

MATH1064 Study Notes

University of Sydney
Semester 2, 2025
MATH1064



Happy studying!

Week 1

Introduction to Discrete Maths

Discrete maths is the study of "discrete structures", this includes objects which are:

- Countable or listable
- Distinct and unconnected.

There are two objectives of MATH1064:

1. Develop mathematical reasoning skills. This involves using **logic and proofs**, and **rigorously** (exhausting all possibilities) finding solutions to problems.
2. Study **discrete structures** and their properties including:
 - Sets and functions
 - Prime numbers and modular arithmetic
 - Graphs and networks
 - Counting and probability.

Week 2

Week 3

Week 4

Week 5