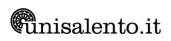
DIAGNOSTICS FOR CULTURAL HERITAGE (LM61)

(Università degli Studi)

Teaching PHYSICAL CHEMISTRY FOR CULTURAL HERITAGE GenCod A005454 Owner professor Gabriele GIANCANE		CHEMISTRY FOR CULTURAL HERITAGE Teaching PHYSICAL CHEMISTRY FOR Langu CULTURAL HERITAGE	Course year 1 E Language INGLESE
			Curriculum PERCORSO COMUNE
		Course type Laurea Magistrale	Location
		Credits 9.0	Semester Primo-Semestre
		Teaching hours Ore-Attivita-frontale: 63.0	Exam type Orale
		For enrolled in 2018/2019	Assessment Voto-Finale
		Taught in 2018/2019	Course timetable https://easyroom.unisalento.it/Orario
REQUIREMENTS	Basic concepts	s of chemistry and physics.	
COURSE AIMS	Diagnostic techniques used to characterize the material components of historically relevant artifacts and the processes that rule the degradation of the materials will be systematically analysed and explained. In particular, not destructive spectroscopic methodologies will be prosed to the students. During the course, the students will be involved in the study of scientific papers that will be critically analysed highlighting strength and weakness of the proposed researches in order to educate the student to face complex problems and to solve them with powerful analytical methods.		
TEACHING METHODOLOGY	Frontal lessons will be given. Course attendance is compulsory.		
ASSESSMENT TYPE	Oral tests will be used to evaluate if the students reached the course's objectives		
ASSESSMENT SESSIONS	29 gennaio 20 14 febbraio 20 28 febbraio 20 2 maggio 201 13 giugno 207 9 luglio 2019 31 luglio 2019	019 019 9 19	



FULL SYLLABUS

During the course, concepts of Physical Chemistry will be proposed and particular attention will paid towards the study of the degradation processes that affect the historical artifacts and monuments.

Possible strategies to prevent the effects of external agents on different materials will be examined and the analytical techniques used to characterize them will be considered. Furthermore, chemical physical approaches applied to real cases will be discussed and possible improvements of the

REFERENCE TEXT BOOKS

• AA. VV., La Chimica per l'Arte, Zanichelli.

• Conservation Science for the Cultural Heritage, Applications of Instrumental Analysis, Editor: Varella, Evangelia A.; Springer

Zecchina, Alchimie nell'arte, Zanichelli

• Science and Art: The Painted Surface Editors: Antonio Sgamellotti, Brunetto Giovanni Brunetti, Costanza Miliani, RSC.

• Ted Lister, Conservation Chemistry, An Introduction; Royal Society of Chemistry.

• M.R. Derrick et al., Infrared Spectroscopy in Conservation Science, Publisher:Getty Trust Publications.

C. Wayne Smith, Archaeological Conservation Using Polymers, Practical Applications for Organic Artifact Stabilization, Texas A & M University Press

• G. Artioli, Scientific Methods and Cultural Heritage, An Introduction to the Application of Materials Science to Archaeometry and Conservation Science, Oxford University Press

