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Module Descriptor
Construction Skills

Award Type: Minor
Award Level: 3
Award Code: 3N0882
FÁS Assessment Code: 3N0882-006
Validation Date: 14th July 2011
Revision 2.0

Module Descriptor

Purpose: The purpose of this module is to equip the learner with the knowledge, skills and competence to use a range of construction tools, equipment, terminology and drawings correctly and safely under supervision.

Module Duration: The learner effort required from a typical learner to successfully achieve the stated learning outcomes for the module is 100 (one hundred) hours.

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

1. Identify the tools required to complete a range of construction projects, under supervision

2. Identify the materials and equipment required to complete a range of construction projects

3. Ensure all tools and equipment are maintained and stored safely and correctly

4. Describe the various career opportunities available within the construction sector to include key employment types

5. Describe the various brick types, mortar mixes and the bonding required to construct a brickwork panel

6. Construct a brickwork panel to industry standards

7. Complete a woodwork project to a given specification

8. Use all the relevant tools, materials and equipment to construct a stud partition and dry line with joints taped and filled to industry standards

9. Fix skirting and other timber trimmings to a given specification

10. Paint wall surfaces and timber trimmings to a given specification

11.Wallpaper wall surfaces to a given specification

12. Hang a central heating radiator, with all fittings and pipe work, according to a given drawing

13. Operate safely and effectively when working in a construction environment

14. Maintain appropriate personal and workplace hygiene standards when working in a construction environment

15. Demonstrate the application of communications, safety, quality awareness and teamwork in a construction environment

Unit 1 Construction Sector

At the end of this unit, the learner will be able to:

1.1 Identify the types of employment opportunities within the construction sector
1.2 Describe the roles and responsibilities of the building team
1.3 Define the purpose of contract documents and the design team

Learning Outcome 1.1: Identify the types of employment opportunities within the construction sector
Key Learning Points
• Defining 'construction sector' • Listing job types in the construction sector • Researching employment opportunities within the construction sector • Listing employment opportunities within the construction sector • Qualifications required for employment within the construction sector • Range of trades within the construction sector

Learning Outcome 1.2: Describe the roles and responsibilities of the building team
Key Learning Points
• Defining 'building team' • Role and responsibilities of the client • Role and responsibilities of an architect • Role and responsibilities of a quantity surveyor • Role and responsibilities of a builder • Role and responsibilities of a contracts manager • Role and responsibilities of a project manager • Role and responsibilities of the engineer • Role and responsibilities of the clerk of works • Role and responsibilities of the site agent • Role and responsibilities of the sub contractor • Different trades within the construction sector

Learning Outcome 1.3: Define the purpose of contract documents and the design team
Key Learning Points
• Contract documents • Defining 'contract document' • Purpose of a contract document • Terminology used in contract documents • Members of a design team • Functions of a design team • Responsibilities of each member of a design team • Distinguishing between design process and construction process • Understanding working drawings, specifications, bills of quantities and conditions of contract

Unit 2 Brickwork, Brick Types, Mortar Mixes and Bonding

At the end of this unit, the learner will be able to:

2.1. Identify the different brick types
2.2. Describe the different types of bonding mixes
2.3. Define the mortar mixes used in bricklaying
2.4. List the tools and equipment used in constructing brickwork
2.5. Maintain all tools and equipment correctly
2.6. Construct a brickwork panel

Learning Outcome 2.1: Identify the different brick types
Key Learning Points
• Properties of a brick • Naming different brick types • Distinguishing between different brick types • Describing the uses of different brick types • Sizes of bricks • Distinguishing between different bat sizes

Learning Outcome 2.2: Describe the different types of bonding mixes
Key Learning Points
• Bonding mixes • Explaining 'bonding' • Tools and equipment required to make a mix • Listing different types of bonding mixes • Identifying different types of bonding mixes • Ingredients of different types of bonding mixes • Importance of bonding • Hazards of bonding mix ingredients

