

# COURSE SYLLABUS

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|-----------------------|--|
| <b>University</b>     | <b>UNIVERSITY OF ORADEA</b>                                    |
| <b>Faculty</b>        | <b>FACULTY OF ENERGY ENGINEERING AND INDUSTRIAL MANAGEMENT</b> |
| <b>Study program*</b> | <b>INDUSTRIAL ECONOMICAL ENGINEERING</b>                       |

## I. Course Name: Finishing of Textile Products

## II. Course Details

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

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

Associate Professor PhD. Eng., Albu Adina-Victoria, adina\_victoria@yahoo.com

## IV. Course objectives

- mastering the general principles of development and familiarizing students with the basic concepts and notions in the field of supplying materials necessary for textile products.
- acquiring skills in understanding processes and developing documentation for obtaining the finishing of textile products

| V. Course content  | No. of hours |
|--|--------------|
| <b>V.1. Lecture (chapters/subchapters and paragraphs)</b>  |              |
| Behavior of textile support in chemical finishing operations. Basics of washing. Auxiliaries.            | 2            |
| Preparation of cotton and cotton-type textiles. Preparation of wool materials.                           | 2            |
| Preparation of chemical textile materials. Drying of textiles.   | 2            |
| Operations that modify the surface of the material. Operations to improve dimensional stability.         | 2            |
| Final finishing by chemical means. Superior finishing of textile materials.                              | 2            |
| Treatments to protect textile materials against degradation. Treatments against ignition and combustion. | 2            |
| Electrostatic treatments. Anti-stain, anti-pilling, anti-picking treatments.                             | 2            |
|  |              |
| <b>V.2. Laboratory/Seminar/Project:</b>  |              |
| Preparation of cotton textiles. Determination of textile hydrophilicity.                                 | 4            |
| Bleaching of cotton textiles. Mercerizing.   | 4            |
| Preparation of linen textiles. Control of degradation of cellulosic materials in finishing processes     | 4            |
| Preparation of woolen textiles. Carbonization of wool.   | 4            |
| Fabric peeling. Bleaching wool.  | 4            |
| Preparation of natural silk textiles. Bleaching natural silk.  | 4            |
| Control of degradation of protein materials. Dyeing with direct dyes                                     | 4            |
|  | 4            |

## VI. Bibliography

1. BUTNARU R.– Textile finishing, Rotaprint Iași, 2001;
2. ALEXANDRESCU I. – Theoretical and practical guide for dyeing textile materials, Certex Publishing House, Iași, 1994;
3. ALBULESCU I.– Operations in textile finishing, Technical Publishing House, Bucharest, 1987;
4. DAESCU C. – Fundamental processes in textile chemical technology, Timișoara, 1998;
5. ALBU ADINA-VICTORIA – Textile finishing, Course notes, E-Learning, e.uoradea.ro, Oradea, 2025
6. SR.EN.ISO 9001:2008. Quality management systems
7. SR EN 29000. Quality management and assurance

## VII. Grading criteria

| Activities | Assessment    | % of final grade |
|------------|---------------|------------------|
| Exam       | Written exam: | 70%              |

|                            |  |     |
|----------------------------|--|-----|
|                            | <p>1. Requirements to get the minimum grade for passing the exam<br/>Knowledge and understanding of the course content at the level of basic ideas.<br/>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<br/>Knowledge and understanding of the course content at the high level of ideas.<br/>For the minimum grade, the student must correctly solve 10 questions on the final exam. Solving all the quizzes in the written exam.</p> |     |
| 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 for finishing 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**