



PIABC LEVEL 3 NVQ DIPLOMA IN WOOD MACHINING

Qualification Number: 600/5436/0

Qualification Specification

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EXECUTIVE SUMMARY

The *PIABC Level 3 NVQ Diploma in Wood Machining* is a nationally recognised qualification which requires the learner to possess or acquire the competencies and knowledge of the more complex wood machining tasks (on traditional machines and /or CNC) brought about by the production of bespoke products or infrequent procedures requiring particular thought and planning and use of guides, jigs, templates and the like. The qualification also requires knowledge of workflow planning in a machine shop environment to maximise output whilst controlling cost, safety and quality.

The qualification is intended for those who have prior knowledge and experience at Level 2 – holding a PIABC Level 2 NVQ in Wood Machining. The qualification contains Level 2 and Level 3 units. Learners who have already obtained relevant units can claim APL for the units already achieved.

The qualification includes mandatory units on basic traditional wood machine operations, complex operations, health and safety, and work flow planning. Learners also choose from a list of other units to best suit their own job role, examples being jig making, quality control, customer relations, production specifications, operating CAD equipment etc

It is expected that the prospective learner will have had sufficient initial assessment by the centre to establish the likely success of the learner, together with the learner specific learning requirements to maximise success.

Programmes leading to **PIABC Level 3 NVQ Diploma in Wood Machining** can be organised and delivered by providers who have gained centre and qualification approval from PIABC. To achieve this they need to complete the PIABC centre and qualification approval procedures available from www.piabc.org.uk.

Success in this qualification prepares learners to advise others on the most appropriate method to produce accurate components in a safe, effective and efficient manner.

The qualification was developed under the Qualifications Credit Framework (QCF) and comprises of units from a number of Sector Skills Councils and therefore Assessors should use the associated relevant Assessment Strategies.

AIM

This national qualification is competence based with a strong requirement to fully understand the capabilities and limitations of wood machining machines and the more complex wood machining tasks as presented in the production of bespoke components – usually made out of wood.

The aim of the qualification is to acknowledge an individual's achievement whilst promoting a wider understanding of workshop planning, operational constraints (such as time, cost and quality) and the extended use of machines, guides, jigs and templates. Those achieving the PIABC Level 3 NVQ Diploma in Wood Machining will be able to produce components and apply related knowledge in a commercial setting.

The qualification is intended for those who have prior knowledge and experience at Level 2 – holding a PIABC Level 2 NVQ in Wood Machining. The qualification contains Level 2 and Level 3 units. Learners who have already obtained relevant units can claim APL for the units already achieved.

The PIABC Level 3 NVQ Diploma in Wood Machining also provides the competency qualification component of the apprenticeship programme.

OUTCOMES

In setting out a clearly-defined level of achievement, this qualification will:

1. Enhance the knowledge and job satisfaction of learners - providing them with a means of progression to higher level job roles and qualifications.
2. Provide employers with an open and transparent basis for judging the suitability of learners for employment and promotion.
3. Facilitate job movement throughout the timber sector and other related areas of the timber industry.

Specific outcomes for the qualification are listed under the individual unit description.

TARGET GROUP

This Level 3 qualification is appropriate for those working in woodworking machine shops, wanting to gain recognition for the competencies and understanding in the use of wood working machines beyond basic operation and for the competencies in organising work output through the machine shop. Learners will have typically achieved a wood machining qualification at Level 2.

Learners are likely to be working as wood machinists with additional areas of responsibility.

Job role	Type of company
Wood machinist with wider workshop responsibilities	Any sized company having access to a range of traditional machines producing components for the furniture or construction industry or similar.

ENTRY REQUIREMENTS

There are no entry qualifications or age limits required for this qualification.

Assessment for this qualification is open to any learner who has the potential to reach the standards laid down for this qualification. An initial assessment of past experience and current skills, knowledge and understanding should be carried out prior to commencement, to determine suitability for this qualification.

Aids or appliances, which are designed to alleviate disability, may be used during assessment, providing they do not compromise the standard required.

PROGRESSION

Success in this qualification prepares learners for progression in the timber and furniture industries to a position where they can assume a level of responsibility for not only machine use but also for a workshop or department. Learners may have the opportunity to progress into supervisory and management roles taking suitable qualifications or equally may have opportunities to study related crafts such as joinery or cabinet making – both of which have national qualifications and Apprenticeships at Levels 2 and 3. Learners are encouraged to consider belonging to a professional institute or similar. Centres are encouraged to make learners aware of wood machining and related professional bodies.

QUALIFICATION STRUCTURE

The qualification was developed under the Qualifications Credit Framework (QCF) and comprises of units from a number of Sector Skills Councils and therefore Assessors should use the associated appropriate Assessment Strategies.

The qualification is made up of mandatory and optional units. The mandatory units cover those areas which have a common approach, such as safety and the principle learning outcomes for the job role. The optional units offer a choice that can be combined to meet the needs of an individual's specific job role together with the organisations and learners preferences.

Guided Learning Hours (GLH) is the number of hours of teacher supervised or directed study time required to teach an individual unit or qualification. GLH have been calculated unit by unit - in isolation of each other - such that the unit is a stand alone unit, therefore Centres may find that where learners are completing a number of units to achieve the complete qualification actual overall GLH will reduce (i.e. the actual GLH for the entire qualification is unlikely to be a sum total of the individual units taken).

