VCE UNITS INFORMATION

VCE Mathematics – Specialist Mathematics Units 1 and 2

CONTENT

Specialist Mathematics Units 1 and 2 provide a course of study for students who wish to undertake an in-depth study of mathematics, with an emphasis on concepts, skills and processes related to mathematical structure, modelling, problem solving and reasoning.

Mathematical Methods Units 1 and 2 and Specialist Mathematics Units 1 and 2, taken in conjunction, provide a comprehensive preparation for Specialist Mathematics Units 3 and 4. The areas of study for Units 1 and 2 of Specialist Mathematics are 'Algebra and Structure', 'Arithmetic and Number', 'Discrete Mathematics', 'Geometry, Measurement and Trigonometry', 'Graphs of Linear and Non-linear Relations' and 'Statistics'.

OUTCOMES

For each unit, the student is required to demonstrate achievement of three outcomes. As a set these outcomes encompass all of the selected areas of study for each unit. For each of Unit 1 and Unit 2 the outcomes as a set apply to the content from the areas of study and topics selected for that unit.

- Students should be able to define and explain key concepts in relation to the topics from the selected areas of study, and apply a range of related mathematical routines and procedures
- Students should be able to apply mathematical processes in non-routine contexts, and analyse and discuss these applications of mathematics in at least three areas of study
- Students should be able to use technology to produce results and carry out analysis in situations requiring problem-solving, modelling or investigative techniques or approaches in at least three areas of study

ASSESSMENT

All assessments at Units 1 and 2 are school-based.

Demonstration of achievement of Outcome 1 will be based on the student's performance on a selection of the following assessment tasks:

- Assignments
- Tests
- Summary or review notes

Demonstration of achievement of Outcome 2 will be based on the student's performance on a selection of the following assessment tasks:

- Modelling tasks
- Problem-solving tasks
- Mathematical investigations

Demonstration of achievement of Outcome 3 will be based on the student's performance on aspects of tasks completed in demonstrating achievement of Outcomes 1 and 2 that incorporate opportunity for the effective and appropriate use of technology.

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