



University of Pretoria Yearbook 2022

Plant physiology and biotechnology 261 (BOT 261)

Qualification	Undergraduate
Faculty	Faculty of Natural and Agricultural Sciences
Module credits	12.00
NQF Level	06
Programmes	BEd (Senior Phase and Further Education and Training Teaching) BSc (Biochemistry) BSc (Biotechnology) BSc (Chemistry) BSc (Ecology) BSc (Entomology) BSc (Genetics) BSc (Geography and Environmental Science) BSc (Human Physiology) BSc (Microbiology) BSc (Plant Science) BSc (Zoology) BScAgric (Applied Plant and Soil Sciences) BScAgric (Plant Pathology)
Service modules	Faculty of Education
Prerequisites	BOT 161 and CMY 127 GS.
Contact time	1 practical per week, 2 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

Nitrogen metabolism in plants; nitrogen fixation in Agriculture; plant secondary metabolism and natural products; photosynthesis and carbohydrate metabolism in plants; applications in solar energy; plant growth regulation and the Green Revolution; plant responses to the environment; developing abiotic stress tolerant and disease resistant plants. Practicals: Basic laboratory skills in plant physiology; techniques used to investigate nitrogen metabolism, carbohydrate metabolism, pigment analysis, water transport in plant tissue and response of plants to hormone treatments.

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