



University of Pretoria Yearbook 2022

Precalculus 135 (WTW 135)

Qualification	Undergraduate
Faculty	Faculty of Natural and Agricultural Sciences
Module credits	16.00
NQF Level	05
Programmes	BCom extended programme BSc extended programme - Mathematical Sciences BSc extended programme - Physical Sciences
Service modules	Faculty of Economic and Management Sciences
Prerequisites	BSc Extended prgm - Mathematical Sciences: 60% for Maths in Gr 12. Other BSc Extended prgms: 50% for Maths Gr 12. BCom Extended prgm students who wish to transfer to BCom (Econometrics) only: 50% for Maths in Gr 12.
Contact time	1 practical per week, 2 tutorials per week, 6 lectures per week, Foundation Course
Language of tuition	Module is presented in English
Department	Mathematics and Applied Mathematics
Period of presentation	Semester 1

Module content

Real numbers, elementary set notation, exponents and radicals. Algebraic expressions, fractional expressions, linear and quadratic equations, inequalities. Coordinate geometry: lines, circles. Functions: definition, notation, piecewise defined functions, domain and range, graphs, transformations of functions, symmetry, even and odd functions, combining functions, one-to-one functions and inverses, polynomial functions and zeros. Sequences, summation notation, arithmetic, geometric sequences, infinite geometric series, annuities and instalments. Degrees and radians, unit circle, trigonometric functions, fundamental identities, trigonometric graphs, trigonometric identities, double-angle, half-angle formulae, trigonometric equations, applications. Elements of Euclidean geometry.

This module is offered at the Mamelodi Campus to students from the BSc and BCom Extended programmes.

The regulations and rules for the degrees published here are subject to change and may be amended after the publication of this information.

The [General Academic Regulations \(G Regulations\)](#) and [General Student Rules](#) apply to all faculties and registered students of the University, as well as all prospective students who have accepted an offer of a place at the University of Pretoria. On registering for a programme, the student bears the responsibility of ensuring that they familiarise themselves with the General Academic Regulations applicable to their registration, as well as the relevant faculty-specific and programme-



specific regulations and information as stipulated in the relevant yearbook. Ignorance concerning these regulations will not be accepted as an excuse for any transgression, or basis for an exception to any of the aforementioned regulations.