University of Pretoria Yearbook 2017

Soil fertility, soil microbiology and plant nutrition 420 (GKD 420)

Qualification	Undergraduate
Faculty	Faculty of Natural and Agricultural Sciences
Module credits	15.00
Programmes	BScAgric Applied Plant and Soil Sciences
Prerequisites	GKD 250 GS
Contact time	1 practical per week, 3 lectures per week
Language of tuition	Separate classes for Afrikaans and English
Academic organisation	Plant and Soil Sciences
Period of presentation	Semester 2

Module content

Soil ultimately controls nutrient supply to plants and organisms. The health and resilience of biota are therefore closely link to the interaction between the pedosphere and the biosphere. This course deals with the availability and uptake of macro and micro nutrients in the plant - microbial– soil system, nutrient deficiencies and toxicities, as well as soil properties and soil environmental conditions that influence soil fertility and its suitability to act as a growth medium. Practical work includes the laboratory evaluation of soil fertility and greenhouse pot trials to investigate nutrient uptake as well as deficiencies and toxicities symptoms in plants.