

School administrators and Heads of Learning Area – Materials Design and Technology and teachers of Materials Design and Technology General Year 12 are requested to note for 2024 the following minor syllabus changes. The syllabus is labelled 'For teaching from 2024'.

## 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,~~ tasks 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~~
- fabrics *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
    - properties
    - care
  - fabrics and fabric blends names
  - environmental impacts
- ~~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, with assistance, implements changes and modifications derived from this *ongoing* evaluation.