

COURSE OUTCOME

1. GENERAL

SCHOOL	Technology		
DEPARTMENT	Forestry, Wood Science & Design		
LEVEL	<i>Undergraduate</i>		
CODE	ΞΞΕ751	STUDENT SEMESTER	7 th
COURSE TITLE	INDUSTRIAL PRODUCT DESIGN		
ACTIVITIES		WEEKLY HRS	ECTS
	Lectures and Workshops	2+1	6
TYPE OF COURSE	Scientific Area		
PREREQUISITES:	None		
LANGUAGE TEACHING AND EXAMINATION:	Greek		
THE COURSE OFFERED TO STUDENTS ERASMUS	No		
WEBPAGES COURSE (URL)			

2. LEARNING OUTCOMES

Learning Outcomes
<p>The course aims to provide students with the necessary knowledge to solve design problems and the design improvement of objects and furniture that surround people to maximize the benefit of the end-user and the manufacturer/producer.</p> <p>Upon successful completion of the course, the student will be able to:</p> <ul style="list-style-type: none"> • Knows the different approaches and views on the scientific field of industrial design of a product. • Knows the concept of "anthropocentric" design • Knows the usefulness of thinking tools and their contribution to the inspiration stage of the creator • Uses the basic tools of the Industrial Designer from the stage of the conception of the idea to the stage of implementation • Can use the appropriate evaluation criteria at the idea selection stage • Understands the semantic features and linguistics of the product • Knows the principles of Ergonomics and Anthropometry related to this profession • Knows the principles of ecological design • Knows the principles of "Design for All."
General Abilities
<ul style="list-style-type: none"> • Development of creativity and cultivation of creative thinking • Holistic and methodological problem solving with the use of thinking tools

3. COURSE CONTENT

In the theoretical part of the course, the student is taught and learns about:
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- The history of industrial design and its evolution today.
- Design as a composition of image - form - emotion, and functionality. The subjective dimension of aesthetics.
- User-centered design.
- Processes of synthesis and production of ideas. The thinking tools as a lever of inspiration for the creative Designer.
- Design and environment. The ecological consciousness of the Designer.
- Ways to achieve innovation through the design process.
- Design and methods of material selection.
- Product testing and prototypes.
- Principles of Ergonomics and Anthropometry.
- Principles and examples of design theory for everyone.
- Semiology of an industrial object.
- The theory and applications of official design in the product design process.

The course exercises are done one (1) hour per week. Attendance by students is mandatory by at least 50%.

The exercises of the course are a continuation of the theory. From the 1st week, the teacher gives a task where students are asked to prepare it gradually and under the constant supervision of the teacher.

The work includes all the design stages, from the idea's conception to its final proposal. It is presented at the end of the semester (usually in the 12th week of courses).

The relevant directions are given, while rich material and instructions are posted in the e-class.

The working grade is calculated at 40% in the course's final grade. The remaining percentage concerns the final written examination of the course theory.

4. TEACHING AND LEARNING METHODS - EVALUATION

DELIVERY METHOD	In the class	
USE OF INFORMATION AND COMMUNICATION TECHNOLOGIES	<ul style="list-style-type: none"> • Learning process support through the electronic platform e-class. • Use of supervisory tools. 	
MANAGEMENT OF TEACHING	Activity	Semester Workload
	Lectures	26
	Semester work	13
	Laboratory Exercises	41
	Self-dependent study	70
	Total (25 hours of workload per credit unit)	150
STUDENT EVALUATION	I. Written final exam (60%), which includes: -Short answer questions from all the material in the book -Problem-solving -Multiple-choice questions II. Presentation of design work (40%)	

5. RECOMMENDED-BIBLIOGRAPHY

-Books

- Γλικά και σχεδιασμός Mike Ashbay & Kara Johnson, 2007
- Σχεδιασμός των αντικειμένων της καθημερινότητας, Donald Norman, Κλειδάριθμος 2010
- Lidwell W., Holden K., Butler J. Universal Principles of Design, Rockport
- Galer, K. Eason, M. Galer, S.Kirk, K. Parsons, J. Sandover, P. Stone, 1987, Applied Ergonomics, Εγχειρίδιο Εφαρμοσμένης Εργονομίας, ΕΛ.ΚΕ.ΠΑ, 1991
- C. Lefteri, 2004, Wood - Materials for Inspirational Design, Rotovision
- Universal Principles of Design , William Lidwell, Kritina Holden, Jill Butler, 2003
- Designing Design, Kenya Hara , 2018
- Hudson J., 2008, Process: 50 Product Designs from Concept to Manufacture, Laurence King
- Sudjic, Deyan, 2009, The Language of Things, W.W. Norton & Company
- Papanek, Victor (1995). The Green Imperative: Natural Design for the Real World, New York, Thames and Hudson.

-Journals

- International Journal of Design
- Design Studies
- International Journal of Industrial Ergonomics
- The International journal of Visual Design
- The International Journal of Design in Society
- The International Journal of Designed Objects
- The International Journal of Design Education