

Name of subject: Integrated product design III. (packaging)	NEPTUN-code: RTXTC2EBNE	Number of hours: lec+ gs+ lab 0+0+4	Credit: 6 Requirements: examination
Course coordinator: Prof. Márta Kisfaludy DLA	Title: professor	Prerequisite: Integrated product design II.	
Subject content:			
<p>Ecological approach in product design. Recycling-reuse-redesign.</p> <p>The integrated product design on the basis of socio-economic and technical aspects lays great emphasis on the unified and coordinated display of products and product groups in addition to the functional, market, long standing, safety and feasibility aspects.</p> <p>The experiments of colour and design studies aim at the diverse presentation of product variants through a design project.</p> <p>The implementation of product design and development projects is aided by the preparation of prototypes and technological model experiments.</p> <p>The most optimal creation of aesthetic product appearance is assisted by the product construction knowledge and the current state of the art industrial background.</p> <p>Profession-specific solutions of the project. Packaging of dry goods with eco-conscious approach.</p>			
Competences to be mastered:			
<p>a) knowledge</p> <ul style="list-style-type: none"> - Knowledge of basic design principles and methods, as well as major production technology procedures and operating processes. - Knowledge of the most important basic materials applied in the special area of product design, their production and their application criteria. - Knowledge of the fundamental rules and technological limitations of shaping products, of striking a harmony between content and form. - Knowledge of the most important practical work techniques of their special field. - Knowledge of the ethics and methods of team work. <p>b) capabilities</p> <ul style="list-style-type: none"> - Able to design the form and construction of relatively simple products by taking into account the limits of production technology, the costs expected, and impacts on the environment. - Able to perform the virtual modelling of product concepts and products using 3D computer-aided design systems as well as to produce their technical documentation. - Able to produce, examine and test real models and prototypes using direct digital production technologies based on both traditional and 3D product models. - Able to master new knowledge by solving practical problems empirically. - Able to apply the calculation and modelling principles and methods of special <p>Bibliography: related to industrial product design.</p> <ul style="list-style-type: none"> - Able to take part in and also to manage team work. - Able to initiate, compile, and carry out projects in team work, primarily in a multidisciplinary environment. 			

- Able to take into account the aspects of the historical, cultural, socio-economic and industrial environment in the process of industrial design and product development.
- Able to analyze design projects by applying design methods and to give methodological reasons for the workflows applied.

c) attitude

- Efforts to make self-education in the special area of industrial product design a continuous process in line with professional objectives.
- Efforts to solve tasks and make management decisions by being aware of the opinions of the colleagues supervised, possibly in cooperation therewith.
- Open to transmitting own knowledge to colleagues.
- Taking care to promote subordinates' professional development, to manage and help such endeavors.
- Taking care of ensuring equal access opportunities in problem solving.

Bibliography:

1. Lissák György: A gondolattól a formáig. Napocska Kiadó 2009
2. Zalavári József: A forma tervezése. Design ökológia. Scolar Kiadó 2008
3. Slézia József: Design évkönyv (2008, 2009, 2010)
4. Erneyi Gyula: Design. Tervezéselmélet és termékformálás. Dialóg Campus Kiadó Bp.- Pécs 2000
5. Scherer József: 100 év formatan. Göncöl Kiadó 2000
6. Hegedűs, J.: Súlyponteltolódások a termékvilágban – új diszciplínák megjelenése a termékvilágban.
7. Iványi, A.-Hoffer, I.: Innovációs és értékelemző módszertan, AULA, Budapest, 1996
8. Kocsis, J.: Menedzsment műszakiaknak. (2. kiadás) Műszaki könyvkiadó, Bp. 1996
9. <https://elearning.uni-obuda.hu/> electronic notes and aids prepared by the instructor