

Higher National Unit Specification

General information for centres

Unit title: Furniture: Materials

Unit code: F0XJ 34

Unit purpose: This Unit is designed to introduce candidates to a range of materials commonly employed in the furniture industry and their properties. Materials will include timber-based upholstery and wood finishing materials.

On completion of the Unit the candidate should be able to:

- 1 Analyse the properties and uses of furniture materials.
- 2 Select appropriate materials to meet a given specification.
- 3 Estimate and cost the materials required for a given specification.

Credit points and level: 1 HN Credit at SCQF level 7: (8 SCQF credit points at SCQF level 7*)

**SCQF credit points are used to allocate credit to qualifications in the Scottish Credit and Qualifications Framework (SCQF). Each qualification in the Framework is allocated a number of SCQF credit points at an SCQF level. There are 12 SCQF levels, ranging from Access 1 to Doctorates.*

Recommended prior knowledge and skills: Access to this Unit is at the discretion of the centre. However, candidates would benefit from having studied furniture making at SCQF level 5 or 6.

Core Skills: There are opportunities to develop the Core Skills of in IT, Numeracy and Problem Solving at SCQF level 5 this Unit, although there is no automatic certification of Core Skills or Core Skills components.

Context for delivery: If this Unit is delivered as part of a Group Award, it is recommended that it should be taught and assessed within the subject area of the Group Award to which it contributes.

Assessment: In Outcome 1 candidates will analyse the properties and use of eight timber-based, six upholstery and four wood finishing materials. In Outcome 2 candidates will select materials for a given brief/s. In Outcome 3 candidates will estimate the material requirements and costs for a given specification.

Higher National Unit specification: statement of standards

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The sections of the Unit stating the Outcomes, knowledge and/or skills, and Evidence Requirements are mandatory.

Where evidence for Outcomes is assessed on a sample basis, the whole of the content listed in the knowledge and/or skills section must be taught and available for assessment. Candidates should not know in advance the items on which they will be assessed and different items should be sampled on each assessment occasion.

Outcome 1

Analyse the properties and uses of furniture materials

Knowledge and/or skills

- ◆ Types of materials: timber-based, upholstery, wood finishing
- ◆ Use of materials
- ◆ Properties of materials

Evidence Requirements

Candidates will need to provide evidence to demonstrate their knowledge and/or skills by selecting a range of furniture materials and providing an analysis of their uses and properties. The range of materials should include the following samples:

- ◆ eight timber-based
- ◆ six upholstery
- ◆ four wood finishing

Each sample or visual should be accompanied by a description, an example of its use and technical information which includes an accurate synopsis of material properties.

Assessment guidelines

The candidates could gather samples into a portfolio or sample box which could be added to during the course of their studies. Each item of material should be laid out and indexed in an easily accessible way to encourage the candidate to use it throughout their course.

Part of the portfolio prepared for this Outcome will be used in Outcomes 2 and 3.

Higher National Unit specification: statement of standards (cont)

Unit title: Furniture: Materials

Outcome 2

Select appropriate materials to meet a given specification

Knowledge and/or skills

- ◆ Material properties
- ◆ Use of materials

Evidence Requirements

Candidates will need to provide evidence to demonstrate their knowledge and/or skills by selecting appropriate timber-based, upholstery and wood finishing materials to meet a given specification/s. The selection should be based on:

- ◆ correct identification of materials required
- ◆ accurate identification of the properties required of materials
- ◆ justification for use

Assessment guidelines

This Outcome could be assessed by one case study encompassing timber based, upholstery and wood finishing materials or by three separate case studies — one for each type of material. The candidate could select the materials from those analysed in Outcome 1.

This Outcome can be combined with Outcome 3.

Outcome 3

Estimate and cost the materials required for a given specification

Knowledge and/or skills

- ◆ Calculation skills
- ◆ Measurement skills
- ◆ Material standard sizes
- ◆ Availability of material
- ◆ Wastage
- ◆ Cost

Evidence Requirements

Candidates will need to provide evidence to demonstrate their knowledge and/or skills by showing that they can produce an estimate of material requirements, along with costs and availability of materials, to meet a given specification. Candidates should provide information on how the calculations for material usage (including reference to wastage) and the costs have been determined.

A maximum of two errors would be allowed.

Higher National Unit specification: statement of standards (cont)

Unit title: Furniture: Materials

Assessment guidelines

The candidates could add to the information produced for Outcome 2 by providing a materials specification list and estimating the cost of materials involved. This could be evidenced by asking the candidate to complete a pro forma document.

Administrative Information

Unit code: F0XJ 34

Unit title: Furniture: Materials

Superclass category: WK

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Version	Description of change	Date

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Higher National Unit specification: support notes

Unit title: Furniture: Materials

This part of the Unit specification is offered as guidance. The support notes are not mandatory.

