

Higher National Unit Specification

General information for centres

Unit title: Furniture: Timber Techniques

Unit code: F0Y5 34

Unit purpose: This Unit is designed to enable candidates to develop the knowledge and skills required to produce components from timber and timber derivatives. It looks at the fundamental aspects of joint manufacture and assembly. It would be relevant to candidates interested in creating or repairing furniture.

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

- 1 Demonstrate the skills, techniques and equipment used in the production of timber components.
- 2 Evaluate the effectiveness of manufacturing techniques used to produce components.
- 3 Comply with health and safety requirements within a workshop environment.

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. No previous knowledge is required for this Unit. It would be advantageous if candidates possessed the HN Unit *Furniture: Workshop Practice* at SCQF level 7.

Core Skills: There are opportunities to develop Core Skills of Communication and Problem Solving at SCQF level 5 in 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: Candidates will be asked to produce components using a practical project. The components should be produced to meet predetermined tolerances. The quality of the techniques employed will be evaluated in Outcome 2. Outcome 3 assesses the candidate's adherence to health and safety requirements.

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

Demonstrate the skills, techniques and equipment used in the production of timber components

Knowledge and/or skills

- ◆ Jointing techniques
- ◆ Sub-assembly and assembly techniques
- ◆ Tools and equipment
- ◆ Tolerances
- ◆ Quality
- ◆ Safe working practices

Evidence Requirements

Candidates will need to provide evidence to demonstrate their knowledge and skills by showing that they can complete a series of practical tasks, using mechanical and hand equipment, to produce timber components. The components will be produced to meet predetermined tolerances and to an acceptable standard. Evidence should be recorded on an observation schedule and should include reference to:

- ◆ choice of tools
- ◆ use of tools
- ◆ choice and use of equipment
- ◆ health and safety requirements

Assessment guidelines

This Outcome could be assessed by the candidate producing a series of samples or by linking with Outcomes 2 and 3 and creating or repairing a simple item of furniture.

Higher National Unit specification: statement of standards (cont)

Unit title: Furniture: Timber Techniques

Outcome 2

Evaluate the effectiveness of manufacturing techniques used to produce components

Knowledge and/or skills

- ◆ Construction and manufacturing techniques
- ◆ Production techniques: hand, mechanical
- ◆ Evaluation techniques

Evidence Requirements

Candidates will need to provide evidence to demonstrate their knowledge and skills by showing that they can research and evaluate **two** different techniques for the production of two components. The evaluation should make reference to:

- ◆ hand production techniques
- ◆ mechanical production techniques
- ◆ comparison of manufacturing methods
- ◆ the most appropriate technique for the component

Assessment guidelines

This assessment could be linked with Outcomes 1 and 3. The candidate could produce samples or could use artefacts or components created in other Units as the basis of comparison.

Outcome 3

Comply with health and safety requirements within a workshop environment

Knowledge and/or skills

- ◆ Health and safety legislation
- ◆ Safe working practices
- ◆ Dedicated health and safety guidelines

Evidence Requirements

Candidates will need to demonstrate their knowledge and skills by showing that they can show an understanding of, and can comply with, health and safety requirements when working within a workshop environment. Evidence should be recorded on an observation schedule.

Assessment guidelines

This could be observed and tested by providing evidence of health and safety requirements within a small workshop in relation to the materials and techniques used throughout the Unit. Alternatively it could be tested by responding to a given scenario or to a series of short answer questions.

Dedicated health and safety guidelines should include specific information accompanying tools and equipment.

Administrative Information

Unit code: F0Y5 34
Unit title: Furniture: Timber Techniques
Superclass category: JP
Original date of publication: November 2006
Version: 01

History of Changes:

Version	Description of change	Date

Source: SQA

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Higher National Unit specification: support notes

Unit title: Furniture: Timber Techniques

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 forms part of the HNC/HND Furniture Group Award. It is an optional Unit in both awards.

This Unit has been designed to teach candidates the fundamental aspects of joint manufacture and assembly. It is envisaged that the Unit content would be of interest to anybody creating or repairing furniture.

Outcome 1

This Outcome looks at the principles of creating/replacing components using a variety of techniques and equipment to an acceptable standard. The candidate could produce a variety of joints to create a simple structure that allows them to understand the process of sub and final assembly. Components produced should be to agreed tolerances and of acceptable quality.

Outcome 2

This Outcome provides the candidate with the skills and understanding required to evaluate the effectiveness of manufacturing and construction techniques used to produce components.

Outcome 3

For this Outcome candidates should be encouraged to research health and safety requirements within a workshop environment. Candidates should be aware of current and emerging legislation, and throughout the Unit comply with any health and safety requirements for products or equipment used.

Examples of legislation at the time of writing include:

- ◆ Health and Safety at Work Act (HASAW)
- ◆ Provision and Use of Work Equipment Regulations (PUWER)
- ◆ Control of Substances Hazardous to Health (COSHH)
- ◆ Relevant EU Directives
- ◆ British Standards/ISO standards and any other legislation relevant to safety in the workplace

Higher National Unit specification: support notes (cont)

Unit title: Furniture: Timber Techniques

Guidance on the delivery and assessment of this Unit

Outcome 1

Tutors should demonstrate appropriate techniques as required within the context of the project. The candidates should practise and master these techniques to an appropriate and predetermined standard that is recorded on a checklist. The tutor will also show candidates how to fabricate sub assembly and assemblies using jointing techniques.

Outcome 2

It is anticipated that candidates will evaluate and justify the manufacturing and construction techniques used in Outcome 1 and suitable alternatives that will produce components, sub assembly or assemblies.

Outcome 3

Candidates should follow tutor guidelines, manufacturers' instructions and the health and safety requirements of tools and equipment when manufacturing components, throughout the Unit. Evidence that candidates have adhered to all of these parameters should be recorded in an observation schedule

Opportunities for developing Core Skills

The opportunities for development of Core Skills in Communication at SCQF level 5 are in Outcome 2 where candidates would need to clearly justify by oral or by written means changes in the selection of joints or assembly techniques.

Problem Solving is incorporated at SCQF level 5 in Outcomes 1 and 2 where candidates are expected to identify appropriate techniques, tools and applications and correct any faults. This demonstrates their ability to think critically which would include planning, and to review and evaluate a problem solving activity where they are required to evaluate the effectiveness of the joints used in the furniture components, assess and explain the use of these joints and draw conclusions and justify the use of specific joints.

Open learning

This Unit is not appropriate for Open Learning. This Unit is not suitable for distance learning as a large proportion of the content is practical work that could involve the use of electrical power tools and will be carried out in a workshop environment. This has health and safety implications which cannot be monitored from distance.

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

Higher National Unit specification: support notes (cont)

Unit title: Furniture: Timber Techniques

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: Timber Techniques

In this Unit you will learn about the fundamental aspects of dealing with timber. You will learn how to use different tools and equipment and you will learn how to scrutinise your work to ensure that what you produce is accurate in size and of a consistent quality. You will learn about making furniture components, and develop your tool skills and timber techniques so that you can make components using the most appropriate tools and equipment.

You will learn how to evaluate manufacturing techniques so that you can assess the most appropriate construction and production methods of making furniture components.

It is important to pay attention to the health and safety requirements you have to follow in a workshop. Not only will you have to follow the requirements of existing legislation, but you will have to follow specific dedicated health and safety guidelines which are supplied by manufacturers of tools and equipment and materials. For example, you would have to know which adhesives should only be used in a well ventilated area.

You will also develop both your communication and your problem solving skills. In particular, you will learn about planning, developing and evaluating what you do.