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

PROGRAMME IN SOIL SCIENCE

Academic course: 2019-2020

Identification and characteristics of the subject					
Code	501128			Créditos ECTS	6
Denomination (Spanish)	Edafología				
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		
FRANCISCO JAVIER VIGUERA RUBIO	Edificio Alfonso XIII	jviguera@unex.es	Campus virtual		
Angel Albarrán Liso	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)	Francisco Javier Viguera Rubio				
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