



CHEMICAL AND PHYSICAL CHARACTERISATION OF LEATHER

COORDINATION

CHEMISANA VILLEGAS, DANIEL

ACADEMIC YEAR

2023-2025

SUBJECT GENERAL INFORMATION

Subject name	CHEMICAL AND PHYSICAL CHARACTERISATION OF LEATHER			
Code	2SEM-SUB3			
Typology	2nd semester. Continued evaluation.			
Course number of credits (ECTS)	6			
Type of activity, credits, and groups	<i>Degree</i>	<i>Course</i>	<i>Character</i>	<i>Modality</i>
	<i>Joint Master Degree in Leather Technology</i>	<i>1</i>	<i>Compulsory</i>	<i>Blended learning</i>
Coordination	ZENGIN, GÖKHAN			
University	EGE			
Language	English			

LEARNING OBJECTIVES

1. Recognize raw and finished leather types and their properties
2. Recognize leather standards, to realize conditioning, sampling, and reporting according to standards
3. Apply basic physical and fastness tests and evaluate the results.
4. Apply basic chemical analysis and evaluate the results.
5. Aware of leather processes, environment and quality issues.

LEARNING OUTCOMES

Basic

CB6 Possess and understand knowledge that provides a basis or opportunity to be original in the development and / or application of ideas, often in a research context.

CB9 That students know how to communicate their conclusions and the knowledge and ultimate reasons that support them to specialized and non-specialized audiences in a clear and unambiguous way.

CB10 That students have the learning skills that allow them to continue studying in a way that will be largely self- directed or autonomous.

General

CG1. Appropriately apply mathematical, analytical, scientific, instrumental, technological and management aspects

CG3 Research, develop and innovate.

Specific

CE1 Analyse the different raw materials, intermediate and final products in the leather manufacturing process.

CE11. Apply the necessary legislation in the field of leather engineering.

SUBJECT CONTENT

1. Water management in the industry.
2. Parameters and legislation.
3. Polluting loads of different processes
4. Decrease of loads for modification of processes and specific treatments.
5. Sewage treatment:
 - Pre-treatments
 - Homogenization and primary treatments
 - Secondary treatments

METHODOLOGY

THEORY CLASSES

Expository lectures: by the teacher, with the explanation of concepts, materials and work plan. Support.

Material: Course notes and relevant bibliography.

EXERCISES AND SELF STUDY

General description: Individual exercises, self-learning and individual study. Support material: Course notes and relevant bibliography.

Deliverable: Exercises to deliver at the end of every unit via digital campus.

PRACTICES IN PHYSICAL AND CHEMICAL LABORATORY

General description: Practices of physical tests and chemical analysis. It should be performed a notebook where to record all the results and used for the final report.

Support material: Practices are held at the laboratories. All materials and reagents are in the laboratory.

Deliverable: At the end of these practices the student shall deliver the laboratory report, which will content note of all the data, calculations, incidents, and observations.

EVALUATION

Exercises	15%
Practices	30%
Exam 1	20%
Exam 2	35%