

---

# University of Pretoria Yearbook 2016

---

## Axiomatic set theory and mathematical logic 724 (WTW 724)

<b>Qualification</b>	Postgraduate
<b>Faculty</b>	<a href="#">Faculty of Natural and Agricultural Sciences</a>
<b>Module credits</b>	15.00
<b>Programmes</b>	<a href="#">BScHons Mathematics</a>
<b>Contact time</b>	1 lecture per week
<b>Language of tuition</b>	English
<b>Academic organisation</b>	Mathematics and Applied Maths
<b>Period of presentation</b>	Semester 1

### Module content

Axiomatic set theory, ordinals, transfinite induction and recursion, ordinal arithmetic, the axiom of choice, cardinal arithmetic, the continuum hypothesis. Propositional and first order logic. The completeness and compactness theorems. Decidability, Gödel's incompleteness theorems.

---

The information published here is subject to change and may be amended after the publication of this information. The [General Regulations \(G Regulations\)](#) apply to all faculties of the University of Pretoria. It is expected of students to familiarise themselves well with these regulations as well as with the information contained in the [General Rules](#) section. Ignorance concerning these regulations and rules will not be accepted as an excuse for any transgression.