ANNEX 1

Department of Agricultural Sciences and Production

Panamerican Agricultural School, Zamorano

DESCRIPTION OF PROFESSIONAL PRACTICE	
Name of Practitioner	
Practice name	Soil pollution and soil remediation
Name of the applicant receiving entity	University of Udine (UNIUD)
Department where you are requesting the practitioner	Department of Agriculture and Environmental Science (DISA)
Practice Manager and position held	Maria De Nobili Ordinary professor
Company address	via delle Scienze 209 – 33100 Udine, ITALY
Telephone	+390432558644 | E mail | maria.denobili@uniud.it
Practice description	The student will participate and be instructed in a series of general introductory activities and be assisted in the implementation of the following project activities. • Training in the use and calibration of UV-visible spectrophotometer, automatic N and P analyzer, automatic titrator, DOC analyzer, ICP. • Set up of incubation experiments on effect of organic amendants on soil chemical and biological properties. • Measure of microbial activity (carbon dioxide evolution) • Measure soil microbial biomass C and N • Measure selected enzymatic activities. • Measure available phosphorus and mineral N • Measure toxic metals in soil. f.to
Requirements	Good knowledge of written and spoken English
Resources to be provided to the practitioner	General laboratory facilities, TOC analyzer, ICP, N and P automatic analyzer, incubation cells.
Coordinator at *Zamorano*	**Dinie Espinal, M.Sc.,** Agronomic Engineering Faculty, Department of Agricultural Sciences and Production, Panamerican Agricultural School, Zamorano University.
Additional comments	The student will participate and be instructed in a series of general introductory activities and be assisted in the implementation of her own project activities
Date:	9/1/2016

DESCRIPTION OF UNIUD INTERNSHIP PROJECT - 2016	
Project title	Use of organic amendants for the remediation of polluted soils and to reduce soil degradation
UNIUD supervisor	**Prof. Maria de Nobili**
Name of the receiving entity	University of Udine (UNIUD) Department of Agriculture and Environmental Science (DISA)
Address	Via delle Scienze 206 - 33100 Udine (Italy)
Telephone	+390432558644
eMail	maria.denobili@uniud.it
Project description	Recycling of agricultural and urban organic residues, biogas effluents, compost and biochar to remediate soil contamination and increase the activity of soil microbial biomass. The student will be able to design soil incubation experiments to study the effects of organic amendments on soil properties, learn to carry out analysis of selected pollutants and measure simple parameters of biological activity. The aim is to improve knowledge of soil processes and awareness of the importance of soil in environmental sustainability. The student will participate and be instructed in a series of general introductory activities and be assisted in the implementation of the following project activities. • Laboratory safety and good laboratory practice. • Preparation of soil samples for analysis • Characterization of soil chemical properties, pH, cation exchange capacity, texture. • Training in the use and calibration of UV-visible spectrophotometer, automatic N and P analyzer, automatic titrator, DOC analyzer, ICP. • Set up of incubation experiments on effect of organic amendants on soil *chemical and biological properties*. • Measure of microbial activity (carbon dioxide evolution) • Measure soil microbial biomass C and N • Measure selected enzymatic activities. • Measure available phosphorus and mineral N • Measure toxic metals in soil
Requirements	Good knowledge of written and spoken English
Resources to be provided to the student	General laboratory facilities, TOC analyzer, ICP, N and P automatic analyzer, incubation cells
Additional comments	The student will participate and be instructed in a series of general introductory activities and be assisted in the implementation of her own project activities
Coordinator at Zamorano	