


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

## PROGRAMME IN FOOD TECHNOLOGY

Academic course: 2019-2020

Identification and characteristics of the subject					
Code	501121			Créditos ECTS	6
Name (Spanish)	<b>Química General</b>				
Name (English)	General Chemistry				
Degree	ENGINEERING IN AGRICULTURAL AND FOOD INDUSTRIES				
Center	Agricultural Engineering School				
Semester	First (1º)	Type	Compulsory		
Module	Basic				
Subject	Chemistry				
Language	Spanish				
Professor/s					
Name	Room	e-mail	Web link		
<b>Concepción de Miguel Gordillo</b>	<b>D-611</b> Edificio Tierra de Barros	cdemigue@unex.es			
<b>M<sup>a</sup> Josefa Bernalte García</b>	<b>D-601</b> Edificio Tierra de Barros	bernalte@unex.es			
Field of knowledge	Soil Science and Agricultural Chemistry				
Department	Plant Biology, Ecology and Earth Sciences				
Coordinator (if there is more than one professor)	<b>Concepción de Miguel Gordillo</b>				
Lessons and contents					
Syllabus					
<p><b>Lesson 1.</b> Fundamental concepts of chemical combinations. Atomic structure and periodic classification of the elements.</p> <p><b>Lesson 2.</b> Chemical bond.</p> <p><b>Lesson 3.</b> Physical states of matter.</p> <p><b>Lesson 4.</b> Molecular solutions.</p>					

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**Lesson 5.** Introduction to organic chemistry. Hydrocarbons, alcohols and ethers.

**Lesson 6.** Carbonyl, carboxylic and nitrogen compounds.

**Lesson 7.** Kinetics and chemical equilibrium.

**Lesson 8.** Acid-base reactions.

**Lesson 9.** Neutralization reactions.

**Lesson 10.** Introduction to precipitation and oxidation-reduction reactions.

### **PRACTICAL SYLLABUS**

**Practical lesson #1:** Seminar on Nomenclature and Formulation of Inorganic Compounds

**Practical lesson #2:** Seminar on Nomenclature and Formulation of Organic Compounds

**Practical lesson #3:** Recognition and handling of laboratory equipment and products

**Practical lesson #4:** Filtration, decantation and centrifugation

**Practical lesson #5:** Chemical extraction

**Practical lesson #6:** Preparation of solutions. Expressions of concentration

**Practical lesson #7:** Acid-base volumetry

**Practical lesson #8:** Buffer solutions: buffer capacity)