Learning Outcome 2.3: Define the mortar mixes used in bricklaying
Key Learning Points
• Mortar mixes • Tools and materials required for mixing mortar • Materials used in a mix • Differences in various types of mix • Uses of different mortar mixes • Ratio for a mix • Describing the different types of joints used in bricklaying • Making a mortar mix • Hazards of mortar mix ingredients

Learning Outcome 2.4: List the tools and equipment used in constructing brickwork
Key Learning Points
• Tools, materials and equipment required in constructing brickwork

- Identifying tools and equipment and their uses required in constructing brickwork
- Writing names of tools and equipment and their uses
- Following manufacturers' instructions
- Care of tools

Learning Outcome 2.5: Maintain all tools and equipment correctly
Key Learning Points
• Maintenance of tools and equipment • Safe handling of tools and equipment • Following manufacturers' instructions • Following written and verbal instructions • Storing tools and bricks correctly

Learning Outcome 2.6: Construct a brickwork panel
Key Learning Points
• Tools required to construct a brickwork panel • Reading and writing the name, parts and uses of each tool • Materials required to construct a brickwork panel • Terminology used in brick laying • Reading drawings • Accurate measuring • Setting out procedures for a brick wall • Plumbing and levelling a brick wall • Hazards in constructing a brickwork panel • Pointing • Clean and store tools, materials and equipment correctly

Unit 3 Wall Mounted Shelf

At the end of this unit, the learner will be able to:

3.1. Select the hand and power tools required to complete a woodwork project
3.2. Describe the various types of material required to complete a woodwork project
3.3. Maintain all tools and equipment correctly
3.4. Construct a wall mounted unit from the given drawing
3.5. Select appropriate wood finishes for the project

Learning Outcome 3.1: Select the hand and power tools required to complete a woodwork project
Key Learning Points
• Hand and power tools required to complete a wall mounted shelf • Reading and writing names, parts and uses of each tool • Reading and following manufacturer's instructions

• Correct maintenance of tools and equipment • Safe handling of tools and equipment

Learning Outcome 3.2: Describe the various types of material required to complete a woodwork project
Key Learning Points
• Various types of materials used in woodwork projects • Identifying different types of woods and materials used in woodwork • Differences between hardwoods, softwoods and manufactured boards • Writing names of woods used in woodwork • Writing a list of materials required to complete the given project • Safe handling of woodwork materials

Learning Outcome 3.3: Maintain all tools and equipment correctly
Key Learning Points
• Maintenance of tools and equipment • Safe handling of tools and equipment • Following manufacturers' instructions • Following written and verbal instructions • Storing tools and equipment correctly • Storing timber correctly

Learning Outcome 3.4: Construct a wall mounted unit from the drawing given
Key Learning Points
• Understanding drawing formats and scales • Interpreting drawings • Following oral and written instructions • Identifying the appropriate tool for measuring • Reading measuring tapes and rulers • Procedures for measuring and marking out • Identifying the appropriate tool for marking out timber • Marking out face, side and edge on each work piece • Measuring and marking out timber accurately • Using correct tools and equipment for each task • Various methods of assembly • Different types of joints and their uses • Describing different types of fixings (screws, nails, etc) • Different types of glues and their uses • Cleaning and storing tools, materials and equipment correctly

Learning Outcome 3.5: Select appropriate wood finishes for the project.
Key Learning Points
• Techniques of applying finishes • Identifying appropriate techniques for finishing tasks

- Surface preparation for sanding
- Techniques used in sanding
- Types of sandpaper
- Sanding wood evenly
- Importance of grain direction
- Various wood finishes
- Even application of stains
- Reading and following manufacturers instructions

Unit 4 Stud Partition

At the end of this unit, the learner will be able to:

4.1. Demonstrate an understanding of the use of a stud partition
4.2. List the tools and equipment used in constructing a stud partition
4.3. Maintain all tools and equipment correctly
4.4. Construct a non load bearing partition
4.5. Dry lining the erected non load bearing partition with joints taped and filled

Learning Outcome 4.1: Demonstrate an understanding of the use of a stud partition
Key Learning Points
• Stud partition • Define 'load bearing partition' • Define 'non load bearing partition' • Describe a metal stud partition • Reading building regulations for partitions walls • Advantages and disadvantages of timber partitions • Drawing a timber stud partition • Labelling a timber stud partition

