PRE-APPROVED LEARNING AND ASSESSMENT PLAN

**Stage 1 Digital Technologies**

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) |
|  |  |  |  | **1** | **D** | **G** | **T** | **10** | **A** |

**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 |  |

Stage 1 Digital Technologies (10-credit)

Assessment Overview

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 and Weighting** | **Focus areas: Programming / Advanced Programming**  **Details of assessment** | **Assessment Design Criteria** | | | **Assessment conditions**  (e.g. task type, word length, time allocated, supervision) |
| --- | --- | --- | --- | --- | --- |
| **Computational Thinking** | **Development and Evaluation** | **Research and Ethics** |
| **Assessment Type 1: Project Skills**  **Weighting 70%** | **Investigation** (Collaborative) – Exploring Eco Systems and Ethics  In groups of 2-3, students identify and research the hazards and opportunities (treasures) that can be found within an Eco System (Ocean, Jungle, Desert, etc), with the future intent of creating a game that teaches children of the dangers and joys of that environment. Students collect data from a variety of sources (including surveys) and determine the most common elements. Students also research ethical considerations associated with game creation. Students identify potential storyboards of gaming ideas. | CT1 | DE3 | RE1 | 2 weeks of class time.  Students summarise findings and ethical considerations and present their findings in a suitable format.  Individually, students create a design brief. |
| **Programming** (Individual) – Learning Basic Programming Skills  Students learn the skills to create the layout, sprites and basic placement and movement of objects within a role-playing game (RPG) (GameMaker Studio, RPG Maker, Scratch). They analyse algorithms learnt and extensions required in applying them to a game. They identify the main components of their game and create a design brief. They use deconstruction, abstraction and algorithmic design to identify the necessary features and components of basic algorithms and objects and create a design plan. Students use the design plan to create the basic skeleton of the game, adapting the design as issues or new ideas arise. | CT2  CT3 | DE1 |  | 5 weeks of class time.  Design brief and plan and skeleton of game, including an analysis of the basic algorithms required to implement.  Video presentation (maximum 5 minutes) that demonstrates the game. |
| **Product Design Plan** (Individual) – Advanced Game Features  Students use the information explored in Task 1 and Task 2, and learn additional skill development to design a more advanced educational game for children. Students will produce and present a more detailed design concept, which clearly shows modifications and extensions to their original project, which incorporates more advanced programming concepts, including arrays, randomization, collision detection and avoidance. The product design must be complimented by a proposed development portfolio outlining their design process. | CT1  CT3 | DE1 |  | 3 weeks of class time.  Digital solution design plan. |
| **Assessment Type 2: Digital Solutions**  **Weighting**  **30%** | **Advanced Programming** (Individual) – Creating an Advanced RPG Game  Students apply more advanced techniques to create a more advanced RPG game based on the skills and research performed in previous tasks. Students use the design plan to alter their existing game skeleton, adapting the design as issues or new ideas arise. | CT2  CT3 | DE1 DE2 | RE1 | 5 weeks of class time.   1. Design plan, including design changes. 2. Digital solution.   Presentation and evaluation of digital solution (maximum 3 minutes). |

***Four assessments.*** *Please refer to the Stage 1 Digital Technologies subject outline.*