

University of Pretoria Yearbook 2025

Tropical meteorology 316 (WKD 316)

Qualification	Undergraduate
Faculty	Faculty of Natural and Agricultural Sciences
Module credits	18.00
NQF Level	07
Programmes	BSc in Applied Mathematics BSc in Geography option Geography and Environmental Science BSc in Meteorology BSc in Meteorology 4-year programme BSc in Physics BSc in Physics 4-year programme
Prerequisites	WKD 261 and WKD 265
Contact time	1 tutorial every 2nd week, 2 lectures per week
Language of tuition	Module is presented in English
Department	Geography Geoinformatics and Meteorology
Period of presentation	Semester 1

Module content

Mean state, major patterns of atmospheric variability in the tropics. Tropical weather systems and their temporal variability, inter tropical convergence zone, tropical waves, trade inversions, trade winds, tropical and sub-tropical jet streams, cloud clusters, tropical depressions, Africánes, sub-tropical ridges, upper-level anticyclones. Tropical cyclones and warnings. Analysis techniques. Tropical waves, Kelvin waves, equatorial Rossby waves and Madden Julian Oscillation. Physical and dynamical process in monsoon circulation. Hazardous weather. Conceptual models and case studies.

General Academic Regulations and Student Rules

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. The G Regulations are updated annually and

may be amended after the publication of this information.

Regulations, degree requirements and information

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

University of Pretoria Programme Qualification Mix (PQM) verification project

The higher education sector has undergone an extensive alignment to the Higher Education Qualification Sub-Framework (HEQSF) across all institutions in South Africa. In order to comply with the HEQSF, all institutions are legally required to participate in a national initiative led by regulatory bodies such as the Department of Higher Education and Training (DHET), the Council on Higher Education (CHE), and the South African Qualifications Authority (SAQA). The University of Pretoria is presently engaged in an ongoing effort to align its qualifications and programmes with the HEQSF criteria. Current and prospective students should take note that changes to UP qualification and programme names, may occur as a result of the HEQSF initiative. Students are advised to contact their faculties if they have any questions.