# Pre-approved Learning and Assessment Plan

Stage 2 Material Products (context: Timber )

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.

|  |  |  |  |
| --- | --- | --- | --- |
| School |  | Teacher(s) |  |

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| SACE school code | | |  | Year |  | Enrolment code | | | | |  | Program variant code (A–W) |
| Stage | Subject code | | | No. of credits (10 or 20) |
|  |  |  |  | **2** | **M** | **M** | **A/B** | **10** |  |

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

|  |
| --- |
| 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.

|  |  |  |  |
| --- | --- | --- | --- |
| Signature of principal or delegate |  | Date |  |

# Assessment overview

Stage 2 Material Products – 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: Skills and Applications Tasks – weighting 20%

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Assessment details | Assessment design criteria | | | | Assessment conditions  (e.g. task type, word length, time allocated, supervision) |
| I | Pl | Pr | E |
| Specialized Skills Application  Production and Finishing of a Mirror Frame  Production of a timber mirror frame. Students to show evidence of the application of the following skills and knowledge to produce the mirror frame safely and effectively.   * Understanding of solid timber properties demonstrated, e.g. grain, hardness, workability * Safe and effective use of machinery and equipment in the workshop. * Jointing of solid timber demonstrated within specifications supplied.   Planning of construction and layout of jointed elements. |  | 2 | 1,2,3 |  | Supervised: 2 weeks.  Completed mirror presented to specification with drawings and planning documentation. |
| Materials Application  Students will investigate the properties of 5 different timber products. They will investigate solid timbers, engineered timber products, and critically analyse through research and testing the appropriate uses and the properties of each. Testing will be both quantitative and qualitative with appropriate documentation provided. Students will discuss the safety issues involved in the use of these materials and the environmental impacts of the production processes involved. | 3,4,5 | 3 |  | 3,4 | 3 weeks. Some supervised lessons to verify student work. Students are to prepare an investigation, maximum of 350 words written or a verbal presentation of at least 5 minutes |

Assessment Type 2: Product – weighting 50%

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Assessment details | Assessment design criteria | | | | Assessment conditions  (e.g. task type, word length, time allocated, supervision) |
| I | Pl | Pr | E |
| Product  Students will identify a need for a designed product and prepare a design brief, investigate possible solutions, prepare a detailed design and complete a costing of their product in their Folio task. The major project will be the realization of that product. Students will negotiate their individual project with the teacher.  Students will keep a product record including evidence of:   * Skills learned and developed * Selection of materials and design development * Processes used in construction * Safe use of tools and machinery * Changes to the design brief and reflection on the technical difficulties encountered. |  | 1,2, | 1,2,3 | 1,3 | 8 weeks.  Supervised use of workshop time – maximum of 5 lessons per week.  Product record of major project in written form including photographs and drawings, which evidence learning and procedural steps.  Use of computer room to maintain the product record. |

Assessment Type 3: Folio – weighting 30%

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Assessment details | Assessment design criteria | | | | Assessment conditions  (e.g. task type, word length, time allocated, supervision) | |
| I | Pl | Pr | E |
| External assessment (two assessments for the folio)  *Product design (documentation and analysis)*  *Students create a design brief and analyse their investigation and planning for their major product, based on the skills and activities outlined in the section ‘The Design Process’ section of the Learning Scope and Requirements .* The design brief should include a statement of intent, functional outcomes, aesthetic considerations, and constraints. It can be presented in dot point form.  The investigating part of the design process should include an investigation into the impact on individuals, society, and/or the environment of technological practices related to the type of product that the student is designing. The analysis involved in investigation can be included in the product design documentation or in the product evaluation. | 1,2,3,  4,5 | 1,2,3 |  | 1,2,3,4 | The combined evidence should be a maximum of 2000 words if written, or a maximum of 12 minutes recorded oral documentation, analysis, and evaluation, or the equivalent in multimodal form. |
| *Product evaluation:*  *Students evaluate their producing skills, using evidence from the major product record in Assessment Type 2, and evaluate their realised major product.* The evaluation should include:   * a critical comparison of the realised product with the requirements of the design brief, and an explanation of and justification for any changes made * a review of criteria, standards, reliability, safety, quality, and cost-effectiveness * reflection on outcomes, with recommendations for possible improvement or redevelopment of designs or procedures * analysis of the impact of the product on individuals, society, and/or the environment (if not part of product design documentation) * evaluative observations about the student’s own skills development.   Evidence of development, with supporting written or oral summaries that explain, analyse, and evaluate the process and product, could take the form of:   * all or sections of the product record * photographic or electronic or digitally generated materials * audiovisual evidence * materials * products * models * sketches, diagrams, or annotations.   Oral summaries may emerge from teacher-led discussion questions. |

*Five assessments.**Please refer to the Stage 2 Design and Technology subject outline.*