**Materials Design and Technology | General Year 12 | Summary of minor syllabus changes for 2024**

The content identified by ~~strikethrough~~ has been deleted from the syllabus and the content identified in *italics* has been revised in the syllabus for teaching from 2024.

**Organisation of content**

**Use of technology**

**Production management**

Various skills are required to successfully manage the production process. ~~Performance must be evaluated throughout.~~ Environmental factors, including management and reduction of waste and energy efficiencies must be considered. Project management of ~~time,~~ task*s* and materials ~~management,~~ as well as task modification ~~and record keeping,~~ are employed throughout the production process. Therefore, management skills, principles of quality assurance, ongoing evaluation~~,~~ and testing are all important factors in ensuring quality outcomes. Communication skills are also important. Working collaboratively with team members~~, maintaining work schedules and time plans,~~ and producing various oral and written communications are all important aspects of the production process.

**Unit 3**

**Design**

**Design fundamentals and skills**

* devise
  + production plans
    - materials list
    - costing for all materials and components
    - ~~time line for plan~~ stages of production

**Use of technology**

**Skills and techniques**

* ICT, folio development and communication skills
  + photography – ~~ongoing record of progress and processes used and~~ final product
  + documenting presentations and evaluations
* context appropriate drawing and relevant technical information to produce the final product to demonstrate:
  + ~~design and making specification sheets~~

**Production management**

* production planning
  + ~~maintain a production plan~~
  + ~~maintain time management while~~ using tools, equipment and machinery to complete production
    - follow instructions from plans
    - maintain safety requirements
  + ~~record changes to materials lists or costing~~
* ongoing evaluation techniques: ~~diary, journal or portfolio notes and use photography, to record ongoing~~ progress/decision changes made to the project

**Metal context content**

**Use of technology**

**Skills and techniques**

* select and safely apply technical skills using a range of tools and machinery, that *may* ~~could~~ include …
* apply correct methods of ~~gas and electric~~ metal welding

**Textiles context content**

**Materials**

**Nature and properties of materials**

* investigation of natural fibres – cotton, wool, ~~silk~~
* fabric~~s~~ *names* ~~and fabric blends~~
* care
* properties

**Use of technology**

**Skills and techniques**

* ~~identify the parts of:~~
* ~~sewing machine~~
* ~~overlocker~~

**Unit 4**

**Common Content**

**Design**

**Design fundamentals and skills**

* investigate
  + application of design fundamentals and factors affecting design

|  |  |
| --- | --- |
| * aesthetics | * ~~critical measurements~~ |
| * function | * environmental impact and considerations |
| * cost | * safety |

* + production plan
    - materials list
    - estimated and actual costing for all materials and component
    - production plan ~~and time line~~ *deadlines*
* evaluate
  + design and production processes
  + production plan/journal/diary and accompanying photographic evidence to record ~~ongoing~~ evaluation

**Use of technology**

**Skills and techniques**

* ICT, folio and communication skills *in:*
  + client and market research techniques
  + client presentation techniques
  + photography~~, ongoing record of progress and processes used,~~ *-* final product
  + *annotated photographs of all views of the final product and all features of the final product*
* develop context appropriate drawings and relevant technical information to produce the final product
  + ~~design and making specification sheets~~

**Production management**

* production planning
  + ~~maintain a detailed production plan~~
  + ~~maintain time management while~~ using tools, equipment and machinery to complete production
    - adhere to sequential instructions
    - apply safety and risk management
  + record changes to materials lists or costing
  + ~~record regular journal/diary entries~~
* ~~ongoing~~ evaluation techniques: ~~diary, journal or portfolio~~ notes and use of photography to record ~~ongoing progress/~~decision changes made to the project, *where applicable considering client consultation*

**Metal context content**

**Materials**

**Nature and properties of materials**

* applications of *at least two* of the following metal finishes

**Use of technology**

**Skills and techniques**

* select and safely apply technical skills using a range of tools and machinery that could include:
* ~~pedestal grinder~~

**Textiles context content**

**Materials**

**Nature and properties of materials**

* fibres
* synthetics fibres – polyester
* regenerated fibres – rayon

|  |  |
| --- | --- |
| * classification and origin | * fabric~~s and fabric blends~~ names |
| * properties | * environmental impacts |
| * care |  |

* fabric ~~types and classifications~~ *structures*

**Use of technology**

**Skills and techniques**

* investigate a range of embellishment and manipulation techniques~~. Apply at least two techniques to a practical project~~ *selected* from: ~~the following:~~

### Assessment table – Year 12

**Design (Practical portfolio)**

~~journal~~

**Production (Practical)**

~~journal~~

**Appendix 1 – Grade descriptions Year 12**

**A – Production**

Provides *documentary* evidence of ~~regular, ongoing evaluation of processes and implements~~ changes and modifications derived from ~~this~~ *ongoing* evaluation.

**B – Design**

Develops a sequence of manufacture and evaluation ~~notes of project process and the~~ *of the* end product against the requirements of the design brief criteria.

**B – Production**

~~Provides evidence of ongoing evaluation of processes and, w~~ *W*ith assistance, implements changes and modifications derived from ~~this~~ *ongoing* evaluation.