



Module Descriptor

Woodwork

Award Type: Minor
Award Level: 3
Award Code: 3N0589
FÁS Assessment Code: 3N0589-021
Validation date 14th July 2011
Revision 2.0

Module Descriptor

Purpose: The purpose of the award is to provide the learner with the knowledge, skills and competencies to use a range of hand tools and power tools under supervision to complete a variety of woodwork projects in a workshop environment

Module Duration: 100 hours

Learning Outcomes: By the end of this module, the learner will be able to:

1. Select the hand tools and power tools required to complete a variety of woodwork projects
2. Describe the various types of materials required to complete a woodwork project
3. Complete a cutting list by using drawings and instructions
4. Carry out estimations of quantities, measuring and marking out of work pieces using correct tools
5. Demonstrate the use of the following hand tools and power tools: bradawl, marking gauge, vice clamps, planes, chisels, saws and sanders
6. Follow manufacturers' instructions when changing various saw blades, belts, guides and drill bits
7. Cut work pieces using the correct saw type and blade to required specifications
8. Assemble projects using a variety of methods including glue, nails, screws, dowels, and panel pins
9. Select appropriate wood finishes to complete the projects
10. Apply appropriate health and safety work practices when using power and hand tools
11. Demonstrate the application of communications, safety awareness and quality awareness in a workshop environment

Key Learning Points

Learning Outcome 1:

Select the hand tools and power tools required to complete a variety of woodwork projects

Key Learning Points

- Knowledge of hand tools and power tools
- Reading names, parts, functions and safety precautions of each tool
- Writing names, parts, functions and safety precautions of each tool

Learning Outcome 2:

Describe the various types of material required to complete a woodwork project

Key Learning Points

- Knowledge of a range of different hardwoods, softwoods and manufactured boards
- Identifying the different types of material and their uses
- Writing lists of materials required to complete the projects

Learning Outcome 3:

Complete a cutting list by using drawings and instructions

Key Learning Points

- Reading drawings
- Reading instructions
- Following written and verbal instructions

Learning Outcome 4:

Carry out estimations of quantities, measuring and marking out work pieces using correct tools

Key Learning Points

- Knowledge of units of measurement, tools of measurement
- Estimating quantities of materials required for a project
- Reading measuring tapes and rulers
- Marking out face, side and edge on each work piece
- Procedures for measuring and marking out

Learning Outcome 5:

Demonstrate the use of the following hand tools and power tools: bradawl, marking gauge, vice clamps, planes, chisels, saws, and sanders

Key Learning Points

- Safe use of each hand tool and power tool
- Holding tools
- Care and maintenance of hand tools and power tools

- Cleaning all tools and equipment appropriately after use
- Storing all tools and equipment safely and appropriately after use
- Sharpening techniques for chisels and cutting irons

Learning Outcome 6:

Follow manufacturers' instructions when changing various saw blades, belts, guides and drill bits

Key Learning Points

- Knowledge of the procedures used when changing various saw blades, guides, bits and sander belts
- Writing a list of steps for changing a saw blade
- Writing a list of steps for changing a drill bit
- Changing drill bits, guides, belts

Learning Outcome 7:

Cut work pieces using the correct saw type and blade to required specifications

Key Learning Points

- Knowledge of saw types and their uses
- Naming the different types of saws and uses
- Cutting techniques

Learning Outcome 8:

Assemble projects using a variety of methods including glue, nails, screws, dowels, and panel pins

Key Learning Points

- Knowledge of various methods of assembly
- Naming the different types of joints and their uses
- Writing and describing different types of fixings (screws, nails, etc.)
- Listing the different types of glues and their uses

Learning Outcome 9:

Select appropriate wood finishes to complete the projects

Key Learning Points

- Knowledge of surface preparation for wood finishing
- Applying surface preparation for wood finishes to projects
- Writing lists of different types of finishes and their uses
- Techniques of applying finishes

Learning Outcome 10:

Apply appropriate health and safety work practices when using power and hand tools

Key Learning Points

- Health and safety issues concerning safe workshop practices
- Personal protective equipment procedures
- Writing a list of safety mechanisms for a range of power and hand tools
- Writing a list of health and safety precautions/procedures in the workshop
- Identifying hazards
- Safe use of tools and materials

