

University of Pretoria Yearbook 2022

Tropical meteorology 316 (WKD 316)

| | |
|-------------------------------|--|
| Qualification | Undergraduate |
| Faculty | Faculty of Natural and Agricultural Sciences |
| Module credits | 18.00 |
| NQF Level | 07 |
| Programmes | BSc (Meteorology) BSc (Applied Mathematics) BSc (Geography and Environmental Science) BSc (Physics) |
| Prerequisites | WKD 315 |
| Contact time | 1 tutorial per week, 4 lectures per week |
| Language of tuition | Module is presented in English |
| Department | Geography Geoinformatics and Meteorology |
| Period of presentation | Quarter 2 |

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, Africânes, 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.

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.