

Ringwood Secondary College
2017 Course Planning Document

VCE Unit 1 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 thermodynamic principles to analyse, interpret and explain changes in thermal energy in selected contexts, and describe the environmental impact of human activities with reference to thermal effects and climate science concepts.

Outcome 2

On completion of this unit the student should be able to investigate and apply a basic DC circuit model to simple battery-operated devices and household electrical systems, apply mathematical models to analyse circuits, and describe the safe and effective use of electricity by individuals and the community.

Outcome 3

On completion of this unit the student should be able explain the origins of atoms, the nature of subatomic particles and how energy can be produced by atoms.

Assessment Tasks

1. Unit tests

Single period unit tests on thermodynamic principles, electrical circuits, and the nature of matter.

Weighting: This task is worth 40% of the overall grade **Time allocated to task:** 1 period each
Due: end of each topic

2. Practical reports

Practical activities are done, on average, once per week. 80% submission is required for this outcome in line with attendance requirements.

Weighting: This task is worth 20% of the overall grade **Time allocated to task:** 1 period
Due: Weekly

3. Homework sheets / chapter questions

Homework tasks are set, on average, weekly. 100% submission is required. Students are responsible for sourcing work they miss due to absence.

Weighting: This task is worth 20% of the overall grade **Time allocated to task:** 1 period
Due: Weekly

4. Semester Examination

Internal VCAA styled examination

Weighting: This task is worth 20% of the overall grade **Time allocated to task:** 90 minutes
Due: Term 2. Week 8