Learning Outcome 4.2: List the tools and equipment used in constructing a stud partition
Key Learning Points
• Tools, materials and equipment required in constructing a stud partition • Identifying tools and equipment used in constructing a stud partition and their uses • Reading and writing names of tools and equipment and their uses • Following manufacturers' instructions • Care of tools

Learning Outcome 4.3: Maintain all tools and equipment correctly
Key Learning Points
• Maintenance of tools and equipment • Safe handling of tools and equipment

• Following manufacturers' instructions • Following written and verbal instructions • Storing tools correctly • Storing slabs correctly • Storing aggregates correctly

Learning Outcome 4.4: Construct a non - load bearing partition
Key Learning Points
• Tools and equipment required to construct a non - load bearing partition • Interpreting drawings • Following oral and written instructions • Cutting lists • Writing out a cutting list • Procedures for measuring and marking out • Measuring and marking out timber accurately • Using correct tools and equipment for constructing partition • Various methods of assembly • Plumbing partition • Constructing non load bearing partition • Cutting grounds for required services • Boring for electrical services • Bracing partitions

Learning Outcome 4.5: Dry lining the erected non- load bearing partition with joints taped and filled
Key Learning Points
• Insulating between partition • Plasterboard sizes and regulations • Measuring plasterboard slab • Cutting plasterboard slab • Writing and describing the types of fixings • Fixing plasterboard slab • Taping joints • Filling joints

Unit 5 Fixing Skirting and Timber Trimmings

At the end of this unit, the learner will be able to:

5.1. Describe the methods of fitting skirting board
5.2. Demonstrate the fitting of dado rail
5.3. List the tools and equipment used in constructing a stud partition
5.4. Maintain all tools and equipment correctly

Learning Outcome 5.1: Describe the methods of fitting skirting board
Key Learning Points

- Types of materials used in skirting
- Types of fixings used for skirting
- Fixing a skirting board
- Scribing skirting
- Mitring skirting
- Listing tools required for fitting skirting board
- Hazards when fitting a skirting board
- Correct use of tools when fitting a skirting board

Learning Outcome 5.2: Demonstrate the fitting of dado rail

Key Learning Points

- Materials used for dado rails
- Purposes of dado rails
- Levelling a dado rail
- Joining a dado rail
- Scribing a dado rail
- Types of fixings used for a dado rail
- Fixing a dado rail
- Safe use of tools when fixing a dado rail

Learning Outcome 5.3: List the tools and equipment used in constructing a stud partition

Key Learning Points

- Tools, materials and equipment required in constructing skirting and dado rail
- Identification of tools and their uses
- Reading and writing names of tools and equipment and their uses
- Following manufacturers' instructions
- Care of tools

Learning Outcome 5.4: Maintain all tools and equipment correctly

Key Learning Points

- Maintenance of tools and equipment
- Safe handling of tools and equipment
- Following manufacturers' instructions
- Following written and verbal instructions
- Storing tools correctly
- Storing timber correctly

Unit 6 Painting

At the end of this unit, the learner will be able to:

6.1. Describe the different types of paint
6.2. List the tools and equipment used in painting
6.3. Maintain all tools and equipment correctly
6.4. Prepare surfaces for painting
6.5. Paint a wall surface and trimming according to the given specification

Learning Outcome 6.1: Describe the different types of paint
Key Learning Points
• Stating the common paint types used in decorating • Stating and writing the reason for painting a surface • Properties of paint • Functions of emulsion paints • Functions of oil base paints • Functions of acrylic paints • Functions of varnish and stains • Selecting correct paint for each surface • Writing the function of paint thinners • Stating the functions of primers and fillers • Hazards of various types of paint, thinners, primers and fillers • Safe handling of paints, thinners, primers and fillers

Learning Outcome 6.2: List the tools and equipment used in painting
Key Learning Points
• Tools, materials and equipment required for painting • Identification of tools and their uses • Reading and writing names of tools and equipment and their uses • Following manufacturers' instructions • Safe handling of tools and equipment used in painting • Care of tools

