

Ringwood Secondary College
2017 Course Planning Document
VCE Unit 4 Biology

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 analyse evidence for evolutionary change, explain how relatedness between species is determined, and elaborate on the consequences of biological change in human evolution.

Outcome 2

On completion of this unit the student should be able to describe how tools and techniques can be used to manipulate DNA, explain how biological knowledge is applied to biotechnical applications, and analyse the interrelationship between scientific knowledge and its applications in society.

Outcome 3

On the completion of this unit the student should be able to design and undertake an investigation related to cellular processes and/or biological change and continuity over time, and present methodologies, findings and conclusions in a scientific poster.

Assessment Tasks

1. A report using primary or secondary data.

The student is required to write a report after comparing the DNA sequences from several species and inferring evolutionary relationships.

Weighting: This task is worth **8%** of the overall grade **Time allocated to task:** 2 periods

Due: Term 3, Week 5

2. A report of a laboratory investigation .

The student is required to write a report after conducting an experiment involving bacterial transformation.

Weighting: This task is worth **8%** of the overall grade **Time allocated to task:** 2 periods

Due: Term 3, Week 9

3. A structured scientific poster

The student is required to design and undertake an investigation related to cellular processes and present methodologies, findings and conclusions in a scientific poster.

Weighting: This task is worth **8%** of the overall grade **Time allocated to task:** 2 weeks

Due: Term 4, Week 1

School-assessed Coursework for Unit 4 will contribute 24% to the study score.

The level of achievement for Units 3 and 4 is also assessed by an end-of-year examination

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

Due: VCAA Examinations commence Term 4, Week 4