



**Australian Government**

**Department of Education, Employment and Workplace Relations**

# **MEM19041A Experiment with jewellery or object designs**

**Release: 1**

## **MEM19041A Experiment with jewellery or object designs**

### **Modification History**

Not applicable.

### **Unit Descriptor**

This unit of competency covers the skills and knowledge required to apply technical and design skills to trial experimental designs and techniques in jewellery or object design. It targets the creative process to inform development of design concepts.

### **Application of the Unit**

This unit applies to jewellery or object designers producing innovative concepts for custom production or exhibition. Application of this unit involves experimentation with materials and construction processes to develop design concepts, and testing of concept viability.

### **Licensing/Regulatory Information**

Not applicable.

### **Pre-Requisites**

Not applicable.

### **Employability Skills Information**

This unit contains employability skills.

### **Elements and Performance Criteria Pre-Content**

Not applicable.

### **Elements and Performance Criteria**

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|---|--|
| 1 Conduct research into jewellery and object design | 1.1 Confirm objectives and parameters for design process   |
|   | 1.2 Access and analyse local and international information on jewellery and object design, materials and production trends |
|   | 1.3 Identify trends in local and international market conditions   |

- 1.4 Determine impact of sustainability considerations on jewellery and object design
- 1.5 Identify opportunities for jewellery or object design
- 1.6 Determine funding opportunities for design development
- 1.7 Identify occupational health and safety (OHS) considerations for design
- 2 Apply creative process to develop design concepts
  - 2.1 Examine possible future directions for jewellery and object design
  - 2.2 Scope future directions to guide concept development
  - 2.3 Use creative design tools and techniques to develop concepts for jewellery or object designs
  - 2.4 Experiment with materials to further develop design concept
  - 2.5 Experiment with jewellery or object construction techniques to further develop design concept
  - 2.6 Apply knowledge of design elements and principles to design concepts
  - 2.7 Document processes and outcomes of experimentation
  - 2.8 Select design concepts for testing
- 3 Assess design concepts
  - 3.1 Test design concepts with selected personnel, obtain feedback and integrate as appropriate
  - 3.2 Determine production processes and requirements for concepts and assess viability of design concepts
  - 3.3 Develop preliminary costings
  - 3.4 Conduct tests to assess quality of design
  - 3.5 Assess design concepts against project objectives and parameters
  - 3.6 Determine viability of jewellery or object designs in current market and assess expected response of intended audience
  - 3.7 Select concept for development

- 4 Confirm and document design proposal
  - 4.1 Review and rework design concept
  - 4.2 Determine and document design specifications and production plan
  - 4.3 Produce proposal for jewellery or object design, including supporting information and documentation

## Required Skills and Knowledge

Required knowledge includes:

- range and uses of jewellery and object production techniques
- calculations and measurements
- reasons for selecting particular materials, construction methods, manufacturing and finishing techniques
- creative design tools and processes
- principles and elements of design
- planning and process stages
- working properties of precious and non-precious metals and/or other materials
- fine detail manufacturing processes
- workplace hazards and emergency procedures
- various components of jewellery items
- appropriate measuring devices and recording methods

Required skills include:

- developing designs
- production skills in order to experiment with design concepts
- selecting appropriate materials and manufacturing techniques
- identifying alternative metals/materials
- determining design specifications
- applying creative processes
- documenting design specifications
- conducting research
- assessing and testing design concepts
- communicating design and construction information
- working with others to develop designs

## Evidence Guide

<b>Overview of assessment</b>	A person who demonstrates competency in this unit must be able to experiment with a range of materials and processes to develop and select a design concept.
<b>Critical aspects for assessment and evidence required to demonstrate competency in this unit</b>	<p>Assessors must be satisfied that the candidate can competently and consistently:</p> <ul style="list-style-type: none"> <li>• implement OHS workplace procedures and practices, including the use of risk control measures</li> <li>• apply skill and knowledge in materials and construction processes to experiment with and develop design concepts</li> <li>• test and assess the viability of design concepts</li> <li>• use and produce design documentation.</li> </ul>
<b>Context of and specific resources for assessment</b>	<ul style="list-style-type: none"> <li>• Assessment may occur on the job or in an appropriately simulated environment. Access is required to real or appropriately simulated situations, including work areas, materials and equipment, and to information on workplace practices and OHS practices.</li> <li>• Where applicable, reasonable adjustment must be made to work environments and training situations to accommodate ethnicity, age, gender, demographics and disability.</li> <li>• Access must be provided to appropriate learning and/or assessment support when required. Where applicable, physical resources should include equipment modified for people with disabilities.</li> </ul>
<b>Method of assessment</b>	<ul style="list-style-type: none"> <li>• Assessment must satisfy the endorsed Assessment Guidelines of the MEM05 Metal and Engineering Training Package.</li> <li>• Assessment methods must confirm consistency and accuracy of performance (over time and in a range of workplace relevant contexts) together with application of underpinning knowledge.</li> <li>• Assessment methods must be by direct observation of tasks and include questioning on underpinning knowledge to ensure its correct interpretation and application.</li> <li>• Assessment may be applied under project-related conditions (real or simulated) and require evidence of process.</li> <li>• Assessment must confirm a reasonable inference that competency is able not only to be satisfied under the particular circumstance, but is able to be transferred</li> </ul>