Learning Outcome 11:

Demonstrate the application of communications, safety awareness and quality awareness in a workshop environment

Key Learning Points

- Knowledge of vocational language
- Listening and responding to spoken language
- Reading and writing to obtain and convey information
- Applying appropriate health and safety procedures
- Reflecting on own strengths and weaknesses
- Identifying areas for improvement

Assessment Specification

Award Title	Woodwork
Award Type	Minor
FÁS Assessment Code	3N0589-021
Credit Value	10
Award Code:	3N0589

Module Learning Outcome	Performance Criteria (Knowledge, Skill & Competence)	Assessment Techniques	Weighting	Assessment Instrument	Assessment Evidence
1	Knowledge	Portfolio	2%	Activity A1	Activity Sheet
1	Skill	Skills Demonstration	7%	Learner's Instructions S1	Assessment Sheet
2	Knowledge	Skills Demonstration	3%	Learner's Instructions S1	Assessment Sheet
3	Knowledge	Portfolio	3%	Exercise E1	Cutting List
3	Skill	Skills Demonstration	7%	Learner's Instructions S1	Assessment Sheet
4	Knowledge, Skill	Skills Demonstration	10%	Learner's Instructions S1	Assessment Sheet
5	Knowledge Skill	Skills Demonstration	10%	Learner's Instructions S1	Assessment Sheet
6	Knowledge	Portfolio	3%	Exercise E2	Exercise Sheet
6	Skill, Competence	Skills Demonstration	7%	Learner's Instructions S1	Assessment Sheet
6	Knowledge	Portfolio	3%	Exercise E3	Exercise Sheet
7	Skill, Competence	Skills Demonstration	7%	Learner's Instructions S1	Assessment Sheet
7	Knowledge	Portfolio	3%	Exercise E4	Exercise Sheet
8	Skill	Skills Demonstration	10%	Learner's Instructions S1	Assessment Sheet
9	Skill	Skills Demonstration	7%	Learner's Instructions S1	Assessment Sheet
10	Skill	Skills Demonstration	6%	Learner's Instructions S1	Assessment Sheet
11	Competence	Portfolio	3%	Activity A2	Reflection Sheet
11	Competence	Portfolio	3%	Activity A3	Reflection Sheet
11	Competence	Skills Demonstration	6%	Learner's Instructions S1	Assessment Sheet

Suggested Learning Methodologies

- Skills demonstration
- Discussion groups
- Practical work training
- Simulated work environment
- Note taking
- Activities
- Exercises

Specific Module Requirements

The following is a recommended list. The list is not definitive as some of the items listed may not be essential in order to run the course. Items other than those listed may also be acquired for the course at the discretion of the Manager

Combination square, marking gauge, mortice gauge, mortice machine, marking knife, tenon saw, bow saw, chop saw, jigsaw, L brackets, smoothing plane, block plane, spokeshave, set of bevelled chisels – 25mm, 18mm, 12mm, 6mm, mortice chisel, wooden mallet, plywood sheet, glue, dowel, sandpaper, varnish, router, set of personal protective equipment, ruler, pencils

Suggested Learning Resources

All of the highlighted curriculum resources mentioned below are available on the Moodle Community Services Curriculum and Assessment page. You can access the CSCA Moodle web page from this link: <http://www.ecollege.ie/site/home.html>
If you do not already have a username and password, ask your supervisor to contact CSCA@fas.ie

Textbooks:

- *Wood Technology*, Bill Gaughran. Published by Gill and Macmillan Ltd, 1992
- *Carpentry & Joinery Book 1: Job Knowledge*, Peter Bret 2nd Edition. Published by Nelson Thornes, 2005
- *The Home Guide To Woodwork*, Chris Simpson. Published by Murdoch Books, 2004
- *Introduction to Health and Safety at Work*, by Phil Hughes and Ed Ferrett. ISBN 0-7506-6623-4, 2005
- *The Big Book of Woodwork Projects*, by Alan Bridgewater, Gill Bridgewater and Philip Gardner. Paperback - 30 Nov 2006

