

Course code: **15-WZR-EMS-DS-SP5** Plan position:

A. INFORMATION ABOUT THE COURSE

B. Basic information

Name of course	SPECIALIZED DESIGN (DESIGNING TECHNICAL EQUIPMENT)
Field of studies	INDUSTRIAL DESIGN
Level of studies	FIRST CYCLE
Profile of studies	PRACTICAL
Form of studies	FULL-TIME STUDIES
Specialty	
Unit responsible for the field of studies	FACULTY OF DESIGN
Name and academic degree of teacher(s)	Dr. Desy Teja Gumilar
Introductory courses	-
Introductory requirements	Basic knowledge related to design in the area of Industrial Design and directions of technological development.

C. Semester/week schedule of classes

Semester	Lectures (W)	Auditorium classes (Ć)	Laboratory classes (L)	Project classes (P)	Seminar (S)	Field classes (T)	Number of ECTS points
Winter				90			4

2. LEARNING OUTCOME

No.	Learning outcomes description	The reference to the learning outcomes of specific field of study	The reference to the learning outcomes for the area
KNOWLEDGE			
W1	Student has advanced and in-depth knowledge related to design in the area of Industrial Design and related disciplines: Interior, Visual Communication, Exhibition and Urban Design.	K_W01	P6S_WG
W2	Student knows and studies publications, understands the development and history of design achievements in the field of Industrial Design and has knowledge of contemporary trends in the development of art, Industrial Design and Architecture.	K_W03	P6S_WG
W3	Student demonstrates an understanding of the impact of the development of civilization and cultural processes on the present day.	K_W09	P6S_WG
SKILLS			

U1	Student is capable of conducting an analysis of human needs and behavior as an individual, functioning in specific conditions and a specific environment.	K_U01	P6S_UW
U2	Student is able to define design problems in the field of Industrial Design resulting from the observation of the needs of both the individual and society, and to realize his own design concepts in the field of Industrial Design concerning the broadly understood human environment.	K_U02	P6S_WG P6S_UW
U3	Student has the ability to make independent decisions about the method of project implementation and is able to choose the right technique for the communication and implementation of the project task.	K_U05	P6S_UW
U4	Student is able to respond by design to the user's needs, considerations of function, material and technology, and to plan and carry out an evaluation of the basic properties of engineering materials.	K_U09	P6S_UW
SOCIAL COMPETENCES			
K1	Student understands the need to communicate with the mass media in term of information and opinions on the achievements in technology and design. Participates in activities to preserve the cultural heritage of the region, country, Europe.	K_K05	P7S_KO P7S_KR

3. TEACHING METHODS

A. Traditional methods used ***

project exercises, demonstration, discussion, lecture

B. Distance learning methods used ***

Synchronous method (classes conducted in a way that ensures direct interaction between the student and the teacher in real time, enabling immediate flow of information, the method can be used only if it is provided for in the study plan for a given cycle of education):
e.g. remote lecture in the form of videoconference, remote discussion, etc.

Asynchronous method used as an auxiliary (a method that does not ensure direct interaction between the student and the teacher in real time, used only as an auxiliary / complementary method):
e.g. online educational videos, online multimedia presentations, etc.

4. METHODS OF EXAMINATION

Design preparation

5. SCOPE

Project	The study period is a time to learn about how to implement project tasks in professional life. Every task. That's why the topics of semestral project are designed to inspire, not to limit. Everyone is different and everyone is subject to different emotions. Therefore, each student should be approached individually. Students is not forced to do anything against his/her will. We bring out their passion. It is the student who, as a result of the process of analysis and his/her own exploration, materializes the thought into the form of an industrial design. The role of the instructor comes down to skilfully guiding this process. A good designer should have the ability not only to respond to a given design topic, but
---------	---

