COURSE SYLLABUS

University	UNIVERSITY OF ORADEA
Faculty	FACULTY OF ENERGY ENGINEERING AND INDUSTRIAL MANAGEMENT
Study program*	ECONOMIC-INDUSTRIAL ENGINEERING

I. Course Name: STRUCTURE AND DESIGN OF TEXTILE GARMENTS

II. Course Details

No of hours/week						
Code	Semester	Credits	Lecture	Seminar	Laboratory	Project
	5	6	28		28	14

III. Course coordinator (title, name, surname, e-mail): Ş.l.dr.ing. Simon Andreea Anca, anca.simon@yahoo.com

IV. Course objectives

The general objective of the discipline	This discipline is addressed to students in the third year of study, and its purpose is to treat and solve the constructive design of clothing products. By constructive design is meant a complex of works carried out for the realization of the new model which includes research, realization of model sketches, calculation and construction of patterns, finalization of templates, as well as obtaining elements of technical documentation necessary to introduce the new model.
Specific objectives	Associating the knowledge, principles and methods specific to the technical sciences of the field for the identification and analysis of the characteristics of the products specific to the garment industry.

V. Course content	**No. of hours**
V.1. Lecture (chapters/subchapters and paragraphs)	
1. Introductory notions in the constructive design of clothing;	2
2. Notions of the anatomy of the human body, seen as a support surface for clothing products;	2
3. The main morphological indicators that characterize the external shape of the human body;	2
4. Anthropometry and anthropometric indicators that characterize the dimensions of the human body;	2
5. Classical and modern methods of measuring the human body, used in anthropometry;	2
6. The basic principles of the elaboration of the dimensional typology of the population;	2
7. Classical methods of construction of clothing patterns;	2
8. Industrial design of new models of clothing products. Ways of obtaining patterns in correspondence with the particularities of the models;	2
9. Basic construction lines and their modification according to fashion;	2
10. Criteria for choosing materials for clothing products;	2
11. Principles regarding the elaboration of the construction of patterns for different models of clothing products - the modification of the basic patterns according to the proposed model;	2
12. Elaboration of the technical documentation of constructive design. Basic principles regarding the construction of templates;	2
13. Grading patterns - grading methods used in the constructive design of clothing;	2
14. Framing the patterns on the textile material. Establishment of specific consumptions and indices of use of textile surfaces.	2

V.2. Laboratory/Seminar/Project:	
Paper no. 1 Clothing functions and classification criteria for clothing products;	2
Paper no. 2 Elements of biomechanics, identification of the skeletal and muscular system, as well as the main morphological indicators of the human body;	2
Paper no. 3 Defining the anthropometric quantities and presenting the way of taking them by the classical method - the dimensions of the rectilinear	2
Paper no. 4 Defining the anthropometric quantities and presenting the way of taking them by the classical method - the dimensions of the curvilinear;	2
Paper no. 5 Study of normative acts that regulate the dimensions of the standard body;	2
Paper no. 6 Geometric methods for constructing basic patterns for shoulder and waist support products;	2
Paper no. 7 Construction of the basic pattern for the product - Skirt for women;	2
Paper no. 8 Construction of the basic pattern for the product - Dress for women;	2
Paper no. 9 Construction of the basic pattern for the product - Dress for women - continued;	2
Paper no. 10 Construction of the basic pattern for the product - Men's shirt;	2
Paper no. 11 Principles of transformation of the basic pattern for different clothing products;	2
Paper no. 12 Obtaining templates and grading the skirt pattern;	2
Paper no. 13 Making the framing of the templates on the textile material;	2
Paper no. 14 Recoveries.	2

V.3. Project- Constructive design of a clothing product	
1. Presentation of the initial data necessary for the design of the proposed product	1
2. Model analysis - Description of the external shape of the model and specification of constructive features. Establishing the categories of carriers and the dimensional range.	1
3. Establishing the operating conditions of the product and the requirements imposed on raw materials. Choice of raw materials for making the product. Establishing the dimensional parameters necessary for the construction of the patterns.	1
4. Elaboration of the construction of the patterns for the proposed model: Construction of the basic patterns	1
5. Obtaining model patterns, according to its particularities	1
6. Construction of the main templates. Construction of derived templates.	1
7. Grading of patterns: Presentation of the grading method used.	1
8. Calculation of the parameters necessary for the grading operation. Grading the patterns for the proposed model	1
9. Execution of the framing of the templates	1
10. Calculation of specific consumptions.	1
11. Calculation of indices of use of textile surfaces	1
12. Guidelines on the technology of making the proposed model.	1
13. Composition of the hierarchical structures for making the proposed model	1
14. Supporting and grading the project	1

VI. Bibliography

1. BRUBARIU A - Proiectarea îmbrăcămintei , Rotaprint I.P.Iaşi, 1989;
2. MITU S - Bazele tehnologiei confecţiilor textile , Editura Gh. Asachi , Iaşi 1998;
3. HOBLEA Z - Structuri textile. Structura şi proiectarea îmbrăcămintei, Editura Gh. Asachi, Iaşi, 1999.
4. CACOVEANU M. –Proiectarea tiparelor în designul vestimentar. Ed. Clusium 2003
5. FILIPESCU E. – Proiectarea constructivă a modelelor. Editura Gh. Asachi , Iaşi 1998
6. FILIPESCU E., AVADANEI M. – Structura şi proiectarea confecţiilor textile.- Îndrumar de laborator. Ed. Performantica Iaşi 2007

VII. Grading criteria

Activities	Assesment	% of final grade
Exam	Written exam: 1. Requirements in order to get the minimum grade for passing the exam 2. Requirements for the maximum grade	
Seminar/Laboratory/Project	Seminar attendance must be at least 80%. Laboratory attendance 100%, active, relevance of the issues raised.	

	Aaboratory attendance 100%, active, conscientiousness, consistency, correctness of calculations.	
Lecture/ Seminar	Written / oral exam	30%
Laboratory	Oral / written examinations, periodic.	30%
Project	Verification and correction of the semester project.	40%

VIII. Learning outcomes:

Knowledge and understanding of basic concepts, theories and methods of the field. Using basic knowledge to explain and interpret process situations associated with the field. Applying some basic principles and methods in order to solve some typical situations in the field of textile garments. Use of basic knowledge to explain and interpret the procedures, techniques and methods necessary for the design and manufacture of textiles using tools specific to computer-aided design. Use of basic knowledge to explain and interpret the procedures, techniques and methods needed to plan, coordinate and monitor textile manufacturing systems. Use of basic knowledge to explain and interpret the procedures, techniques and methods needed to evaluate and ensure the quality of products and processes specific to the manufacture of garments. Use of standard criteria and methods for evaluating the quality of some programs / methods / theories. Application of basic principles and methods for the design of textile garments on aesthetic criteria Applying basic principles and methods for planning, coordinating and monitoring manufacturing systems.

Course coordinator,
Ş.l.dr.ing. Simon Andreea Anca