

# WriteMath Workshop

Department of Mathematics & Applied Mathematics

University of Pretoria, 2015

**1. First session – Fundamentals.** In this session we discuss the most basic principles involved in the design and writing of a reasonable mathematical text. Whether it be an Honours essay, a dissertation or a research paper, these principles are the same. The topics are

- A. PLANNING OF THE TEXT. What do we want to communicate, to whom and how?
- B. TITLE, ABSTRACT AND INTRODUCTORY SECTION. The purpose and roles of these components of the text.
- C. SECTIONS. The natural and logical flow of sections.
- D. REFERENCES. The ethics of referencing. What is included and why and how?
- E. LABELS. Cross-referencing; displayed expressions, figures and tables.
- F. LANGUAGE. Mathematics is not a language. It augments a natural language (such as English). How does this happen?
- G. DEFINITIONS, THEOREMS, ETC. The role of definitions, theorems, lemmas and propositions. How to formulate them.
- H. GOOD, BAD, UGLY. Examples of GBU.
- I. ABOUT READING. Dictionaries, Thesauri, Books on writing, Just books.

**Second session.** We analyse some examples of good text and text that can be improved.

**Third session.** We analyse in positive way a short assignment given after the second session.