VCE Unit 1 Specialist Maths

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 terms and concepts from the Arithmetic and Number; Geometry, Measurement and Trigonometry; Algebra and Structure; and Graphs of Linear and Non-linear Relations areas of study. They should be able to apply this knowledge to a range of related mathematical procedures to solve routine application tasks.

Outcome 2
The student should be able to apply mathematical processes in non-routine contexts, and analyse and discuss these applications in the Arithmetic and Number; Geometry, Measurement and Trigonometry; Algebra and Structure; and Graphs of Linear and Non-linear Relations areas of study.

Outcome 3
The student should be able to use technology to produce results and carry out analysis in situations requiring problem solving, modeling or investigative techniques or approaches in the areas of Arithmetic and Number; Geometry, Measurement and Trigonometry; Algebra and Structure; and Graphs of Linear and Non-linear Relations.

Assessment Tasks
1. Number Systems: Test
The student is required to complete a variety of multiple choice and short answer questions.

Weighting: 12.5% of the overall grade  Time allocated to task: 1 period
Due: Term 1 Week 4

2. Sequences and Series: Test
The student is required to complete a variety of multiple choice and short answer questions.

Weighting: 12.5% of the overall grade  Time allocated to task: 1 period
Due: Term 1 Week 8

3. Geometry in the Plane and Proof: Test
The student is required to complete a variety of multiple choice and short answer questions.
4. Geometry in the Plane and Proof: Construction
The student is required to complete a set of geometric constructions meeting given criteria.

Weighting: 2.5% of the overall grade  
Time allocated to task: 1 week (Homework task)
Due: Term 2 Week 3

4. Kinematics: Test
The student is required to complete a variety of multiple choice and short answer questions.

Weighting: 12.5% of the overall grade  
Time allocated to task: 1 period
Due: Term 2 Week 7

5. Examination
The student is required to apply knowledge and understanding of Number Systems and Recursion, Geometry, Matrices (covered in transition) and Kinematics.

Weighting: 50% of the overall grade  
Time allocated to task: 90 minutes
Due: Term 2, Week 8