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

## PROGRAMME IN APPLIED FOOD TECHNOLOGY

Academic course: 2018-2019

Identification and characteristics of the subject					
Code	502225			Créditos ECTS	6
Name (Spanish)	<b>Tecnología Alimentaria Aplicada</b>				
Name (English)	<b>Applied Food Technology</b>				
Degree	Food Science and Technology Degree				
Center	Agricultural Engineering School				
Semester	SITH (6º)	Type	<u>Compulsory</u>		
Module	Food TEchnology				
Subject	Food Technology				
Language	Spanish				
Professor/s					
Name	Room	e-mail	Web link		
<b>Juan Florencio Tejada Sereno</b>	D702	jftejada@unex.es			
<b>Ana Isabel Andrés Nieto</b>	D701	aiandres@unex.es			
Field of knowledge	Food Technology				
Departament	Animal Production and Food Science				
Coordinator (if there is more than one professor)	<b>Juan Florencio Tejada Sereno</b>				
Lessons and contents					
Syllabus					
<b><u>SECTION I.- INTRODUCTION TO APPLIED FOOD TECHNOLOGY</u></b>					
LESSON 1.- APPLIED FOOD TECHNOLOGY AT THE PILOT PLANT AND LAB.					
<b><u>SECTION II.- FOOD TECHNOLOGY APPLIED INTO TRANSFORMATION AND PRESERVATION OF FOOD.</u></b>					
LESSON 2.- THERMAL PROCESSING OF FOOD					
LESSON 3.- DESIGN AND APPLICATION OF FREEZING CURVES.					

LESSON 4.- FOOD DRYING

LESSON 5.- EXTRUSION

**SECTION III.- EMERGING TECHNOLOGIES**

LESSON 6.- TRADITIONAL VERSUS NEW TECHNOLOGIES FOR PRESERVING FOOD.

LESSON 7.- NON-THERMAL EMERGING TECHNOLOGIES (I): HIGH PRESSURE TREATMENT

LESSON 8.- NON-THERMAL EMERGING TECHNOLOGIES (II): FOOD IRRADIATION

LESSON 9.- .- NON-THERMAL EMERGING TECHNOLOGIES (II): ULTRASOUNDS, LIGHT PULSES. MAGNETIC FIELDS.

LESSON 10.- THERMAL EMERGING TECHNOLOGIES (I): "SOUS-VIDE" COOKING

LESSON 11.- THERMAL EMERGING TECHNOLOGIES (II): OHMIC TREATMENT

**SECTION IV.- INNOVATION IN FOOD PACKAGING**

LESSON 12.- ACTIVE AND INTELLIGENT PACKAGING

LESSON 13.- BIOBASED PACKAGING MATERIAL

LESSON 14.- EDIBLE FILMS AND COATINGS.

**SECTION V.- CULINARY TECHNOLOGY**

LESSON 15.- INTRODUCTION TO CULINARY TECHNOLOGY

LESSON 16.- CULINARY TECHNIQUES

**PRACTICAL SYLLABUS**

PRACTICAL LESSON 1.- CALCULATION OF LETALITY IN FOOD CANNING

PRACTICAL LESSON 2.- FOOD DRYING SIMULATION AT THE PILOT PLANT

PRACTICAL LESSON 3.- FREEZING CURVES OF FOODS.

PRACTICAL LESSON 4.- FREEZE-DRYING OF FOOD.

PRACTICAL LESSON 5.- "SOUS-VIDE" COOKING AT THE LAB



PRACTICAL LESSON 6.- VISIT TO CICYTEX/INTAEX

PRACTICAL LESSON 7.- SEALING CONTROL IN METAL CANS.

PRACTICAL LESSON 8.- PACKAGING (I): MODIFIED ATMOSPHERE PACKAGING

PRACTICAL LESSON 9.- PACKAGING (II): MODIFIED ATMOSPHERE PACKAGING. STUDY  
OF SHELF LIFE

PRACTICAL LESSON 10.- EDIBLE FILMS AND COATINGS: COMPUTER ROOM