



PROGRAMME IN FOOD TECHNOLOGY

Academic course: 2018-2019

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 Sciences											
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)