



Course Code	Course Title	ECTS Credits
INT 112	Materials Workshop	4
Department	Semester	Prerequisites
Architecture	Spring	None
Type of Course	Field	Language of Instruction
Major Requirement	Interior Design	English
Level of Course	Year of Study	Lecturer
1 st Cycle	1 st	Angela Petrou
Mode of Delivery	Work Placement	Co- Requisites
Face-to-face	N/A	None

Objectives of the Course:

The main objectives of the course are :

- To Introduce ideas of matter, form and structure
- To examine the main properties and characteristics of materials
- To carry out a workshop class involving hands-on, empirical, experimentation with different materials and forming processes (casting, assembling, extruding, converting, mixing, fracturing etc);
- To examine and experiment with types of structural form: solid, membrane, hybrid, skeletal, surface etc
- To experiment with how materials can be combined to form composite elements
- To experiment with how materials can be manipulated to give them other physical qualities (stronger, more porous, less brittle...)

Learning Outcomes:

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

- Identify material properties and be aware of the structural and ‘workable’ qualities of these materials
- Demonstrate knowledge of a wide range of forming techniques (and have technical competency in some of these techniques)
- Determine how materials can be manipulated, worked and applied
- Differentiate between what is suitable to be used a skin and what can be used as mass
- Experiment with combining materials to create new composites
- Experiment with combining materials to change their material characteristics
- Compose and combine materials within making processes for models or installations.

Course Contents:

- Introduction to ideas of form & matter
- Examination of properties and characteristics of materials

Workshop forming processes :
 casting, assembling, extruding, converting, mixing, fracturing
 Workshop Skins
 Workshop Skeletons
 Workshop Hybrids
 Workshop Changing Nature

Learning Activities & Teaching Methods:

Lectures, Workshop Presentations, Studio presentations, Studio tutorials, Assignments, Projects and Site visits.

Assessment Methods:

Assignments, Workshop, Models, Process, Experimentation, Presentation

Recommended Textbooks

Authors	Title	Publisher	Year	ISBN
Andrea Deplazes	CONSTRUCTING ARCHITECTURE, Materials Processes Structures (2 nd Edition)	Birkhauser	2008	3764386304
	Detail (architectural journal) Review of architecture and construction details	Detail, Germany		
Staib, Gerald	Components and Systems: Modular Construction - Design, Structure, New Technologies	Birkhauser	2008	3764386568
Thomas, K. L.	Material Matters: Architecture and Material Practice	Routledge	2007	020301362X
Branko Kolarevic	Architecture in the Digital Age: Design and Manufacturing	Taylor & Francis	2005	041538141X