VCE Unit 2 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. Vectors: Test
The student is required to complete a variety of multiple choice and short answer problems.

Weighting: 12.5% of the overall grade. Time allocated to task: 1 period
Due Date: Term 3 Week 3

2. Graphs of Non-linear Functions: Test
The student is required to complete a variety of short and extended answer questions.

Weighting: 10% of the overall grade Time allocated to task: 1 period
Due Date: Term 3 Week 8

3. Graphs of Non-linear Functions: Application Task
The student is required to apply their skills in an application task.

Weighting: 2.5% of the overall grade Time allocated to task: 1 week (Out of class)
Due Date: Term 3 Week 8
4. Transformations of Functions: Test
The student is required to complete a variety of multiple choice, short answer and analysis questions.

**Weighting:** 12.5% of the overall grade  
**Time allocated to task:** 1 period  
**Due Date:** Term 4 Week 2

5. Simulation, Sampling and Sampling Distributions: Test
The student is required to complete a variety of multiple choice and short answer problems.

**Weighting:** 10% of the overall grade  
**Time allocated to task:** 1 period  
**Due Date:** Term 4 Week 7

6. Simulation, Sampling and Sampling Distributions: Application Task
The student is required to apply their skills in an application task.

**Weighting:** 2.5% of the overall grade  
**Time allocated to task:** 1 week (out of class)  
**Due Date:** Term 4 Week 7

7. Examination
The student is required to apply knowledge and understanding of Vectors, Non-linear Graphs, Transformations of Functions and Simulation and Sampling in an end of semester examination.

**Weighting:** 50% of the overall grade  
**Time allocated to task:** 90 minutes  
**Due:** Term 4, Week 8