COURSE SYLLABUS

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

I. Course Name: KNITTED STRUCTURES

II. Course Details

No of hours/week						
Code	Semester	Credits	Lecture	Seminar	Laboratory	Project
	3	5	2	-	2	-

III. Course coordinator (title, name, surname, e-mail):

IV. Courseobjectives

The course **KNITTED STRUCTURES**has the main objective to familiarize students with concepts and the basic notions for knitting structures. At the end of the courses students will be able to know, understand and define the main types of knits, the main properties and physical-mechanical characteristics of them and will be able to represent graphics them by which all the methods are current.

In the first part of the course there will be presented notions related the definition of knits, the classification of knits, general properties of knits. Then specific definitions of knits structures will be defined and the methods of graphical representation of knits will be presented. The course will continue with the presentation of the structures and properties of the main knitting fabrics.

V. Course content	**No. of hours**
V.1. Lecture (chapters/subchapters and paragraphs)	
1. Introduction to Knitting. Weft knitting. Warp knitting.	4
2. The basic weft knittedstructures - Plain knitted fabrics, Rib knitted fabrics, Purl knitted fabrics	4
3. The weft knitted structures -Interlock knitted fabrics	2
4.The weft knitted structures - with color designs	2
5 The weft knitted structures - with structure designs(single cross tuck, cross miss, double pique etc)	10
6. The weft knitted structures – intarsia , jaquard	6
V.2. Laboratory:	
1. Introduction to Knitting. Weft knitting. Warp knitting.	4
2. The basic weft knitted structures - Plain knitted fabrics, Rib knitted fabrics, Purl knitted fabrics	4
3. The weft knitted structures - Interlock knitted fabrics	2
4. The weft knitted structures - with color designs	2
5 The weft knitted structures - with structure designs (single cross tuck, cross miss, double pique etc)	10
6. The weft knitted structures – intarsia , jaquard	6

VI. Bibliography

1. Kudriavin, L. (Ed). Laboratory Practice in Knitting Technology. Mir Publishers, Moscow.
2. Spencer, B. 1983. Knitting Technology. Pergamon Press. U.K.
3. Didarul Islam, Derivatives of Single Jersey and Double Jersey Weft Knitted Structures with Cam and Needle Arrangement,https://www.textileblog.com/single-jersey-double-jersey-weft-knitted-structures/
4. M.Amsaveni,WEFT KNITTING,https://www.kongunaducollege.ac.in/wadmin/articles/EC-CDF-8.pdf
5. Kovar, R., 2002. Flat knitting technology. KnittingTechnology, March 2, 2002, pp58-59.
6. *KNITTING AND BASIC KNITS,https://gcwgandhinagar.com/econtent/document/15874492071HSCTCO203-%20knitting%20and%20classification%20of%20knits%20.pdf
7. Errol Wood, Formation and Properties of Knitted Structures, https://www.woolwise.com/wp-content/uploads/2017/07/Wool-482-582-08-T-20.pdf
8. Tripa, S., Indrie, L. – Structura tricoturilor simple şi reprezentarea acestora în CORELDRAW, Editura Universităţii Oradea, 2008

9. Tripa, Simona - “Structuri textile - tricoturi : îndrumar de proiectare”, Editura Universităţii din Oradea, ISBN 978-606-10-1959-5, 2018, pp.102

VII. Grading criteria

Activities	Assesment	% of final grade
Exam	Written exam: The evaluation of the students will be done by taking a written exam that will include 10 subjects, for the solution of which they have 1 hour. 1. Requirements in order to get the minimum grade for passing the exam - solve 5 subjects correctly 2. Requirements for the maximum grade - solve 10 subjects correctly	70%
Seminar/Laboratory/Project	The evaluation of the seminar activity is made based on the way of active participation in the debates (30%).	30%

VIII. Learning outcomes:

On completion of this lecture the students should be able to:
•Describe, using simple diagrams, common knitted structures (eg, jersey stitch, rib stitch, purl stitch)
•Compare the features the of various types of knitted structures
•Describe the types of faults that can occur in knitwear, and their origin
•Compare the respective advantages and limitations of knitted fabrics

Course coordinator,
Assoc.Prof. Phd. Simona Tripa