
	PROCESO PARA EL DESARROLLO DE LAS ENSEÑANZAS DE LA ESCUELA DE INGENIERÍAS AGRARIAS		
		CÓDIGO: P/CL009_D002	

PROGRAMME IN APPLIED FOOD TECHNOLOGY

Academic course: 2019-2020

Identification and characteristics of the subject				
Code	501261			Créditos ECTS 6
Name (Spanish)	Industrias de Materias Primas Animales.			
Name (English)	Food Industries of Animal Products			
Degree	ENGINEERING IN AGRICULTURAL AND FOOD INDUSTRIES			
Center	Agricultural Engineering School			
Semester	(7th)	Type	<u>Compulsory</u>	
Module	Food Technology			
Subject	Industries of Raw Materials			
Language	Spanish			
Professor/s				
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Field of knowledge	Food Technology			
Department	Animal Production and Food Science			
Coordinator (if there is more than one professor)	Ana Isabel Carrapiso Martínez.			
Lessons and contents				
Syllabus				
<u>SECTION I.- INTRODUCTION</u>				
LESSON 1.- INTRODUCTION TO THE FOOD INDUSTRIES OF PRODUCTION AND/OR TRANSFORMATION OF ANIMAL RAW MATERIALS.				

SECTION II.- DAIRY INDUSTRIES.

LESSON 2.- DAIRY INDUSTRIES. TYPES AND CHARACTERISTICS OF DAIRY INDUSTRIES.

LESSON 3.- MILK PRODUCTION HOLDINGS, MILK TRANSPORT AND COLLECTION CENTERS. PRELIMINARY TREATMENTS OF MILK.

LESSON 4.- PROCESSING ESTABLISHMENTS. PRESERVATION TREATMENTS: PASTEURIZATION AND STERILIZATION.

LESSON 5.- PRESERVATION TREATMENTS: DEHYDRATION (EVAPORATED, CONDENSED AND POWDERED MILK).

LESSON 6.- MODIFIED MILKS: AROMATIZED MILK, FORTIFIED AND DIET MILKS, AND INFANT FORMULAE.

LESSON 7.- ICE CREAM INDUSTRIES.

LESSON 8.- CREAM, BUTTER AND FERMENTED MILK INDUSTRIES.

LESSON 9.- CHEESE INDUSTRIES.

SECTION III.- MEAT INDUSTRIES.

LESSON 10.- MEAT INDUSTRIES. INTRODUCTION. TYPES AND CHARACTERISTICS.

LESSON 11.- SLAUGHTERHOUSES I. SLAUGHTERING.

LESSON 12.- SLAUGHTERHOUSES II. CARCASS PREPARATION AND OTHER OPERATIONS.

LESSON 13.- CUTTING ROOMS. BONING AND CUTTING. MECHANICALLY SEPARATED MEAT.

LESSON 14.- MEAT PRESERVATION BY CHILLING. ELECTRICAL STIMULATION. COOLING. FREEZING.

LESSON 15.- PROCESSED MEAT INDUSTRIES. NON-RIPENED RAW MEAT PRODUCTS. RESTRUCTURED MEATS. LOW ENERGY AND LOW SODIUM CONTENT MEAT PRODUCTS.

LESSON 16.- RIPENED RAW MEAT PRODUCTS. NON-STUFFED RIPENED MEAT PRODUCTS. STUFFED RIPENED MEAT PRODUCTS.

LESSON 17.- HEAT TREATED MEAT PRODUCTS. MEAT PRESERVES AND SEMIPRESERVES. OTHER PRESERVATION TREATMENTS.

SECTION IV.- FISH INDUSTRIES.

LESSON 18.- FISH INDUSTRIES: TYPES AND CHARACTERISTICS.

LESSON 19.- FRESH FISH INDUSTRIES. SLAUGHTERING. PREPARATION. COOLING AND OTHER PROCEDURES TO DELAY FRESH FISH SPOILAGE.

LESSON 20.- FISH PRODUCTS FREEZING.

LESSON 21.- SALTING, DEHYDRATION AND SMOKING FISH INDUSTRIES.

LESSON 22.- FISH CONSERVES FISH GELS.

SECTION V.- EGG AND APICULTURE INDUSTRIES

LESSON 23.- EGG AND EGG-PRODUCT INDUSTRIES.

LESSON 24.- APICULTURE INDUSTRIES.

SECTION VI.- BY-PRODUCTS EXPLOITATION.

LESSON 25.- BY-PRODUCTS FROM MEAT AND FISH INDUSTRIES.

LESSON 26.- BY-PRODUCTS FROM DAIRY INDUSTRIES.

PRACTICAL SYLLABUS

PRACTICAL LESSON 1.- PROCESSING OF UNRIPENED RAW MEAT PRODUCTS AND RESTRUCTURED MEATS.

PRACTICAL LESSON 2.- PROCESSING OF RIPENED MEAT PRODUCTS.

PRACTICAL LESSON 3.- PROCESSING OF RESTRUCTURED FISH PRODUCTS AND RESTRUCTURED FAT.

PRACTICAL LESSON 4.- PROCESSING OF THERMALLY TREATED MEAT PRODUCTS.

PRACTICAL LESSON 5.- CHEESE PROCESSING. DETERMINATION OF COAGULATING STRENGTH. PROCESSING OF CURD CHEESE.

PRACTICAL LESSON 6.- PROCESSING OF YOGURT AND BUTTER.

PRACTICAL LESSON 7.- PROCESSING OF ICE CREAM AND OTHER DAIRY PRODUCTS.

PRACTICAL LESSON 8.- VISIT TO A LOCAL COMPANY RELATED TO THE ANIMAL PROCESSING.