- *Complete Guide to Basic Woodwork: Skills and Projects Every Woodworker Needs (Weekend Woodworker)*, Chris Marshall and Creative Publishing International. Paperback - 2 Jun 2005
- *How to Woodwork*, Phil Davy. Paperback - 15 Aug 2007
- *Woodwork: A Step-By-Step Photographic Guide to Successful Woodworking*, Strother Purdy and Andy Engel. Hardback - 19 April 2010
- *Oxford English Dictionary*

Video:

- Wood Finishing Tips and Techniques (video tape/PAL)

Websites:

General:

- <http://www.woodworkireland.com>

Dealing with hand tools and power tools:

- <http://www.using-tools.com/>
- http://www.ccohs.ca/oshanswers/safety_haz/hand_tools/general.html
- http://school.mech.uwa.edu.au/~nscott/How_to_do_stuff/hand_tools/
- http://www.ehow.com/how_2177054_use-power-tools-safely.html
- http://en.wikipedia.org/wiki/Power_tool
- <http://www.technologystudent.com/>

Trade Magazine:

- *The Woodworker* (can be bought in any good newsagent)

Generic Skills: Literacy and Numeracy

Learners will maintain and keep a **Learning Diary** throughout the course in order to record and file any useful and relevant information on Woodwork.

At the end of each week, the learners will complete a short **Weekly Reflective Sheet** in order to reflect on their learning and progress during that week. This will help the learners in developing their generic skills of literacy, numeracy, communications and quality awareness and will give learners an opportunity to develop their writing skills.

This diary can be used to as a reference for the learner when filling out the mid-course and end of course reflections, Activity A2 and Activity A3.

Learners will create a **Personal Dictionary** of new key words and terms relating to woodwork. This dictionary will be updated each week and kept in the learning diary.

Learners will add words and terms to a key **Word and Terminology Bank** in the classroom, relating to hand tools, power tools and woodwork. Learners will find words listed in text books, manufacturers' product information and websites.

Learners will complete a number of **Word Searches**. These are **Word Search1, Word Search2, Word Search3, Word Search4, Word Search5, Word Search 6** and **Word Search 7**.

When they have gained sufficient practice and experience at these, each learner will make up one (1) Word Quiz, which will be completed by the group.

Learners will complete a number of '**True or False**' **Quizzes** when the Learning outcomes (LOs) have been achieved. These are **Quiz for LO1, Quiz for LO2, Quiz for LO6, Quiz for LO7, Quiz for LO8, Quiz for LO9, and Quiz for LO10**.

Generic Skill: Numeracy:

Learners will practise **using a calculator**, identifying and locating all keys needed to carry out basic calculations.

Learners will refer to a **Glossary of Mathematical Symbols** and identify the symbols relevant to Woodwork.

Learners will collect a number of plans of different woodwork projects. This will be done by consulting textbooks, magazines and the Internet. The learners will practise making out **Cutting Lists** for these projects.

Learners will complete a **Purchase Order Form** using a given materials price list and will calculate the total cost of the materials ordered.

Generic Skill: Literacy

Learners will gather relevant information, using text books, the Internet and class notes, in order to write a short description of:

- Each hand tool
- Each power tool
- Types of materials
- Types of wood finishes

- Health and safety in a workshop environment

This information will be kept in the Learning Diary.

During the course the learners will compile a file, which will be kept in their learning diary, of different types of articles on woodwork that they have found in a variety of sources. These will include plans of projects and photographs of hand tools and power tools.

Generic Skill: Teamwork and Communications

Learners will discuss the importance of teamwork with the instructor using the **Teamwork Guide**.

Learners will take part in a **Teamwork Exercise**, designing and planning a project that will incorporate group discussion.

Practical, Health and Safety

Learners will practise how to use each **hand tool and power tool** under the instructor's supervision until the instructor is satisfied that a required standard is achieved. The instructor will demonstrate health and safety procedures to be used when using hand and power tools.

Prior to making a project, the learners will practise making various **joints**. These joints could be incorporated into their projects.

Learners will continue to **practise** by making a range of woodwork projects until the instructor is satisfied that a required standard is achieved. Once the Instructor is satisfied that each learner is sufficiently competent, the learners will be divided into teams. Each team will plan and make a **chair**.

Recommended by: _____
Manager Training Policy Development and Support

Approved by: _____
Director Training Policy Development and Support