Testi del Syllabus

Resp. Did. **D'AVINO STEFANO** Matricola: **002419**

Anno offerta: **2015/2016**
Insegnamento: **AI220 - TECNICHE DEL RESTAURO ARCHITETTONICO**
Corso di studio: **700M - Architettura**
Anno regolamento: **2012**
CFU: **6**
Settore: **ICAR/19**
Tipo Attività: **B - Caratterizzante**
Anno corso: **4**
Periodo: **Primo Semestre**
Sede: **PESCARA**

Testi in inglese

Lingua insegnamento	Italian; the seminars (project of restoration) can be taught in English for students who require
Contenuti	The course offers the student, as a future architect, the contents needed to deal with the project aimed at the conservation and restoration of architectural heritage. The most up to date methods for the conservation and restoration of materials, surfaces and structures will be presented. Such content will be treated as part of the national and international cultural debate, in continuation of the course "Theory and history of restoration" (3rd year).
Testi di riferimento	L. BARUCHELLO, G. ASSENZA, Diagnosi dei dissesti e consolidamento delle costruzioni. Manuale pratico, Roma, DEI – Tipografia del Genio Civile, 1998 G. CIGNI G., B. CODACCI PISANELLI, Umidità e degrado negli edifici. Diagnosi e rimedi, Roma, Kappa, 1987 C. CONTI, G. MARTINES, C. USAI, Gli interventi di conservazione su materiali e superfici, in G. CARBONARA (a cura di), Trattato di restauro architettonico, Torino U.T.E.T., 1996, vol. 3° G. CANGI, Manuale del recupero strutturale e antisismico, Roma, D.E.I. – Tipografia del Genio Civile, 2005 L. LAZZARINI, M. LAURENZI TABASSO, Il restauro della pietra, II ed., Torino, Utet Scienze tecniche, 2010 G. MASSARI, I. MASSARI, Risanamento igienico dei locali umidi, Milano, Hoepli, 1981 S. FRANCESCHI, L. GERMANI, Manuale operativo per il restauro architettonico, Roma, D.E.I. – Tipografia del Genio Civile, 2003
Obiettivi formativi	The main objective is the training and development of specific skills in the approach to historical heritage in architecture. An important role is assigned to the management for static problems, which is of primary importance for the restoration. The goal is to train technicians able to orient the acquired knowledge to the main purpose, which is the preservation and restoration of architectural and monumental heritage.

Prerequisiti	It’s required an extensive knowledge of architectural history and fundamentals of statics, science of construction and survey techniques. It is also crucial the acquisition of the main principles of the restoration and the knowledge of current debate in the discipline, as it is developed in the course of "Theory and history of restoration."
Metodi didattici	The contents will be presented in classes and in exercises about buildings that need to be preserved or restoration work. Concrete cases of restoration will be analyzed during some visits to sites in historic buildings. There will be lectures and conferences of professors from other universities and scientific institutions.
Modalità di verifica dell'apprendimento	The evaluation takes place at the end of the course by an oral examination and discussion on the restoration project. Other checks are made during the course through short exercises and multiple choice quizzes. The checks are an integral part of the final evaluation.
Programma esteso	TRADITIONAL BUILDING MATERIALS 1. The stone: tools, workmanship, surface finishing. 2. The bricks: equipment and manufacturing systems. 3. The binders and the coatings: limes, gypsum and aggregates. Paints and surface finishing. 4. The wood: physico-chemical characteristics, workmanship and applications. THE RESTORATION OF MATERIALS AND SURFACES 1. The treatment of stone surfaces: cleaning, consolidation and protection. 2. The treatment of the brick structures. 3. The treatment of the plaster and painting, the restoration of the frescoes. THE RESTORATION OF STRUCTURES 1. Guide-lines in restoration of foundations and structures, vaults and roofings. 2. Traditional and innovative systems in masonry retrofitting after 2009 seism 3. Restorations and reinforcements after 2009 earthquake in historic buildings and towns 4. Rehabilitation of damp walls.