# DEPARTMENT OF MATHEMATICS MATHS 713: Logic and Set Theory Study Guide 2007

Prerequisite: A first course in formal predicate logic such as MATHS 315 or PHIL 305.

## Content:

• A study of the foundations of pure mathematics, formalising the notions of "mathematical proof" and "mathematical structure" through Predicate Calculus and Model Theory.

• Axiomatic set theory including ordinal and cardinal arithmetic.

**Teaching format:** Notes will be handed out which will include problems to be completed. These problems will form a basis for class discussions and the assignments for the course. Their solutions will also be part of the course content.

**Course materials:** All course materials, notes, assignments etc will be given out in lectures or they can be collected from Sina. Only the study guide will be made available on the course web page.

Assessment will be based on either:

- four written assignment (30%) and a final 2-hour examination (70%); or
- the final examination (100%),

whichever is greater.

#### Assignment due dates:

Assignment 1	Monday 6 August
Assignment 2	Friday 24 August
Assignment 3	Friday 28 September
Assignment 4	Friday 12 October

Lectures: Mondays, Wednesdays and Thursdays at 11:00am in B08.

#### Office hours:

Monday	2:00 - 3:00
Wednesday	2:00 - 3:00
Thursday	1:00 - 2:00

These hours may be subject to change: for updated versions see my office door or the homepage.

### Lecturer:

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