratory attendance is required
<b>SUGGESTED BIBLIOGRAPHY</b>	Massimo Limoncelli, Virtual restoration 1. Paintings and Mosaics, Roma 2017, ISBN 9786057673107

## SYLLABUS

Hrs	Workshops
25	<p>The workshop will focus on practical activities related to virtual restoration methodologies and techniques applied to pictorial and mosaic surfaces according to the most up-to-date principles and methods of the discipline. In particular, all the individual steps envisaged will be illustrated through concrete cases to be performed in the laboratory</p> <p>in a restoration work: digital survey of the pictorial surfaces with Image-based in Camera Scanner techniques, surface representation and treatment (optimization, calibration and scaling of the digital image), surface mapping (degradation and interventions), color analysis , analysis and integration of the gaps (neutral retouching, mimetic retouching, chromatic abatement) and reconstruction of the shortcomings (stylistic restoration).</p> <p>At the end of the course each student will be able to perform a complete virtual restoration of a fresco or a mosaic following all the single steps provided.</p>