VCE Unit 1 Environmental Science

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 compare the processes and timeframes for obtaining the key inputs required for life on earth, describe the strategies for the minimization of waste product outputs, and explain how earth’s four systems interact to sustain life.

Outcome 2
The student should be able to describe the flow of matter and energy, nutrient exchange and the environmental changes in ecosystems across Earth’s four systems over different time scales.

Outcome 3
The student should be able to design and undertake an investigation related to ecosystem monitoring and/or change, and draw a conclusion based on evidence from collected data.

Assessment Tasks

1. A Logbook of Practical Activities
The students are required to complete a range of practical activities and collect in a logbook format. The students will answer a range of questions related to each practical under test conditions.

Weighting: This task is worth 10% of the overall grade  
Time allocated to task: 1 period per practical  
Due: Throughout Semester 1

2. Scientific Poster based on Student designed Practical Investigation (AoS3)
The students are required to undertake a student designed practical investigation where they will develop a question, plan a course of action that attempts to answer a question, undertakes the investigation to obtain primary data and then organises and analyses the data in the form of a scientific poster.

Weighting: This task is worth 20% of the overall grade  
Time allocated to task: 6 periods  
Due: Term 2, Week 6

3. Area of Study 1 & 2 Tests
The student is required to complete a test at the end of each area of study

Weighting: This task is worth 20% of the overall grade  
Time allocated to task:1 periods  
Due: At the conclusion of each area of study
4. Multi media Presentation
Students are required to complete a multimedia presentation on a chosen Biogeochemical Cycle and use this task show their understanding of the cycle and how matter and energy move through systems.

**Weighting:** This task is worth 10% of the overall grade
**Due:** Term 1, Week 6-7

**Time allocated to task:** 2-3 periods

5. Semester Examination
The students are required to apply knowledge and understanding of how all the earth's systems, atmosphere, biosphere, hydrosphere and lithosphere are connected. Students are required to apply knowledge and understanding of how ecosystems and the environment are affected by natural and human induced changes.

**Weighting:** This task is worth 40% of the overall grade
**Due:** Term 2, Week 8

**Time allocated to task:** 90 minutes