



Course Syllabus

Course Code	Course Title	ECTS Credits
ARCH 112	Construction Materials and Finishes	4
Prerequisites	Department	Semester
-	Architecture	Spring
Type of Course	Field	Language of Instruction
Required	Architecture	English
Level of Course	Lecturer(s)	Year of Study
1 st Cycle	Adonis Cleanthous Panagiotis Pierides	1 st
Mode of Delivery	Work Placement	Corequisites
Face to face	N/A	

Course Objectives:

The main objectives of the course are to:

- Explore building technology through the study of structure, construction, materials, the techniques of environmental design and their integration into building design.
- Emphasize the technical aspects of Architecture.
- Highlight key construction systems and methodologies in Architecture.
- Study the interrelationship of Architecture and Technology through selected and comprehensive case studies and paradigms.
- Assist students in developing the basic skills required in Architectural Construction Research.
- Promote critical thinking capacity through presentations, construction site field trips, discussion, and related ongoing assignments.
- Present students with the necessary tools to utilise technical knowledge in the conception and design of Architecture.

Learning Outcomes:

After completion of the course students are expected to be able to:

1. Recognise the main architectural construction types.
2. List the main technical characteristics of each construction system.
3. Reproduce and interpret technical architectural drawings and construction details specification documents.
4. Compose site surveys through measurement, sketching, listing, scaled drawing, and annotated photographic representations.
5. Summarise the technological social, and economic environment affecting architectural construction evolution.
6. Describe verbally and in sketch and annotation form the main characteristics of technologically seminal buildings.
7. Produce sketches and diagrams highlighting principal construction, aspects and key features.
8. Analyze the characteristics of construction elements and their method of assemblage.
9. Cite aspects of construction and its materiality responding to environmental concerns.
10. Formulate a mature and personal stance regarding key technical specification strategies.
11. Evaluate the appropriateness of construction concepts utilized in the implementation of the built environment.

Course Content:

1. Issues of technology and the environment
2. Development of skills in the techniques of technical design
3. Construction systems
4. Materials and processes
5. Design and construction
6. Site-specificity
7. Sensual qualities of construction
8. Energy efficiency
9. Recyclability
10. Assemblage detailing
11. Site and founding
12. Building components
13. Thermal insulation and draining

Learning Activities and Teaching Methods:

Lectures, case studies, site visits, physical construction laboratories, physical modeling, individual work
student participation, analytical sketching, drawing and annotating, model making, environment analysis, reading/ researching, drafting, photo documenting, surveying

Assessment Methods:

Portfolio, Midterm Exam, Final Exam, Attendance and Participation

Required Textbooks / Readings:

Title	Author(s)	Publisher	Year	ISBN
Building Construction Illustrated	Francis Ching	Wiley	2002	978-1-118-45834-1
Constructing Architecture	Deplazes Andrea	Birkhauser	2005	10 3 7643 7189 7

Recommended Textbooks / Readings:

Title	Author(s)	Publisher	Year	ISBN
Fundamentals of Building Construction	Eduard Allen, Joseph Iano	Wiley	2012	978 111 880193
Neufert Architects' Data	Ernst & Peter Neufert	Wiley-Blackwell; 4 th edition	2012	ISBN-13: 978-1405192538