	<p>also to propose directions himself. A keen observation of the market, visits to trade fairs and individual abilities give the opportunity to create a good design that sets trends and resists passing fashions. The student, after learning about the topic, is required to draw up a schedule of design work and strictly follow it. In this way, the instructor and the student have full control over the progress of the design work.</p> <p>Requirements to pass the semester project:</p> <ul style="list-style-type: none"> - 70x100 cm design poster, - imitation or functional model of the project in 1:1 or 1:3 scale (type of model depending on the project), - designer's sketchbook in A4 format, - archived digital documentation of the project in the form of slides (extension .jpg, minimum 15x15 cm, with a resolution of 300 dpi.). <p>It is also important for the student to be able to design not only an industrial design, but also his own career. The world around us is constantly changing. Knowledge acquired now may be useless in an instance. The goal of the class is to teach the student to think like a designer, and we place special emphasis on the ability to seek inspiration. This is the starting point for further stages of design. The student should also be familiar with the techniques, tools and materials necessary to undertake the design task and have the ability to properly read the the issues contained in the Design Brief. During revisions, the way of communication, the form of presenting the design vision is important. Student will obtain knowledge of known and applicable procedures in manufacturing and commercial companies.</p>
--	--

6. METHODS OF VERIFICATION OF LEARNING OUTCOMES

LEARNING OUTCOME	Form of assessment					
	Oral examination	Written exam	Colloquium	Project	Credit
W1 - W3					x	
U1 - U4					x	
K1					x	

7. LITERATURE

Basic literature	<p>Guidot R., 1998. DESIGN 1940-1990 wzornictwo i projektowanie, Arkady, W-wa</p> <p>Bhaskaran L., 2006. <i>Design XX wieku. Główne nurty i style we współczesnym designie</i>, ABE Dom Wydawniczy, Warszawa</p> <p>McDermott C.,1999. <i>Design. Sztuka projektowania XX wieku</i>, Wydawnictwo Prowincja, Lesko</p> <p>Buchanan C., <i>Wzornictwo dla zmieniającego się świata</i>, Wiadomości IWP nr 9-10/74</p> <p>Smardzewski J., 2009. <i>Projektowanie mebli</i>, Poznań</p> <p>Jerzy Smardzewski J.,2007. <i>Komputerowo zintegrowane wytwarzanie mebli</i>, Poznań</p> <p>Szczuka J., J. Żurowski J., 1999. <i>Materiałoznawstwo przemysłu drzewnego</i>, Warszawa</p> <p>Dzięgielewski S., Smardzewski J., 1995, <i>Meblarstwo projekt i konstrukcja</i>, Poznań</p>
------------------	--

	<p>Cameron B. i B., 2006. <i>Meble gięte i inne przedmioty z wikliny</i>, Warszawa</p> <p>Kaesz G., 1990. <i>Meble stylowe</i>, Wrocław</p> <p>Asensio F., 2004. <i>Meble stylowe t.I-II</i>, Warszawa</p> <p>Dzięgielewski S., 1996. <i>Meble tapicerowane produkcja przemysłowa</i>, Warszawa</p>
Supplementary literature	<p>1. Cel I. Doskonałość w produkcji, Eliyahu M. Goldratt, Jeff Cox, Mintbooks 2007</p> <p>2. Cel II. To nie przypadek, Eliyahu M. Goldratt, Jeff Cox, Mintbooks 2007</p> <p>3. Nienasycone żywice poliestrowe, Zofia Kłosowska-Wońkiewicz, Piotr Penczek, Waław Królikowski, Piotr Czub, Jan Pielichowski, Ryszadr Ostrysz, WNT 2010</p> <p>4. Na grzbiecie fali. O projektowaniu w złożonym świecie, John Thackara, SWPS Academica 2010</p> <p>5. Starck, Ed Mau Cooper, Taschen 2012</p>

8. TOTAL STUDENT WORKLOAD REQUIRED TO ACHIEVE EXPECTED LEARNING OUTCOMES EXPRESSED IN TIME AND ECTS CREDITS

Student's activity		Student workload– number of hours
Classes conducted under a direct supervision of an academic teacher or other persons responsible for classes	Participation in classes indicated in point 1B	90
	Supervision hours	10
Student's own work	Preparation for classes	5
	Reading assignments	5
	Other (preparation for exams, tests, carrying out a project etc)	30
Total student workload		140
Number of ECTS points		4