

Ringwood Secondary College
2017 Course Planning Document

VCE Unit 3 Specialist Mathematics

Time Allocation

This unit of work will consist of approximately 100 hours of which at least 50 hours will be class time. **To complete this unit of work satisfactorily, students must complete each of the following learning outcomes.**

Learning Outcomes

Outcome 1

The student should be able to define and explain key concepts as specified in the content from the Functions and graphs, Algebra, Calculus, Vectors, Mechanics and Probability and statistics areas of study, and apply a range of related mathematical routines and procedures.

Outcome 2

The student should be able to apply mathematical processes, with an emphasis on general cases, in non-routine contexts, and analyse and discuss these applications of mathematics.

Outcome 3

The student should be able to select and appropriately use numerical, graphical, symbolic and statistical functionalities of technology to develop mathematical ideas, produce results and carry out analysis in situations requiring problem-solving, modeling or investigative techniques or approaches.

Assessment Tasks

1. Application Task

The student is required to complete a single problem solving or modeling *application task* based on content from the Functions and Graphs, Kinematics and Vectors areas of study, with three components of increasing complexity:

- introduction of a context through specific cases or examples;
- consideration of general features of this context;
- variation, or further specification, of assumptions or conditions involved in the context to focus on a particular feature related to the context.

Weighting: This task is worth 17% of the overall grade

Time allocated to task: 4 periods

Due: Term 2, Week 5 and 6