

University of Pretoria Yearbook 2021

Atmospheric balance laws 351 (WKD 351)

| Qualification | Undergraduate |
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| Faculty | Faculty of Natural and Agricultural Sciences |
| Module credits | 18.00 |
| NQF Level | 07 |
| Programmes | BSc Meteorology |
| Prerequisites | WTW 258 GS or WTW 218 and WTW 248, WTW 256 or WTW 264 or WTW 286 and WKD 261. |
| 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 1 |

Module content

Vector algebra, curl of a vector, total and partial derivatives, second law of motion. Spherical coordinates. Acceleration in rotating co-ordinates, fundamental forces, momentum equation. Three dimensional flow balance, conservation of mass, thermodynamic energy equation.

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