

University of Pretoria Yearbook 2021

Atmospheric balance laws 351 (WKD 351)

Qualification	Undergraduate
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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