Learning Outcome 6.3: Maintain all tools and equipment correctly
Key Learning Points
• Maintenance of tools and equipment • Safe handling of tools and equipment • Following manufacturers' instructions • Following written and verbal instructions • Storing tools correctly • Cleaning brushes correctly

Learning Outcome 6.4: Prepare surfaces for painting
Key Learning Points
• Preparation required to decorate a newly plastered surface when using an emulsion paint

- Preparation required to decorate a newly plastered surface when using an oil paint
- Preparation required to decorate a pre painted surface when using an oil paint
- Preparation required to decorate a pre painted surface when using a water based paint
- Preparation required to decorate new woodwork when using an oil paint or varnish
- Preparation required to redecorate woodwork to be repainted/varnished in oil paint/varnish
- Mixing filler to the correct ratio
- Applying filler to any damaged surface correctly
- Sanding to a required smooth finish
- Sealing wall surfaces
- Priming and filling woodwork in preparation for undercoating

Learning Outcome 6.5: Paint a wall surface and trimmings according to the given specification
Key Learning Points
• Calculating the area of the room in m square • Masking off • Selecting the correct brush size • Holding the brushes correctly • Explaining correct method of mixing colours • Naming the different applications of finishes • Correct sequencing of coats of paint • Thinning paint • Priming wall surfaces • Undercoating wall surfaces • Preparing various surfaces for recoating • Varnishing skirting boards

Unit 7 Paper Hanging

At the end of this unit, the learner will be able to:

7.1. Describe the different types of wallpaper
7.2. List the tools and equipment used in painting
7.3. Maintain all tools and equipment correctly
7.4. Prepare surfaces for wallpapering
7.5. Wallpaper a wall surface to a given specification

Learning Outcome 7.1: Describe the different types of wallpaper
Key Learning Points
• Stating the common wall covering types used in decorating • Writing the reasons for wallpapering a wall surface • Define the terms ‘vinyl’ wallpaper, ‘embossed’ wallpaper, ‘anaglypta’ wallpaper,

‘woodchip’ wallpaper etc • Functions of a range of wallpapers to include vinyl, woodchip, anaglypta, embossed etc

Learning Outcome 7.2: List the tools and equipment used in wall papering
Key Learning Points
• Tools, materials and equipment required for wall papering • Identification of tools and equipment and their uses • Reading and writing names of tools and equipment and their uses • Following manufacturers’ instructions • Care of tools • Types of pastes

Learning Outcome 7.3: Maintain all tools and equipment correctly
Key Learning Points
• Maintenance of tools and equipment • Safe handling of tools and equipment • Following manufacturers’ instructions • Following written and verbal instructions • Storing tools correctly • Cleaning paste brushes correctly • Storing wall adhesives correctly

Learning Outcome 7.4: Prepare surfaces for wallpapering
Key Learning Points
• Preparation required prior to hanging paper to a newly plaster wall • Preparation required prior to hanging paper to a previously papered wall • Stripping wallpaper • Mixing adhesive to the correct ratio • Hazards of adhesives • Applying filler to any damaged surface correctly • Sanding to acquire a smooth finish

Learning Outcome 7.5: Wallpaper a wall surface to a given specification
Key Learning Points
• Calculating quantities of wallpaper required • Measuring wallpaper • Cutting wallpaper • Mixing wallpaper paste • Pasting wallpaper • Hanging wallpaper • Matching patterns when wallpapering • Joining wall paper

- Plumbing wallpaper
- Trimming wallpaper
- Hazards of wallpaper paste
- Disposal of unused wallpaper paste

Unit 8 Hanging a Central Heating Radiator with all Fittings and Pipe Work

At the end of this unit, the learner will be able to:

8.1 Describe the principle types of domestic heating systems
8.2 State the function of the basic components of a domestic heating system
8.3 List the tools and equipment used in plumbing a radiator
8.4 Maintain all tools and equipment correctly
8.5 Hang a radiator to the given specification

