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-0843	5	4	2	-	1	-

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 speciality disciplines studied previously or simultaneously. 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. Principles of actuation of mesh-producing organs.	2
2. Direct action.	2
3. Indirect action. Principles for the selection of mesh-producing organs. Select in a direct group at a single level.	2
4. Select in direct group at multiple levels.	2
5. Reverse selection.	2
6. Individual selection.	2
7. Performing different types of meshes and technological operations. Principles for making normal meshes and double ochui in the structure of simple knits.	2
8. Production of knitted with retained meshes and knitting with a drawing around.	2
9. Production of knitted with moving and cross-meshed drawings.	2
10. Start knitting and double the border.	2
11. Contouring the edges of the knit. Execution of successive narrowings in steps.	2
12. Contouring the edges of the knit. Execution of successive and step-by-step widenings.	2
13. Separation of details and transition from one structure to another along the length of the panel.	2
14. The correlation between the finesse of processed yarns and knitting machines.	2
V.2. Laboratory:	
1. Analysis of mesh-producing organs.	1
2. Use of different types of mesh-producing organs. Mesh formation phases.	1
3. Principles of actuation and selection of mesh-producing organs. Direct action.	1
4. Indirect action.	1
5. Group selection.	1
6. Individual selection.	1
7. Making knits with normal meshes, double meshes and meshes retained on the rectilinear knitting machine.	1
8. Making knits with drawing around on the rectilinear knitting machine.	1
9. Making knits with drawings by movement and with cross-meshed.	1
10. Start knitting and doubling the border on the rectilinear knitting machine.	1

11. Execution of successive enlargements on the rectilinear knitting machine. The importance of the operation.	1
12. Execution of successive narrowings on the rectilinear knitting machine. The importance of the operation.	1
13. Execution of the transition from one structure to another in the body of the tricor panel. The importance of the operation.	1
14. Verification of acquired knowledge.	1

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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