While the exact time allocated to this Unit is at the discretion of the centre, the notional design length is 40 hours.

Guidance on the content and context for this Unit

This Unit is mandatory within the HNC/D Furniture Group Award framework. It should be delivered early in course. Classroom based access to computers is recommended for research. A sound investigation into a range of materials is recommended.

Outcome 1 and 2

Candidates should learn about different types of materials. Timber-based materials should include hardwoods, softwoods and sheet materials. Upholstery materials should include covering materials filling materials and suspensions. Wood finishing materials should include oil, wax, French polish, stains and lacquer. The properties of each of these materials should be researched and candidates should investigate examples of their use within the furniture industry.

Material properties should include shelf life, pot life, appearance, strength, stability, colour texture, resilience, durability, and resistance to deterioration. Suitability of materials for use in particular situations eg environmental conditions, compatibility and movement and stability should be discussed.

Outcome 3

Candidates should be encouraged to cost work from the earliest stage. Price ranges of materials should be investigated as part of the Unit. Minimum quantities and Unit costs should also be taken into account. Candidates should also ensure availability of materials recommended eg order times,, delivery constraints, special licences etc. The costing should take into account, standard sizes of materials available eg width of fabrics, repeat of pattern, size of timber, etc and should take account of possible wastage. Candidates would be expected to show how they had arrived at final costing figures but would not be expected to show detailed calculations which may be carried out using calculators or computers.

Candidates should be given the opportunity to choose and cost materials for a variety of small projects throughout the Unit.

Guidance on the delivery and assessment of this Unit

This Unit should be delivered at the beginning of an HNC/D Furniture course.

The candidates could be encouraged to gather material samples into a portfolio or sample box which could be added to during the course of their studies. Each item of material should be laid out and indexed in an easily accessible way to encourage the candidate to use it throughout their course.

Higher National Unit specification: support notes (cont)

Unit title: Furniture: Materials

A variety of timber-based, upholstery and wood finishing materials should be looked at and analysed in Outcome 1.

In Outcomes 2 and 3 the candidates could be given a specification/case study which asks for recommended materials, justification for use, material requirements and costs as well as an indication of availability. This could be one case study encompassing timber-based, upholstery and wood finishing materials or it could be three separate case studies – one for each type of material. The candidate could select the materials from those previously analysed in Outcome 1.

A materials specification list could be produced for Outcome 3. This, along with an estimate of the costs, could be evidenced by asking the candidate to complete a pro forma document.

Opportunities for developing Core Skills

The Core Skill of IT may be developed in Outcomes 1 and 3. Candidates should access the internet to research/investigate different materials and their properties. The use of digitised images may be used in Outcome 1. Spreadsheet and word processing software may be used in Outcome 3 to carry out calculations and complete pro forma documents. The Core Skill of Numeracy, Using Number, can be developed in Outcome 3 where candidates have to work out costs and material requirements, including wastage. Problem solving will be developed in Outcome 2 where candidates are asked to identify the factors involved in a specification, assess the relevance of these factors and develop an approach to deal with the given factors.

Open learning

It would be possible undertake most of this Unit by Open Learning. However, it would require planning by the centre to ensure the sufficiency and authenticity of candidate evidence.

For further information and advice, please refer to the SQA guide *Assessment and Quality Assurance for Open and Distance Learning* www.sqa.org.uk.

Candidates with disabilities and/or additional support needs

The additional support needs of individual candidates should be taken into account when planning learning experiences, selecting assessment instruments or considering alternative Outcomes for Units. For information on these, please refer to the SQA document *Guidance on Alternative Assessment Arrangements for Candidates with Disabilities and/or Additional Support Needs*, which is available on SQA's website: www.sqa.org.uk.

General information for candidates

Unit title: Furniture: Materials

In this Unit you will be introduced to some of the materials you will use in your furniture course. The materials will include timber-based products, upholstery products and wood finishing products. You will learn about the properties of different types of materials and their uses. For example some materials may not be suitable for outdoor use, they may be fragile or may have surfaces which are easily damaged by weather. As part of this Unit you will gather samples or visuals of materials into a portfolio which can be used for reference purposes in your course.

You will learn how to research information on the costs of materials, the standard sizes which can be ordered and the availability of materials. You will also learn how to measure and work out the materials you will need for specific jobs.

Often when you are working with materials you have to allow for wastage. This happens when materials are only available in certain standard sizes or minimum quantities affect the amount of materials you have to order.

As part of your assessment you will be asked to select materials suitable for a particular item of furniture and you will be asked to work out the materials required and to price these materials.

In the course of your studies you will develop your IT skills and your Problem Solving and your skills in Using Number.