



STUDIUM ARCHITECTURAE

FLORENCE DESIGN SCHOOL

SYLLABUS : TECHNOLOGY AND BUILDING MATERIALS

- **Introduction:**

Materials and technology choices have as strong an impact both on the symbolic and expressive value as on the performance of the architecture.

The course presents for each material: properties, processing methods, aesthetic significance and performance in relation to the construction choices adopted as guidelines for proper design.

We will show examples of historical and contemporary architecture that best enhance the characteristics of each material.

Theory lessons are supported by guided visits to places of production of different materials.

For each material constructional details will be produced and the object of the graphics exercise.

- **Aims and purpose of the course:**

The aim of the course is to provide students with basic knowledge about the characteristics, behavior and performance of materials in order to have an overall control of the project, to express the poetic of architecture.

The student at the end of the course will have acquired the theoretical tools and developed a critical sense to orient in the different possible technological choices in relation to the architectural requirements, the environment and sustainability of the project.

- **Course Structure:**

The lectures will focus on the characteristics of the individual materials: wood ,terracotta, stone, concrete, metal, glass.

There will be monthly graphic exercises for constructional details for each material.

The field trip will be to companies that produce different materials.
The final exam consists in the oral test that focuses on the themes discussed during the course and in the consignment of drawings.

- **Program:**

First Month:

Wood

Field Trip*: Campigli Legnami, Empoli.

Graphic exercise : Interior design detail/ Urban design detail.

Second Month:

Terracotta

Graphic exercise: Brick wall detail

Field Trip*: Cotto Impruneta, Greve in Chianti (FI)

Third month:

Stone

Field Trip*: Quarry/ Pietre di Rapolano company

Graphic exercise : Stone masonry detail

- **Format:**

Types of Instruction: Lecture, Homework assignments; Lab; Textbook readings; Class field trips

- **Evaluation and Grading:**

Methods of evaluation: Participation in class and attendance (40%); Homework; Classwork assignment (20%); Monthly examination(20%); Final project (20%)

Grade: The grade is determined by the attitude of the student toward his/her work, the desire to increase his/her own knowledge; how the student has matured as seen through a comparison of the work completed during the semester.

The grading scale used in the course:

100-95 = A

94-90= A-

89-86= B+

85=B

84-80= B-

79-76= C+
75=C
74-70=C-
69-66= D+
65= D
64-60= D-
59-Below= F

- **Books and Supplies:**

Birkhauser,Basel Third Edition; A. Deplazes, *Constructiong Architecture, materials,processes, structures.*

- **Credits:---**

- **Class hours:**

The duration of a lecture is 50 minutes / 4 hours per week;

- **Rules:**

Attendance at all lectures is obligatory.

Students must bring all course materials to class together with their laptops with programs already installed (Autocad for students and Sketchup-free version).

- **Special Instructions:**

The use of cell phones during the lecture is prohibited;

Tardiness for the class is not accepted(Students need to be present 15 minutes before the lecture starts);

Students are expected to clean up their area at the end of every class.

* All Design field trips are not included in tuition fees. They will be billed separately.

All design field trips are optional , but the school strongly advises you to participate as each trip complements the course.