# Pre-approved Learning and Assessment Plan

LAP 02 - Wetlands

Stage 1 Scientific Studies

Pre-approved learning and assessment plans are for *school use only*.

* Teachers may make changes to the plan, retaining alignment with the subject outline.
* The principal or delegate endorses the use of the plan, and any changes made to it, including use of an addendum.
* The plan does not need to be submitted to the SACE Board for approval.

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| School |  | Teacher(s) |  |

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| SACE school code | | |  | Year |  | Enrolment code | | | | |  | Program variant code (A–W) |
| Stage | Subject code | | | No. of credits (10 or 20) |
|  |  |  | 2021 | **1** | **S** | **T** | **U** | **10** |  |

Addendum – changes made to the pre-approved learning and assessment plan

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| Describe any changes made to the pre-approved learning and assessment plan to support students to be successful in meeting the requirements of the subject. In your description, please explain:  what changes have been made to the plan   * the rationale for making the changes * whether these changes have been made for all students, or for individuals within the student group. |

Endorsement

The use of the learning and assessment plan is approved for use in the school. Any changes made to the plan support student achievement of the performance standards and retain alignment with the subject outline.

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| Signature of principal or delegate |  | Date |  |

# Assessment overview

Stage 1 Scientific Studies – 10 credits

The table below provides details of the planned tasks and shows where students have the opportunity to provide evidence for each of the specific features of all of the assessment design criteria.

Assessment Type 1: Inquiry Folio

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| Assessment details | Assessment design criteria | | Assessment conditions  (e.g. task type, word length, time allocated, supervision) |
| IAE | KA |
| **SIS Analysis and Interpretation Task:**  Students interrogate previous year’s water quality data. Questions require students to interpret data, formulate and justify conclusions, evaluate investigation design, collect and represent data, and evaluate conclusions. | 3, 4 | 1 | Individual, in class, 3 lessons.  Maximum 2 A4 pages. The response is prepared electronically including using Excel. |
| **SIS Design Task:**  Students design and conduct a practical investigation to measure a specific water quality characteristic within the wetland over time. This is designed to build upon and expand the existing dataset. They deconstruct the problem, consider a range of factors, consider ways of testing different factors, justify a design and implement an investigation to test one of the factors. They prepare a report on their investigation. In this report, they analyse the results, evaluate the procedures and formulate and justify a conclusion. | 1, 2, 3, 4 | 2, 4 | Group deconstruction, Investigation is conducted in groups. The report is prepared individually.  Maximum 4 A4 pages – approximately 2.5 pages for design; 1.5 pages for evaluation.  Design and report are submitted electronically. |
| **SHE inquiry:**  Students investigate a relationship between a measurable water quality characteristic and the overall health of an aquatic ecosystem, with a focus on Science as a Human Endeavour. The scientific communication must emphasise one of the SHE key concepts described in the subject outline. They access information from different sources, select relevant information, analyse their findings, and develop and justify their own conclusions from the investigation. |  | 1, 3, 4 | 3 weeks to complete. Class time provided for research and to support students.  Word Count: maximum of 1000 words, if written, 6 minutes for an oral presentation, or equivalent for a multimodal product. |

Assessment Type 2: Collaborative Investigation

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| Assessment details | Assessment design criteria | | Assessment conditions  (e.g. task type, word length, time allocated, supervision) |
| IAE | KA |
| **Collaborative Inquiry – group design:**  Students work in groups to design a measuring system for water flow into and out of the wetlands system. The students create a design for a system, prototype it, evaluate the prototype and develop an implementation plan.  They record their individual contribution and progress in a journal to reflect their ideas, learning and development of the prototype. They also record the primary data collected and analyse it for meaning.  After testing the prototype(s), students individually prepare a presentation that evaluates the prototype(s) and the results/outcome, and the effectiveness of the collaboration. | 1, 2, 3, 4, 5 |  | Personal journal – maximum 8 A4 pages.  Pitch, defence, justification – either recorded or multimedia  Maximum 3 minutes. |

*Four assessments.**Please refer to the Stage 1 Scientific Studies subject outline.*