Learning Outcome 8.1: Describe the principle types of domestic heating systems
Key Learning Points
• Naming different types of heating systems • Describing a single pipe system • Describing a twin pipe system • Drawing a single pipe heating system • Drawing a double pipe heating system • Listing advantages and disadvantages of a one pipe domestic heating system • Listing advantages and disadvantages of a twin pipe domestic heating system • Labelling all the components in a domestic heating system

Learning Outcome 8.2: State the function of the basic components of a domestic heating system
Key Learning Points
• Listing the names of components used for a domestic heating system • Functions of a boiler • Function of a pump • Functions of a cylinder • Function of a radiator • Functions of an expansion tank • Functions of a safety valve • Naming of the types of fittings • Naming the types of valves used in radiators • Describing PTFE tape • Writing the names of different types of radiators

Learning Outcome 8.3: List the tools and equipment used in plumbing a radiator
Key Learning Points
• Tools, materials and equipment required for plumbing

• Identification of tools and equipment and their uses • Reading and writing names of tools and equipment and their uses • Following manufacturers' instructions • Care of tools • Correct storage of tools • Hazards of tools and equipment required to plumb a radiator

Learning Outcome 8.4: Maintain all tools and equipment correctly
Key Learning Points
• Maintenance of tools and equipment • Safe handling of tools and equipment • Following manufacturers' instructions • Following written and verbal instructions • Storing tools correctly

Learning Outcome 8.5: Hang a radiator to the given specification
Key Learning Points
• Setting out vertical lines on a wall for fitting of radiator • Fastening bracket to a wall • Securing radiator onto a bracket • Cutting pipe work • Bending pipe work • Placing fittings onto pipe work • Connecting pipe work to a radiator • Hazards when hanging a radiator • Correct use of tools and equipment when hanging radiators

Unit 9 Health, Safety, Welfare and Personal Hygiene

At the end of this unit, the learner will be able to:

9.1 Demonstrate an understanding of Health and Safety legislation
9.2 Demonstrate the correct procedures for Manual Handling of loads
9.3 Describe and apply safety precautions to be taken when using tools and equipment
9.4 Describe safe work practices within the construction environment

Learning Outcome 9.1: Demonstrate an understanding of Health and Safety legislation
Key Learning Points
• Main provisions of the Health, Safety and Welfare at Work Act 2005 • The role of the employer • The role of the employee • Maintaining the construction environment safe • Understanding the duties of the safety officer • Safety Statements

• Defining the term ‘Safety Statement’ • Writing Safety Statements

Learning Outcome 9.2: Demonstrate the correct procedures for Manual Handling of loads
Key Learning Points
• Defining the term ‘manual handling’ • Defining the term ‘hazard’ • The hazards of lifting and carrying loads • Lifting objects of various sizes and weights correctly and safely • Lifting procedures • Pushing and pulling procedures • Examples of hazards in the construction industry

Learning Outcome 9.3: Describe and apply safety precautions to be taken when using tools and equipment
Key Learning Points
• Defining the term ‘Personal Protective Equipment’ • Examples of PPE • Stating the function of each PPE verbally or in writing • Hazards associated with hand tools and power tools • The safety precautions to be taken before using construction tools • Applying safety precautions when using construction tools • Hazards when using ladders • Safety precautions to be taken when working at heights • Identifying location of first aid unit • Location of first aid box • Listing materials in a first aid box • Stating health and safety precautions and procedures in the workshop, verbally or in writing • Safe use of tools and materials • Safe handling of tools and equipment • Operating machines and tools safely • Correct position of safety guards on machinery

Learning Outcome 9.4: Describe safe work practices within the construction environment
Key Learning Points
• Identifying assembly point and fire exists within the workplace • Explaining the importance of fire extinguishers • Various types of fire extinguishers and their uses • Using a fire extinguisher • Describing safety regulations when using powered machinery • Safe handling of aggregates • Safe storage of materials

• Identifying housekeeping practices within the construction environment • Applying safe working practices within a construction environment • Correct methods of waste disposal • Ensuring all safety guards are on machinery

Unit 10 Communications, Safety, Quality Awareness and Teamwork

At the end of this unit, the learner will be able to:
10.1. Demonstrate the application of communications, safety, quality awareness and teamwork in a construction environment.

