



UNIVERSITÀ DI PAVIA

Anno Accademico 2021/2022

PHYSICAL TECHNOLOGIES AND CULTURAL HERITAGE

Enrollment year	2019/2020
Academic year	2021/2022
Regulations	DM270
Academic discipline	FIS/07 (APPLIED PHYSICS (CULTURAL HERITAGE, ENVIRONMENT, BIOLOGY AND MEDICINE))
Department	DEPARTMENT OF PHYSICS
Course	PHYSICS
Curriculum	PERCORSO COMUNE
Year of study	3°
Period	2nd semester (01/03/2022 - 15/06/2022)
ECTS	6
Lesson hours	48 lesson hours
Language	Italian
Activity type	ORAL TEST
Teacher	GALINETTO PIETRO (titolare) - 3 ECTS MOZZATI MARIA CRISTINA - 3 ECTS
Prerequisites	Basics of Electromagnetism, Nuclear physics, Quantum Mechanics.
Learning outcomes	The aim of the course is to provide students with the basic knowledge about some physical experimental methods to study materials of interest in cultural heritage field.
Course contents	The program includes Raman and micro-Raman spectroscopy, photo and thermoluminescence, neutron activation, C-14 dating.
Teaching methods	The course program includes both theoretical lessons on a variety of physical methods for cultural heritage studies and laboratory exercises, essentially related to Raman spectroscopy, Electron paramagnetic resonance and neutron activation methods.

**Recommeneded or required
readings**

Documents prepared by the teacher and related to the techniques discussed during the course, accompanied by selected research papers in the field of cultural heritage

Oral examination. The student first presents a specific topic (among those presented during the course and agreed with the teachers) illustrating the physical basics and the experimental issues, also recalling one or more scientific papers that report experimental results related to the chosen methodology/ technique.

