

# University of Pretoria Yearbook 2020

## Atmospheric balance laws 351 (WKD 351)

<b>Qualification</b>	Undergraduate
<b>Faculty</b>	<a href="#">Faculty of Natural and Agricultural Sciences</a>
<b>Module credits</b>	18.00
<b>Programmes</b>	<a href="#">BSc Meteorology</a>
<b>Prerequisites</b>	WTW 258 GS or WTW 218 and WTW 248, WTW 256 or WTW 264 or WTW 286 and WKD 261.
<b>Contact time</b>	1 tutorial per week, 4 lectures per week
<b>Language of tuition</b>	Module is presented in English
<b>Department</b>	Geography Geoinformatics and Meteorology
<b>Period of presentation</b>	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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