Learning Outcome 10.1: Demonstrate the application of communications, safety, quality awareness and teamwork in a construction 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 • Ability to work independently if required • Participating in a team

Assessment Specification

Award Title	**Construction Skills**
Award Type	**Minor**
FÁS Assessment Code	**3N0882-006**
Credit Value :	**10**
Award Code*:*	**3N0882**

Module Learning Outcome	Performance Criteria (Knowledge, Skill & Competence)	Assessment Techniques	Weighting	Assessment Instrument	Assessment Evidence
L01	Knowledge Skill	Skills Demo	10%	Learners Instructions S1, S2, S3	Assessment Sheet
L02	Knowledge Skill	Skills Demo	10%	Learners Instructions S1, S2, S3	Assessment Sheet
L03	Knowledge Skill	Skills Demo	10%	Learners Instructions S1, S2, S3	Assessment Sheet
L04	Knowledge Skill	Skills Demo	5%	Exercise E1	Information folder, notes
L05	Knowledge Skill	Skills Demo	5%	Learners Instructions S1	Assessment Sheet
L06	Knowledge Skill	Skills Demo	5%	Learners Instructions S1	Assessment Sheet
L07	Knowledge Skill	Skills Demo	5%	Learners Instructions S2	Assessment Sheet
L08	Knowledge Skill	Skills Demo	5%	Learners Instructions S3	Assessment Sheet
L09	Knowledge Skill	Skills Demo	5%	Learners Instructions S3	Assessment Sheet
L10	Knowledge Skill	Skills Demo	5%	Learners Instructions S3	Assessment Sheet
L11	Knowledge Skill	Skills Demo	5%	Learners Instructions S3	Assessment Sheet
L12	Knowledge Skill	Skills Demo	5%	Learners Instructions S3	Assessment Sheet

L13	Knowledge Skill	Skills Demo	10%	Learners Instructions S1, S2, S3	Assessment Sheet
L14	Knowledge Skill	Skills Demo	5%	Learners Instructions S1, S2, S3	Assessment Sheet
L15	Competence	Portfolio	2%	Activity A1	Mid Course Reflection Sheet
L15	Competence	Portfolio	3%	Activity A2	End of Course Reflection Sheet
L15	Knowledge, skill, competence	Portfolio	5%	Exercise E1	Teamwork Exercise Sheet

Suggested Learning Methodologies

- Note taking
- Practical Work Training
- Simulated Work Environment
- Activities
- Exercises
- Discussion Groups
- Text Books
- Videos/DVDs
- Skills Demonstrations
- Internet

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

Workshop, 180 square metres minimum with 9 areas of 16 square metres per unit/team

Separate area for Woodwork Benches

Lock-up Strong Room

Material Storage Area

Lockers

Instructor Locker

Storage Cupboard

Desks with tilting table top facility to use as a drawing surface

Panel Saw
Dust Extract Unit
Elu Mitre Saw/Bench Saw
Hilti 100V Drill
110V Transformer
Hilti Battery Operated Screwdriver
Angle Grinder
Jig Saw 110V
Brick Guillotine
Woodwork Bench
Extension Leads 110V and 220V, Selection of
110V Rip Saw
Television Set
Video Recorder

Stanley Jetcut Handsaws
Tenon Saws
Try Squares
Adjustable Mitre Squares
Sliding Bevel Squares
Marking Gauges
Smoothing Planes
Coping Saws
Wooden Mallets
Stanley Bevel Edge Chisels, Sets of
Stanley 1603 Claw Hammers
Stanley Braces
Twist Bits to suit Brace, Sets of
Bradawls
Nail Punch
Pincers
Screwdrivers - Ordinary
- Philips
- Pozidrives
Evans 5m Measuring Tape
Oil Stones
Masonry Drill Bits, Selection of
Wood Drill Bits, Selection of
Nail Bars
1m Spirit Levels
10mm Hilti Drill Bits
12mm Hilti Drill Bits
4" Filling Knives

