



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

**PROGRAMME IN DESCRIPTIVE BROMATOLOGY I**  
**Academic course: 2019-2020**

Identification and characteristics of the subject			
Code	502223	ECTS credits	6
Name (Spanish)	<b>Bromatología Descriptiva II</b>		
Name (English)	DESCRIPTIVE BROMATOLOGY II		
Degree	Food Science and Technology Degree		
Center	Agricultural Engineering School		
Semester	(7th)	Type of subject	Compulsory
Module	Food Science		
Subject	Descriptive Bromatology		
Language	Spanish		
Professor/s			
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Field of knowledge	Food Science and Nutrition		
Department	Animal Production and Food Science		
Coordinator (if there is more than one professor)	<b>Alberto Martín González</b>		
Lessons and contents			
Syllabus			
<b><u>SECTION I.- EDIBLE FATS AND OILS</u></b>			
1.1 Fats and oils of animal origin.			
1.2. Fats and oils of vegetable origin.			
<b><u>SECTION II.- CEREALS AND CEREAL PRODUCTS</u></b>			
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.			
<b><u>SECTION III.- LEGUMES AND VEGETABLES</u></b>			
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.			

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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**

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

**PRACTICAL LESSON 8. HONEY**

- Honey quality. Amylase activity of honey.