# School-developed Learning and Assessment Plan

Stage 2 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) |
|  |  |  | 2024 | **2** | **S** | **T** | **U** | **20** |  |

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.
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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

Editor’s note:

This template contains the required components for Stage 2 Scientific Studies. To use this form, schools must customise the tasks where there are XXXs to reflect the focus of their program. In addition, schools add details for appropriate SIS Tasks 1, 2, and 3. [Text boxes should be deleted.]

Stage 2 Scientific Studies – 20 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 – weighting 50%

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| --- | --- | --- |
| Assessment details | Assessment design criteria | Assessment conditions (e.g. task type, word length, time allocated, supervision) |
| IAE | KA |
| **SIS Design Proposal for Individual Inquiry (prior to Assessment Type 3)**In preparation for their external assessment, students individually prepare a proposal for an investigation for which the outcome is uncertain. This investigation focusses on XXXXXXX and student XXXXXX. The design proposal includes: a question/hypothesis, problem/need, identification of variables and discussion of all variables, an outline (with reasons) of an approach or method or engineering design of a model, a plan for conducting the research. | 1 | 1,4 | Individual proposal.Maximum 4 x A4 pages if written or equivalent in multimodal form. Minimum font size 10, no page reduction. |
| **SIS Task 1**  |  |  | Combined total number of pages for these three tasks is 12 single-sided A4 pages in 10 point font, no page reduction. |
| **SIS Task 2** |  |  |  |
| **SIS Task 3** |  |  |  |
| **SHE Task**Students choose a topic related to XXXXXXXX and investigate the role of new technologies, communication, the influence of other areas of science, and the beneficial or unexpected consequences. They explore and understand the connection between science and society through this topic. Based on their investigation the present a report following the guidelines in the subject outline. |  | 1,3, 4 | Individual.Maximum 1500 words or 10 minutes if oral, or equivalent in multimodal form. |

Assessment Type 2: Collaborative Inquiry – weighting 20%

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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:****Design**Students work in groups to choose an investigation of interest, within this framework (XXXXXXXXXXXXX), for which the outcome is uncertain. They design their inquiry, and individually record in a personal journal:* their initial thinking, ideas and individual deconstruction of the problem
* their own contribution to the project and progress along with evidence and supporting documentation on the group’s application of collaborative skills to reflect their learning and development of the method/model
* a record of the primary data collected, their analysis and interpretation, and evaluate the procedures and the model, formulating a conclusion with justification and consideration of possible limitations.

**Evaluation (recorded presentation)**After completing the investigation, students individually complete a recorded presentation that evaluates the effectiveness of the collaboration within the group across all parts of the investigation. | 1,2,3,4,5 | 2 | **Collaborative Inquiry Design****Personal journal** – maximum 12 one-sided A4 pages, min 10 font size, no page reduction.**Collaborative Inquiry Evaluation (recorded presentation)**(either recorded or multimedia) – maximum 5 minutes. |

Assessment Type 3: Individual Inquiry – weighting 30%

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| --- | --- | --- |
| Assessment details | Assessment design criteria | Assessment conditions (e.g. task type, word length, time allocated, supervision) |
| IAE | KA |
| **External assessment**Students undertake one individual inquiry using the proposal developed and assessed in Assessment Type 1: Inquiry Folio.Students use the design proposal to conduct an investigation for which the outcome is uncertain. They select either a scientific method or the engineering design process to conduct an investigation based on a question, problem, need or opportunity identified by each student.Students present an individual report that includes: an introduction, summary of design including hypothesis, modifications, results of the practical, analysis of results, identification of trends and linking results to relevant discipline knowledge, evaluation of method/model used, identification of sources of uncertainty, conclusion with justification of the limitations of the investigation, citations and referencing. | 2,3,4 | 1,4 | Individual report, maximum of 1500 words or equivalent in multimodal form. Only the following sections are included in the word count:* introduction
* analysis of results
* evaluation of procedures
* conclusion with justification
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*Seven assessments.**Please refer to the* Stage *2 Scientific Studies subject outline.*