

COURSE SYLLABUS

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

I. Course Name: Finishing of Leather and Leather-substitute products

II. Course Details

No of hours/week						
Code	Semester	Credits	Lecture	Seminar	Laboratory	Project
IEMI-0406	VII	3	1	-	2	-

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

Associate Professor PhD. Eng., Albu Adina-Victoria, adina_victoria@yahoo.com

IV. Course objectives

- understanding and mastering the concepts and processes necessary for the supply of raw materials for finishing leather products.
- developing a unique way of economic thinking that will serve to correctly assess opportunities and risks in the actions taken.
- applying the acquired knowledge in related fields; establishing correlations between theory and practice.

V. Course content	No. of hours
V.1. Lecture (chapters/subchapters and paragraphs)	
Preparation of leather. Preparation of tanning materials. Rawhide – definition, structure Preliminary operations. Transformation of rawhide into gelatinous leather	2
Mechanical operations. Descaling, smelting, pickling. Tan with chromium salt. Vegetable tanning	2
Combined tanning. Finishing leather. Finishing operations.	2
Leather substitutes. Flexible leather substitutes. Textile-based substitutes: structure, composition, quality ranges.	2
Substitutes without textile support. Dyeing with coating dyes.	2
Varnishing. Plasticizers for leather substitutes	2
Finishing based on dressings. Finished leather. Shoe finishing. Maintenance of leather and leather goods and substitutes.	2
V.2. Laboratory/Seminar/Project:	
Skin shrinkage during drying Kinetics of the drying process. Moisture movement in the skin during drying	4
Elements of film-forming chemistry	4
Finishing leather with coating films. Film formation and their properties	4
Coating paints. Finishes	4
Varnishes. Application of coatings, finishes and varnishes to the skin	4
Finishing the upper assembly of leather and substitute footwear. Finishing suede footwear	4
Determination of the resistance of the paint coating of finished leather to the action of organic solvents	4

VI. Bibliography

1. Albu Adina-Victoria – Finishing of textile products, course notes, E-Learning, e.uoradea.ro, Oradea, 2025
2. Albu Adina-Victoria –” Finishing of leather products”, University of Oradea Publishing House, ISBN 978-606-10-0996-1, 80 pages, 2013
3. Albu Adina-Victoria –” Finishing of leather products and substitutes”, - course notes, E-Learning Platform, e.uradea.ro, Oradea, 2025
4. Chiriță, Gh., Chiriță, A. –” Treatise on the chemistry and technology of leather and furs”, vol. II, “Gh. Asachi” Publishing House, Iasi, 1999
5. Gh. Chiriță –” Fundamentals of leather manufacturing”, Technical Publishing House, Bucharest, 1980
6. C. Anghel –” Leather substitutes; Possibilities of tracking and determination of specific characteristics”, Magazine,, Light Industry “, no. 8/ 1986

7. Maier, S., Badea, N., Vitan, F. –” Filming agents for leather finishing”, Publishing House “Bolta Rece”, Iași, 1996

8. Bucevschi, M. D., Negreanu, D. S. - Artificial and synthetic leathers, Technical Publishing House, Bucharest, 1990

9. *** STAS Collection - Leather and leather goods, Technical Publishing House, Bucharest, 1990

VII. Grading criteria

Activities	Assessment	% of final grade
Exam	<p>Written exam:</p> <p>1. Requirements to get the minimum grade for passing the exam Knowledge and understanding of the course content at the level of basic ideas. For the minimum grade, the student must correctly solve 5 questions on the final exam. Solving at least half of the quizzes in the written exam.</p> <p>2. Requirements for the maximum grade Knowledge and understanding of the course content at the high level of ideas. For the minimum grade, the student must correctly solve 10 questions on the final exam. Solving all the quizzes in the written exam.</p>	70%
Seminar/Laboratory/Project	The evaluation of the Laboratory activity is based on tests (10%), the paper produced and presented (10%), and the method of active participation in debates (10%).	30%

VIII. Learning outcomes:

The student/graduate has knowledge about information regarding materials used in the footwear, clothing and leather goods industry, by presenting the materials (textiles, leather, leather substitutes) and their hygienic and thermal properties, chemical composition and structure that influence the finishing of the finished products.

Done on the date: 20.09.2025

Approved in the FC meeting: 24.09.2025

Course coordinator,

Associate Professor PhD. Eng., Albu Adina-Victoria