Podger Mixing Tools
Plastering Trowels
Aluminium Hawk
Plastic Floats
Internal Corner Trowels
Stock Brush
Hop Up Trestle
2440mm x 225m x 65mm Plank
Stanley Knife
Small Step Ladder 3.0 ft high
Pin Hammers
Stock Brush
2" Paint Brushes
Paint Pots
Wallpaper Scissors
Wallpaper Pasting Boards
300mm Metal Rules
25mm Masking Tape, Roll of
Stanley Blades, Packet of
Dust Sheets, Set of
Spot Boards
Stands
Bricklayer's Trowels
Pointing Trowels
10mm Rubbing Bar
Line and Pin
Brick Hammers
Lump Hammers
Bolster Chisels
3 Lm Straight Edge
Still Hand Brush
Personal Protective Equipment
Rothenberger Pipe Benders
Instantor Spanners
Adjustable Spanners, large
Pipe Cutters
1/2" Bending Springs
Pipe Vices
Junior Hacksaws
Hand Held Blowlamps

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

Textbooks and Videos/DVDs

A range of textbooks dealing with Construction skills:

- *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
- *Construction Studies Today* Trevor Hickey, 2006, Published by Gill & Macmillan Ltd.
- *Carpentry & Construction* by Mark Miller, Rex Miller, Glenn Baker, and Rex Miller (Paperback - June 18, 2004)
- *Carpentry* 5th Edition by Leonard Koel (Hardcover - Aug. 1, 2008)
- *Modern Carpentry: Essential Skills for the Building Trade*, Workbook by Willis H. Wagner and Howard Bud Smith (Paperback - Jan. 1, 2007)

- *Debbie Travis' Painted House: More than 35 Quick and Easy Finishes for Walls, Floors, and Furniture* by Debbie Travis (Paperback - July 9, 2002)
- *Decorative Painting Techniques for Walls, Floors, Ceilings & Furniture* by Elise Kinkead and Gail McCauley (Paperback - Mar. 1, 2009)
- *Do-It-Yourself: Papering Walls & Ceiling* by Diane Carr (Hardcover - Apr. 2002)
- *Complete Paint & Wall Coverings* by Rob Lutes and Sunset Books (Paperback - Jan. 1999)
- *Papering and Painting ("House Beautiful" DIY Factfiles)* by Julian Cassell and Peter Parham (Paperback - Aug. 16, 2000)

- *Basic Plumbing With Illustrations* by Howard C. Massey (Paperback - Sept. 9, 1994)
- *Complete Plumbing (Stanley Complete)* by Stanley (Paperback - Feb. 5, 2008)
- *Ultimate Guide to Plumbing: Complete Projects for the Home* by Merle Henkenius (Paperback - Aug. 10, 2006)
- *Plumbing a House (For Pros By Pros)* by Peter A. Hemp (Paperback - Oct. 1, 1994

- *House Building Manual,* Homebond , Published by National House Building Guarantee.

- *The home guide to woodwork* Chris Simpson, Published by Murdoch Books.
- *The BDA Guides to Successful Brickwork* Woodside House, Winkfield, Windosor, Berks, 3rd edition

- *Brickwork 1* W.G Nash Published by Hutchinson & Co.
- *Brickwork for Apprentices* J.C. Hodge 5th edition

- *Sitebook A Practical pocket guide to systems installation* British Gysum
- *Introduction to Health and Safety at Work* by Phil Hughes and Ed Farrett ISBN 0-7506-6623-4, 2005

- *Drywall: Professional Techniques for Great Results* - Paperback (1 Mar 2008) by Myron R. Ferguson

- *Oxford English Dictionary*

A range of videos/DVDs dealing with Construction skills:

- *Techniques and Projects* by Bonnie Klein
- *How to D.I.Y*. - Carpentry [DVD] [2007]
- *Plumbing [VHS]* - VHS Tape (Jan. 1, 2002)
- *Interior Paint & Wallpaper: Step-By-Step Video Instruction-Complete Instruction for Painting Rooms & Hanging Wallcoverings: Special Sections on Borders, Stencils, & Wallpaper Repair* (VHS Tape)
- *Sharpening the Professional Way* [VHS]

Generic Skills: Literacy and Numeracy

The learners will keep and maintain a **Learning Diary** throughout the course in order to record and file any useful and relevant information on any aspect of Construction Skills and construction skills tools, equipment and materials.

