

Course/Subject/Unit Description

1. General Information			
School		School of Design Studies	
Department		INTERIOR ARCHITECTURE	
STUDY LEVEL		Undergraduate	
CODE OF SUBJECT	EA203	SEMESTER	2
SUBJECT TITLE		Design Methodology with Digital Media	
Teaching Content	Weekly (Hrs)	Credits	
Lectures, Essays, Design Workshops/Excercises, Design Project – Portfolio of work.	1	3	
	2		
Type of Subject		Mandatory - General Infrastructure Course	
PREREQUIRED COURSES		No	
Teaching and Exams Language		Greek	
THE COURSE IS OFFERED TO ERASMUS STUDENTS		Yes	
Course website (URL)		ia.i.hu.gr/ea203	

2. Aims and Objectives – Methods – Skills
a. Learning Outcomes
<p>General context The course of Design Methodology with digital media is an introduction to basic techniques, processes and methods of digital design that digitally support the architectural design methodology and the corresponding spatial projections.</p> <p>Aims and objectives The main objectives of the course are to familiarize students with issues of digital design of architectural spaces, the integration of application of digital techniques in architectural design methodology, critical thinking and approach to the use of digital tools in the architectural design process.</p> <p>Method - learning outcomes The course consists of both theoretical and laboratory content. In the theoretical part, a series of injectable theoretical presentations are made, which are analyzed and discussed with the active participation of the students, either in the design application of the computer, or on the blackboard or with the use of multimedia or visual material. In the laboratory part, a series of laboratory exercises for the application of theoretical presentations are performed. Students first prepare individual laboratory exercises and then an individual integrated digital design study.</p> <p>Upon successful completion of the course the student will:</p> <ul style="list-style-type: none"> • has knowledge of the basic theoretical concepts and tools of digital design, • has knowledge of basic digital spatial tools, • can know and apply the rules, geometric correlations, constraints and modeling interdependencies, • understands the digital design process in relation to the needs of the architectural design methodology, • correlates, connects various design systems, • has the ability to express and communicate his design-synthetic ideas in a digital way, • can have a standalone digital design action covering all the design and presentation needs of synthetic and other related workshops
β. Skills
<ul style="list-style-type: none"> • Knowledge of analog design methodology • Synthesis of design data and information, using digital applications • Autonomous work

- Application of theoretical knowledge in practice
- Criticism of both the use and the integration of digital tools in the architectural design methodology
- Spatial perception

3. Subject Context

A course that is developed in parallel at a theoretical and laboratory level and concerns terms, principles, techniques, procedures and methods of digital design that digitally support the architectural design methodology and the corresponding spatial projections. The course covers in addition: digital modeling and simulation techniques of two-dimensional architectural models, basic digital transformations, rules of digital design, geometric correlations, definition of constraints and interdependencies, modeling, relationship, connection and collaboration of systems multimedia objects and finally preparation of programming, automated and parametric design.

In addition to consolidating the technical knowledge that is obviously required to create designs and models in 2 dimensions, special attention is given to students to control the relationship of the design tool with the designed space, especially the issue of scale, in other words, its absolute and comparative sizes. space, but also the risk of excessive dependence of the designed space on the facilities of the design tool through a critical approach and integrated application of digital techniques in the architectural design methodology.

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 	Theory and Design Workshops Theory Essay and Design Exercises Project Final	
Use of Information and Communication Technologies	Use of computer software Multimedia and conventional presentations via PC Video projection	
Teaching organization	Activity	Semester Credits
	Lectures	15
	Theory Essay	20
	Design Workshop and Exercises	20
	Main Design Project	10
	Research and Analysis of Bibliography	10
	Total	75
<i>Student assesment</i>	Written theoretical examination Project design and presentation Laboratory examination via PC Digital portfolio organization	

5. Recommended/ Bibliography

Indicative suggested bibliography:

- Dally W., & Harging, C., (2017), Digital design, from the systems side. University Publications of Crete, ISBN 978-960-524-445-3, England, translated edition Crete 2017
 - Mano, M., Cilleti, M., (2017), Digital design. Papasotiriou Publications, ISBN 978-960-491-084-7, USA, translated edition Athens, 2017
 - Wakerly, J., (2004), Digital Design, Principles and Practices. Key Number Publications, ISBN 960-209-728-0, USA, translated edition Athens, 2017
 - Kappos, I., (2017), Work with Autocad 2017. Key Number Publications, ISBN 978-960-461-730-2, Athens 2017
 - Omura .G., Benton B., (2016), Mastering AutoCAD 2017 and AutoCAD LT 2017. John Wiley & Sons Inc Publications, ISBN 9781119240051, USA 2016
 - Paraschakis, I., Papadopoulou, M., Patias, P., (1990), "Design with PC", Ziti Publications, ISBN 960-431-002-X, Thessaloniki 1990,
 - Dedousis, V., Giannatsis, I., Kanellidis, V., (2015), CAD Systems. SEAB Publications, KALLIPOS, ISBN: 978-960-603-460-2, Athens 2015
 - Anthymidis, K., David, K., (2015), Computer Aided Design, Autocad in practice. Dissigma Publications 2nd edition, ISBN 978-960-9495-54-7, Athens 2015
 - Kouzeleas, St. (2006), Electronic Notes, "Coordinate Systems and their Use in the AutoCAD Platform, Drawing Algorithms".
 - Kouzeleas, St. (2021), Electronic notes "Basic functions of AutoCAD platform".
- Related Scientific Journals