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

## PROGRAMME IN SOIL SCIENCE

**Academic course: 2020-2021**

Identification and characteristics of the subject					
Code	501128			Créditos ECTS	6
Denomination (Spanish)	<b>Edafología</b>				
Denomination (Spanish)	Soil Science				
Degree	ENGINEERING IN AGRICULTURAL AND FOOD INDUSTRIES				
Center	Agricultural Engineering School				
Semester	(3rd)	Character	Compulsory		
Module	Common to the agrarian branch				
Materia	Bases of vegetable production				
Language	Spanish				
Professor/s					
Name	Room	e-mail	Web link		
<b>FRANCISCO JAVIER VIGUERA RUBIO</b>	Edificio Alfonso XIII	jviguera@unex.es	Campus virtual		
<b>Angel Albarrán Liso</b>	D-722 Edificio Valle del Jerte	angliso@unex.es	Campus virtual		
Field of knowledge	Plant Production				
Department	Engineering of the Agricultural and Forestry Environment				
Coordinator (in case there is more than one professor )	<b>Francisco Javier Viguera Rubio</b>				
Lessons and contents					
Syllabus					
Lesson 1. INTRODUCTION TO EDAFOLOGY Lesson 2.- SOIL ORGANIZATION Lesson 3.- MORPHOLOGY AND SOIL DESCRIPTION Lesson 4.- PRIMARY MINERALS Lesson 5.- SECONDARY MINERALS					

Lesson 6.- SOLID ORGANIC PHASE. THE ORGANIC MATTER  
 Lesson 7.- SOIL ORGANISMS  
 Lesson 8.- LIQUID AND GASEOUS PHASE OF THE SOIL  
 Lesson 9.- TEXTURE  
 Lesson 10.- STRUCTURE  
 Lesson 11.- OTHER PHYSICAL PROPERTIES  
 Lesson 12.- IONIC EXCHANGE  
 Lesson 13.- ACIDITY AND pH  
 Lesson 14.- SALINE AND SODIC SOILS  
 Lesson 15.- OXIDATION-REDUCTION  
 Lesson 16.- TRAINING FACTORS  
 Lesson 17.- TRAINING PROCESSES  
 Lesson 18.- SOIL TAXONOMY AND FAO (BRSM)  
 Lesson 19.- SOIL CONTAMINATION  
 Lesson 20.- SOIL EVALUATION

**PRACTICAL SYLLABUS**

Practical lesson #1: Opening of a calicata

Practical lesson #2: Morphology and soil description

Practical lesson #3: Sampling in soil

Practical lesson #4: Determination of organic matter

Practical lesson #5: Determination of the texture

Practical lesson #6: Determination of apparent density

Practical lesson #7: Determination of color and electrical conductivity

Practical lesson #8: Determination of the coarse elements and Calcium + Magnesium

Practical lesson #9: Determination of the consistency and Phosphorus

Practical lesson #10: Writing of work and interpretation of analysis results