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

PROGRAMME IN DESCRIPTIVE BROMATOLOGY I
Academic course: 2019-2020

Identification and characteristics of the subject			
Code	502223	ECTS credits	6
Name (Spanish)	Bromatología Descriptiva II		
Name (English)	DESCRIPTIVE BROMATOLOGY II		
Degree	Food Science and Technology Degree		
Center	Agricultural Engineering School		
Semester	FITH (5º)	Type of subject	Compulsory
Module	Food Science		
Subject	Descriptive Bromatology		
Language	Spanish		
Professor/s			
Name	Room	e-mail	Web link
Alberto Martín González	D704	amartin@unex.es	
Alicia Rodríguez Jiménez	D717	srms@unex.es	
Emilio Aranda Medina	D709	earanda@unex.es	
Santiago Ruiz Moyano Seco de Herrera	D717	srms@unex.es	
Field of knowledge	Food Science and Nutrition		
Department	Animal Production and Food Science		
Coordinator (if there is more than one professor)	Alberto Martín González		
Lessons and contents			
Syllabus			
<u>SECTION I.- EDIBLE FATS AND OILS</u> 1.1 Fats and oils of animal origin. 1.2. Fats and oils of vegetable origin.			
<u>SECTION II.- CEREALS AND CEREAL PRODUCTS</u> 2.1. Cereals. Types of cereals. Structure of the cereals. 2.2. Cereals II. Chemical composition. Flour and semolina. Quality parameters. 2.3. Processed grains. Bread. 2.4. Alimentary paste. 2.5 Soft white wheat products.			
<u>SECTION III.- LEGUMES AND VEGETABLES</u> 3.1. Legumes. Types of legumes. Chemical composition. Quality parameters. 3.2. Vegetables: Classification. Chemical composition. Quality parameters. 3.3. Tubers and derivative products. 3.4. Mushrooms and seaweed.			

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

3.5. Vegetables products. Products minimally processed, frozen, sterilized, concentrated and dehydrated.

SECTION IV.- FRUITS AND FRUIT PRODUCTS

4.1. Fruits: Classification. Chemical composition. Quality parameters.

4.2. Fruit products: Juices, jams, compotes and candied fruits

4.3. Dried fruits, nuts, and seeds.

SECTION V.- WATER AND BEVERAGES

5.1. Types of bottled water. Ice.

5.2. Non-alcoholic beverage.

5.3. Fermented beverage I: Beer Classification. Chemical composition. Quality parameters.

5.4. Fermented beverage II: Wine Classification. Chemical composition. Quality parameters. Cider.

5.5. Alcoholic beverages: Classification. Chemical composition. Quality parameters.

SECTION VI.- OTHER FOODS

6.1. Honey and other bee products

6.2. Caffeinated foods: Coffee, tea, and cocoa.

6.3. Spices. Classification. Chemical composition. Quality parameters.

PRACTICAL SYLLABUS

PRACTICAL LESSON 1. Cereal products

- Baking potential of wheat. Chopin Alveograph: the ratio of P to L and the W value.
- Determination of the gluten.

PRACTICAL LESSON 2. Vegetable products

- Determination of crude fiber content.
- Determination of soluble solids content.

PRACTICAL LESSON 3. Fruit products

- Determination of total sugars and reducing sugars.

PRACTICAL LESSON 4. Beverage I

- Determination of anions in water.



• **PRACTICAL LESSON 5. Beverage II**

- Determination of caffeine in cola-based beverages
- Determination of quinine in tonic.

PRACTICAL LESSON 6. Beverage III

- Determination of tannins and alcoholic grade in wine.

PRACTICAL LESSON 7. SPICES

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

- The extractable color of paprika expressed in ASTA units.
- Pungency intensity. Scoville scale.

PRACTICAL LESSON 8. HONEY

- Honey quality. Amylase activity of honey.