	<p>to other circumstances.</p> <ul style="list-style-type: none"><li>• Assessment may be in conjunction with assessment of other units of competency where required.</li></ul>
<b>Guidance information for assessment</b>	Assessment processes and techniques must be culturally appropriate and appropriate to the language and literacy capacity of the candidate and the work being performed.

## Range Statement

<b>Objectives for design process</b>	<p>Objectives for design process may include:</p> <ul style="list-style-type: none"> <li>• exhibition</li> <li>• sale</li> <li>• presentation or display</li> <li>• creative expression</li> <li>• commercial production</li> <li>• custom production</li> <li>• demonstrate ability or for portfolio</li> <li>• develop design skills</li> <li>• innovate new design concepts</li> <li>• marketing or promotion</li> </ul>
<b>Parameters for design process</b>	<p>Parameters for design process may include:</p> <ul style="list-style-type: none"> <li>• availability of materials and equipment</li> <li>• budget</li> <li>• timelines</li> <li>• required criteria</li> <li>• design brief</li> </ul>
<b>Market conditions</b>	<p>Market conditions may include:</p> <ul style="list-style-type: none"> <li>• fashion trends</li> <li>• price and availability of materials and other resources</li> <li>• disposable income of target market</li> <li>• purchasing preferences</li> </ul>
<b>Sustainability considerations</b>	<p>Sustainability considerations may include:</p> <ul style="list-style-type: none"> <li>• impact on environment (e.g. generation of waste and by-products resulting from production or end use, and use of precious or rare materials)</li> <li>• impact on greater society (e.g. health risks to those obtaining materials or providing resources, and community values with regard to design features)</li> <li>• impact on economy (e.g. contribution to financial wellbeing of community)</li> </ul>
<b>Future directions for jewellery and object designs</b>	<p>Future directions for jewellery and object design may include:</p> <ul style="list-style-type: none"> <li>• new uses and applications</li> <li>• new materials</li> <li>• new technologies and equipment</li> <li>• new markets or market conditions</li> <li>• changes to pricing, distribution or other marketing</li> </ul>

	variables
<b>Elements and principles of design</b>	<p>Design elements include:</p> <ul style="list-style-type: none"> <li>• colour</li> <li>• direction</li> <li>• form</li> <li>• light</li> <li>• line</li> <li>• mass</li> <li>• point</li> <li>• shape</li> <li>• size</li> <li>• space</li> <li>• texture</li> <li>• time</li> <li>• tone</li> <li>• value</li> </ul> <p>Design principles include:</p> <ul style="list-style-type: none"> <li>• balance</li> <li>• contrast</li> <li>• dominance</li> <li>• emphasis</li> <li>• harmony</li> <li>• movement</li> <li>• pattern</li> <li>• proportion</li> <li>• rhythm</li> <li>• unity</li> </ul>
<b>Creative design tools and techniques</b>	<p>Creative design tools and techniques may include use of:</p> <ul style="list-style-type: none"> <li>• colour wheels</li> <li>• collage</li> <li>• materials board</li> <li>• mind mapping</li> <li>• drawings (hand drawings and electronic)</li> <li>• pictures, photographs and images</li> <li>• discussions with others</li> <li>• models</li> <li>• exhibitions</li> <li>• examination of jewellery and objects</li> </ul>
<b>Design tests</b>	<p>Design tests may include, but are not limited to:</p>



	<ul style="list-style-type: none"> <li>• market feedback</li> <li>• testing strength of components and whole piece</li> <li>• development and testing of prototypes or models</li> <li>• colour fastness</li> <li>• testing of fixing mechanisms, glues and finishes</li> <li>• protection of precious components</li> <li>• transportability</li> </ul>
<b>Design documentation</b>	<p>Design documentation may include:</p> <ul style="list-style-type: none"> <li>• drawings and illustrations</li> <li>• photographs</li> <li>• specifications</li> <li>• production plan</li> </ul>
<b>OHS considerations</b>	<p>OHS considerations may include:</p> <ul style="list-style-type: none"> <li>• legislation</li> <li>• protective equipment</li> <li>• material safety management systems</li> <li>• hazardous substances and dangerous goods code</li> <li>• local safe operation procedures</li> <li>• award provisions</li> </ul>

## Unit Sector(s)

Jewellery and horological

## Custom Content Section

Not applicable.