

Course/Subject/Unit Description

1. General Information			
School		School of Design Studies	
Department		INTERIOR ARCHITECTURE	
STUDY LEVEL		Undergraduate	
CODE OF SUBJECT	EA303	SEMESTER	3
SUBJECT TITLE		STRUCTURAL ART III	
Teaching Content	Weekly (Hrs)	Credits	
Lectures, Essays, Design Workshops/Exercises, Design Project – Portfolio of work.	3	3	
Type of Subject	Compulsory		
PREREQUIRED COURSES	No		
Teaching and Exams Language	Greek- English		
THE COURSE IS OFFERED TO ERASMUS STUDENTS	Yes		
Course website (URL)	ia.ihu.gr/ea303		

2. Aims and Objectives – Methods – Skills
<i>α. Learning Outcomes</i>
The aim of the course is to familiarize students with the subject of "lightweight structures" in order to design small-scale indoor projects and specifically to develop the capability of researching structural details, since construction is not just a process of composing material together by following the mechanical- dynamic rules but mainly the connecting link between function and aesthetics for small- and large-scale projects.
<i>β. Skills</i>
<ul style="list-style-type: none"> • Research, analysis and composition of structural information with the use of necessary technologies • Use of contemporary light constructions • Autonomous work • Production of new research ideas • Exercise on criticism and self-criticism • Application of knowledge in practice

3. Subject Context
<p>This course is an introduction to modern construction logic of the so-called "Lightweight building methods" with the application of light structures, interior partition walls made of plasterboard and other easily used materials and exterior lightweight wall hangings. The main topics include the analysis of principles and characteristics of lightweight structures and construction methods which, due to their materiality, allow an easy and fast application to the buildings.</p> <p>The modern construction techniques of interiors, such as plasterboard partitions, cement board partitions, suspended ceilings and flooring, are analysed. Construction techniques and connection of light constructions with load-bearing structural elements of the building as well as other installations (electrical, hydraulic, network) are analyzed, adapting to lightweight components.</p>

In the laboratory - design part students are requested to elaborate design issues related to construction details of various interiors, through several workshops or exercises.

4. Teaching and learning methods – Evaluation and assessment

<ul style="list-style-type: none"> - Theory and Design Workshops – Main Project Brief/ Site visits - Group Appraisal /Site Analysis - Theory Essay and Design Exercises - Interim Reviews - Project Final Pin Up - Portfolio Hand In. 	<p>Theoretical presentations in class, visiting lectures, workshop exercises and detailed design development phases of the project, structural exercises, with a critical evaluation by fellow students and teachers, possibility of improvements.</p>												
<p>Use of Information and Communication Technologies</p>	<p>Weblinks, e-learning uploading of notes, communication via email, zoom meetings, etc.</p>												
<p>Teaching organization</p>	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 70%;">Activity</th> <th style="width: 30%;">Semester Credits</th> </tr> </thead> <tbody> <tr> <td>Lectures</td> <td style="text-align: center;">10</td> </tr> <tr> <td>Theory Essay</td> <td style="text-align: center;">30</td> </tr> <tr> <td>Design Workshop and Exercises</td> <td style="text-align: center;">10</td> </tr> <tr> <td>Main Design Project</td> <td style="text-align: center;">50</td> </tr> <tr> <td>Total</td> <td style="text-align: center;">100</td> </tr> </tbody> </table>	Activity	Semester Credits	Lectures	10	Theory Essay	30	Design Workshop and Exercises	10	Main Design Project	50	Total	100
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<p><i>Student assesment</i></p>	<p>Written Theory Exams/ Precedent Presentation Design Project Project Model making Structural Detail Design Exercises Portfolio Hand in</p>												

5. Recommended/ Bibliography

Athanasopoulos Ch. (2003) Building construction: Synthesis and technology (6th edition). Athens, Papisotiriou Publications [in Greek].

Berger, H. (1996) Light Structures, Structures of Light: The Art and Engineering of Tensile Architecture. Laurence King Publishing.

Michaltsos, G. (2009) Lightweight metal structures: Theory and applications. Symeon Publications [in Greek].

Neufert, E. (2003) Neufert, architects' data (36th German edition 2000). Giourdas Publications [in Greek].

Newman, M. (1993) Standard handbook of structural details for building construction. McGraw-Hill.

Ouggrinis, K. A. (2012) Variable architecture: Movement, adjustment, Κίνηση, προσαρμογή, ευελιξία, versatility. Ion Publications [in Greek].

Tsinikas, N. (2001) Architecture against gravity: Metal, suspended, inflatable structures. Thessaloniki, University Studio Press [in Greek].

Tsinikas, N. (2016) Architectural Technology. Thessaloniki, University Studio Press [in Greek].

