PROGRAMME IN FOOD TECHNOLOGY

Academic course: 2019-2020

Identification and characteristics of the subject					
Code	501121			Créditos ECTS	6
Name (Spanish)	**Química General**				
Name (English)	General Chemistry				
Degree	Degree in Food Science and Technology				
Center	Agricultural Engineering School				
Semester	First (1º)	Type		Compulsory	
Module	Basic				
Subject	Chemistry				
Language	Spanish				
Professor/s					
Name		Room	e-mail	Web link	
Concepción de Miguel Gordillo		**D-611** Edificio Tierra de Barros	cdemigue@unex.es		
Mª Josefa Bernalte García		**D-601** Edificio Tierra de Barros	bernalte@unex.es		
Field of knowledge	Soil Science and Agricultural Chemistry				
Department	Plant Biology, Ecology and Earth Sciencies				
Coordinator (if there is more than one professor)	**Concepción de Miguel Gordillo**				
Lessons and contents					
Syllabus					

Lesson 1. Fundamental concepts of chemical combinations. Atomic structure and periodic classification of the elements.

Lesson 2. Chemical bond.

Lesson 3. Physical states of matter.

Lesson 4. Molecular solutions.

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)