



University of Pretoria Yearbook 2019

Plant ecophysiology 356 (BOT 356)

Qualification Undergraduate

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

Module content The emphasis is on the efficiency of the mechanisms whereby C3-, C4 and CAM-plants bind CO₂ and how it impacted upon by environmental factors. The mechanisms and factors which determine the respiratory conversion of carbon skeletons and how production is affected thereby will be discussed. Insight into the ecological distribution and manipulation of plants for increased production is gained by discussing the internal mechanisms whereby carbon allocation, hormone production, growth, flowering and fruitset are influenced by external factors. To understand the functioning of plants in diverse environments, the relevant structural properties of plants, and the impact of soil composition, water flow in the soil-plant air continuum and long distance transport of assimilates will be discussed. Various important techniques will be used in the practicals to investigate aspects such as water-use efficiency, photosynthesis and respiration of plants.

Module credits 18.00

Programmes [BSc Biochemistry](#)

[BSc Biotechnology](#)

[BSc Ecology](#)

[BSc Genetics](#)

[BSc Microbiology](#)

[BSc Plant Science](#)

[BSc Zoology](#)

[BScAgric Applied Plant and Soil Sciences](#)

[BScAgric Plant Pathology](#)

Service modules Faculty of Education

Prerequisites BOT 161 or permission from head of department

Contact time 2 lectures per week, 1 practical per week

Language of tuition Separate classes for Afrikaans and English

Department Department of Plant and Soil Sciences

Period of presentation Semester 1

The information published here is subject to change and may be amended after the publication of this information. The



General Regulations (G Regulations) apply to all faculties of the University of Pretoria. It is expected of each student to familiarise himself or herself well with these regulations as well as with the information contained in the **General Rules** section. Ignorance concerning these regulations and rules will not be accepted as an excuse for any transgression.