At the end of every week the learners will complete a short **Weekly Reflective Sheet** in order to reflect on their learning and progress during that week.

This Weekly Reflective Sheet will assist the learners to develop their generic skills of literacy, numeracy, communications and quality awareness and will give learners an opportunity to develop their writing skills.

The Learning Diary can be used as a reference for the learner when filling out the Mid Course and End of Course reflections, Activity A1 and Activity A2.

The learners will create a **Personal Dictionary** of new words, key words and terms relating to construction skills and construction skills tools, equipment and materials. This Dictionary will be updated each week and kept in the Learning Diary.

The learners, as a group, will add words and terms to a **Key Word and Terminology** Bank in the classroom, relating to construction skills, construction skills tools, equipment and materials. The learners will find words listed in text books, class notes, manufacturers' product information, dvds and websites etc.

The learners will complete a number of **Word Searches.** These are **Word Search 1 for LO4; Word Search 2 for LO5**, **Word Search 3 for LO8 and Word Search 4 for LO12.** When the learners have gained sufficient practice and experience at these word searches, each learner will make up 1 (one) Word Search/Quiz which will be completed by the group.

When the learners have completed certain Activities/Exercises they will complete a **'True or False' quiz** for that particular Activity/Exercise. These are: **quiz for LO1; quiz for LO10** and **quiz for LO13** .There should be at least 2 (two) days between the completion of the Activity/Exercise and the completing of the quiz.

Generic Skill: Numeracy: Digital

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

The learners will practice solving various problems, involving litres, metres etc, set by the instructor**, using the mathematical glossary.**

Learners will fill in a **purchase order form** using a materials price list and calculate the total cost of materials.

All notes and information will be kept in the Learning Diary.

Generic Skill: Literacy and Digital Literacy

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

- Tools required in construction skills
- Materials used in construction
- Career opportunities within the construction industry

- Various Brick types
- Construction of a brick wall
- 3 (three) types of finishes
- Stud partitions
- Basics fittings and pipework used in plumbing
- Operating construction tools and equipment safely and effectively
- Health and safety in the worksite environment

This information and the short description will be kept in the Learning Diary.

In the Learning Diary, the learners will compile a file of different types of articles on construction that they have found. These articles could include:

- Plans of projects
- Photographs of projects
- Photographs of construction sites
- Photographs of tools and materials used

Learners could, if they wished, take photographs with a Digital camera, download the photographs to a computer and print the photographs to include in their Learning Diary.

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** by designing, planning and carrying out a project which will incorporate group discussion.

The learners will complete the Team Review Sheet after completing the Teamwork exercise.

Practical:
The learners will carry out any **practical exercises or projects** dealing with construction skills assigned to them by the instructor.

Practical, Health and Safety

Learners will practise how to use each **construction 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 construction tools.

Internet websites: Information can be accessed on the following suggested websites as of 30th June 2010:

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.technologystudent.com/

http://www.woodworkireland.com

http://www.newwoodworker.com/turning/bwlbsics.html

http://www.aroundthewoods.com/

www.diyfixit.co.uk/central-heating/radiator-fitting-new.html

http://www.nala.ie/index.cfm/section/publications/top/1/ext/publications/cat/0/page/9

Trade Magazines and Journals: these can be bought in any good newsagents:

- *Practical Woodworking* published by Nexus
- *Wood*
- *Quick & Easy Painting*
- *Irish Construction Industry Magazine*
- *Plumbing & Mechanical*
- *Contractors Pricing Guide Framing & Rough Carpentry*

Recommended by: _____
Manager Training Policy Development and Support

Approved by: _____

Director Training Policy Development and Support