VCE Unit 4 Physics

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
On completion of this unit the student should be able to apply wave concepts to analyse, interpret and explain the behaviour of light. To achieve this outcome the student will draw on key knowledge outlined in Area of Study 1 and the related key science skills on pages 11 and 12 of the study design.

Outcome 2
On completion of this unit the student should be able to provide evidence for the nature of light and matter, and analyse the data from experiments that supports this evidence. To achieve this outcome the student will draw on key knowledge outlined in Area of Study 2 and the related key science skills on pages 11 and 12 of the study design.

Outcome 3
On completion of this unit the student should be able to design and undertake a practical investigation related to waves or fields or motion, and present methodologies, findings and conclusions in a scientific poster. To achieve this outcome the student will draw on key knowledge outlined in Area of Study 3 and the related key science skills on pages 11 and 12 of the study design.

Assessment Tasks
1. SAC 4 AoS 4 Test
The student is required to complete a one period VCAA styled test.

Weighting: This task is worth 6% of the overall grade
Time allocated to task: 1 period
Due: Term 3, Week 4

2. SAC 5 AoS 5 Data analysis
The student is required to visualise and analyse a number of sets of experimental data.

Weighting: This task is worth 6% of the overall grade
Time allocated to task: 1 period
Due: Term 3, Week 7

3. SAC 6 Practical Investigation
The student is required to design their own investigation from one of the areas studied in unit 3 or unit 4 and present their findings in the form of a scientific poster.

Weighting: This task is worth 8% of the overall grade
Time allocated to task: 9 periods
Due: Term 4, Week 10
4. End of Year Examination
The examination will be set by a panel appointed by the VCAA. All the key knowledge that underpins the outcomes in Units 3 and 4 and the cross-study key science skills are examinable.

**Weighting:** This task is worth 60% of the overall grade  **Time allocated to task:** 150 minutes

**Due:**  Unit 4 VCAA Written Examinations commence Term 4, Week 4 from 1/11/2017

Unit 4 Performance and Language Oral Examinations commence from 9/10/2017