



University of Pretoria Yearbook 2023

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

Qualification Undergraduate

Faculty [Faculty of Natural and Agricultural Sciences](#)

Module credits 15.00

NQF Level 08

Programmes [BScAgric \(Applied Plant and Soil Sciences\)](#)

Prerequisites GKD 250 GS, #APS 461, #HSC 420 and #OKW 413. Final year students only.

Contact time 1 practical per week, 3 lectures per week

Language of tuition Module is presented in English

Department Department of 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 linked 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.

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