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 quantitatively compare a range of energy resources and technologies, in relation to efficiency, renewability and environmental impact.

Outcome 2
The student should be able to apply rate and equilibrium principles to predict how the rate and extent of reactions can be optimised, and explain how electrolysis is involved in the production of chemicals and in the recharging of batteries.

Outcome 3
The student should be able to design and undertake a practical investigation related to energy and present methodologies, findings and conclusions in a scientific poster.

Assessment Tasks

1 Comparison of Energy Resources
The student is required to analyse and evaluate possible energy resources, involving different chemical processes, based on a test stimulus material based test.

**Weighting:** This is worth 8% of the overall grade
**Time allocated to task:** 1 period
**Due:** Term 2, Week 1

2 Written report on one practical activity
The student is required to complete an investigation on equilibrium and complete a report on their results.

**Weighting:** This is worth 4% of the overall grade
**Time allocated to task:** 2 periods
**Due:** Term 2, Week 5

3 Written report on Electrolysis
The student is required to respond to a set of structured questions related to electrolysis.

**Weighting:** This is worth 4% of the overall grade
**Time allocated to task:** 1 period
**Due:** Term 2, Week 9

4 Scientific Poster
The student is required to complete a scientific poster on a practical investigation related to energy.

**Weighting:** This is worth 8% of the overall grade
**Time allocated to task:** 6 periods
**Due:** Term 2, Week 10 - 11