COURSE SYLLABUS

University	UNIVERSITY OF ORADEA
Faculty	FACULTY OF ENERGY ENGINEERING AND INDUSTRIAL MANAGEMENT
Study program*	KNITTING AND CLOTHING TECHNOLOGY

I. Course Name: THE BASES OF KNITTING PROCESSES I

II. Course Details

No of hours/week						
Code	Semester	Credits	Lecture	Seminar	Laboratory	Project
IEMI-0842	**4**	**4**	**2**	**-**	**2**	**-**

III. Course coordinator (title, name, surname, e-mail): Ş.L.dr.ing. Böhm Gabriella, bohmgaby@gmail.com

IV. Course objectives
The issues dealt with are basic concepts for knitting technology and complement the information acquired in the specialized disciplines studied previously or at the same time.
Study of raw materials and preparation of knitwear, knitting processes, analysis of mesh formation phases, operation and selection of mesh-producing organs, together with the study of machinery and parameters of knitting operation – necessary specialized notions of a textile engineer.

V. Course content	No. of hours
V.1. Lecture (chapters/subchapters and paragraphs)	
1. General notions of technological processes in the knitting industry.	2
2. The raw material used in the knitting industry.	2
3. Humidity and strength of yarns used in knitwear.	2
4. Winding yarns in the knitting industry.	2
5. Thread bearing in the knitting industry.	2
6. Basic problems of knitting structure and design. Types of meshes. Knits – definitions and classification criteria.	2
7. Graphic representation of knits. Methods of graphic representation of simple knits and warp.	2
8. Knitting design elements. structure parameters of knits.	2
9. The properties of knitwear and the factors that determine them.	2
10. Knitting procedures. The knitting process with pre-bucleted.	2
11. The knitting process with final buclets.	2
12. Combined knitting procedure	2
13. Mesh-producing organs.	2
14. Use of different types of mesh-producing organs. mesh formation phases.	2
V.2. Laboratory:	
1. Raw material and preparation for knitting.	2
2. The raw material used in the knitting industry.	2
3. Humidity and strength of yarns used in knitwear.	2
4. Reeling of knitting yarns. Types of formats and wraps.	2
5. Thread-climbing. Formats used. Nettle procedures.	2
6. Basic problems related to knitting and making knits.	2
7. Graphic representation of knits.	2
8. Knitting design elements.	2
9. Structure parameters of knits.	2
10. Analysis of factors influencing the characteristics of knits.	2
11. Knitting procedure with prior buclles.	2
12. Knitting procedure with final buclets.	2
13. Combined knitting procedure.	2
14. Verification of acquired knowledge.	2

VI. Bibliography

1. BUDULAN R.   –*Bazele tehnologiei tricoturilor*, Editura BIT, 1996;
2. MATEESCU M.   –*Tehnologia tricotajelor*, Editura didactică şi pedagogică,
                          Bucureşti, 1970;
3. MACOVEI L., ŞERBAN V–*Tehnologii şi utilaje în tricotaje* , Editura „Gh. Asachi", ,Iaşi, 2002;
4. PETREANU C.   –*Tehnologia tricotajelor. Maşini moderne*, Editura tehnică, Bucureşti,
                          1966;
5. POTORAN I.   –*Structura şi proiectarea tricoturilor*, Editura didactică şi pedagogică,
                          Bucureşti, 1965;
6. ŞERBAN V., MACOVEI L.– *Tehnologii de tricotare pe maşini circulare*, Editura „Gh. Asachi", Iaşi,
                          2002;
                          – *Note de curs.*

VII. Grading criteria

Activities	Assesment	% of final grade
Exam	Written exam: 1. Requirements in order to get the minimum grade for passing the exam: to obtain a grade of 5 (five) all subjects are mandatory in the proportion of 50%. 2. Requirements for the maximum grade: For note 10(ten) all subjects are 100 % mandatory.	80%
Seminar/Laboratory/Project	100% presence at the laboratory	20%

VIII. Learning outcomes:

☐ Definition of principles and methods in the technical sciences of the field of knitwear for the identification and analysis of the functional characteristics of specific products.

☐ Use of basic knowledge to explain and interpret the processes, techniques and methods necessary for the correct design of knitwear and the appropriate choice of specific technological processes.

☐ Application of basic principles and methods for the aesthetic design of knitwear and specific technological processes.

☐ Appropriate use of standard criteria and methods of evaluation for the adoption of basic processes, techniques and methods applied to assess the quality and efficiency of knitting manufacturing systems.

☐ Development of specific professional projects, based on the selection, combination and use of established principles and methods in the technical sciences of the field of knitting for the identification and analysis of the functional characteristics of specific products.

Course coordinator,
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