Learning time will clearly be reduced if learners hold QCF credits from prior learning. Learners will also be expected to carry out additional reading, practice and other work to complete each unit and prepare for assessment.

Credit values are determined by the total learning hours (teaching + demonstrations + practice + reflection + assessment - including developing competence in the work environment etc) divided by 10. For example 7 credits reflect a total learning time of 70 hours. Learning time is usually much greater than GLH. Credit values have been calculated unit by unit - in isolation of each other - such that the unit is a stand alone unit; therefore Centres may find that where learners are completing a number of units to achieve the complete qualification, actual learning time will reduce (i.e. the actual learning time for the entire qualification is unlikely to be a sum total of the credits of the individual units taken).

Rules of Combination are used to define the structure of QCF qualifications and specify the minimum credits which must be achieved through a particular combination of units to gain a full qualification.

RULES OF COMBINATION

To achieve the PIABC Level 3 NVQ Diploma in Wood Machining, learners need to successfully gain 103 credits:

Group A: 45 Credits required

PIABC Unit No.	Ofqual Unit No.	Title	Credit	Level	GLH
WM301	A/600/8384	Monitor and maintain a healthy and safe working environment	7	3	30
WM302	H/503/8078	Complete complex and non-routine operations on wood and wood-based products using woodworking machinery	17	3	114
WM303	R/503/2924	Confirming the occupational method of work in the workplace	11	3	37
WM304	A/503/2772	Confirming activities and resources for an occupational work area	10	3	33

Group B: 48 Credits required

PIABC Unit No.	Ofqual Unit No.	Title	Credit	Level	GLH
WM305	L/600/8566	Producing sawn wood and wood based products in the workplace	20	2	67
WM306	R/600/8567	Producing planed wood and wood based products in the workplace	15	2	50
WM307	Y/600/8568	Producing profiled wood and wood based products in the workplace	21	2	70
WM308	H/600/8573	Producing wood and wood-based products using computer numerically controlled/numerically controlled (CNC/NC) machinery in the workplace	22	2	73
WM309	D/600/8569	Jointed wood and wood based products in the workplace	13	2	43

Group C: 10 credits required

PIABC Unit No.	Ofqual Unit No.	Title	Credit	Level	GLH
WM310	F/600/8290	Evaluate and develop own skills and expertise	10	3	41
WM311	T/600/8335	Improve process and quality control in a commercial environment	10	3	41
WM312	K/600/8333	Improve the customer relationship	14	3	55
WM313	F/600/8337	Define and develop standard operating procedures within the furniture, furnishings and interiors industry	10	3	33
WM314	F/600/8339	Provide technical advice on furniture manufacture operations	15	3	49
WM315	R/600/8343	Produce and maintain jigs and templates	8	3	16
WM316	Y/600/8344	Solve and prevent furniture manufacture problems	15	3	47
WM317	K/600/8347	Produce furniture production specifications	9	3	30
WM318	M/600/8348	Operate CAD equipment	10	3	46
WM319	F/600/8371	Plan and manage design work	17	3	65
WM320	H/600/8380	Conduct a health and safety risk assessment of a Furniture/interiors-related workplace	8	3	36
WM321	M/600/8382	Make sure your own actions within the Furniture/interiors- related workplace aim to protect the environment	7	3	30
WM322	D/600/8491	Allocate and check your team's work	5	3	24
WM323	H/600/8492	Manage and motivate work teams	5	3	24

QUALIFICATION LEVEL

PIABC Level 3 NVQ Diploma in Wood Machining is a Level 3 qualification.

Level 3 Descriptor Summary

Achievement at Level 3 reflects the ability to identify and use relevant understanding, methods and skills to complete tasks and address problems that, while well defined, have a measure of complexity. It includes taking responsibility for initiating and completing tasks and procedures as well as exercising autonomy and judgement within limited parameters. It also reflects awareness of different perspectives or approaches within an area of study or work.

Source: Regulatory arrangements for the Qualifications and Credit Framework OFQUAL 2008

PROGRAMME ORGANISATION

Programmes leading to the PIABC Level 3 NVQ Diploma in Wood Machining (QCF) can be organised and delivered by providers who have gained centre and qualification approval from PIABC. To achieve this they need to complete the PIABC centre and qualification approval procedures available from www.piabc.org.uk. In completing the documentation and the approval visit, centres need to demonstrate their ability to deliver high quality education leading to the qualification. Centres are expected to employ robust quality assurance processes. PIABC will appoint its own moderators to ensure the effective operation of these processes and the maintenance of standards of quality.

The organisation of the qualification is at the discretion of the centre and will take into account the aims, aspirations and experience of the learners.

Centres are encouraged to choose the most suitable curriculum model for their learners. Whilst the sequential delivery of parts of the unit is a possibility and may provide the most straightforward way of determining completion, it may be that some degree of integration of elements will occur, or that other methods of delivery are more appropriate to meet the needs of learners. It should be noted however that the whole unit and all the learning outcomes will be assessed.

Centres must ensure that adequate arrangements are in place for supporting learners. This could be either through separate tutorial sessions or through the use of time within structured study sessions. Centres using on-line or other forms of open learning must ensure that appropriate tutorial support is provided for learners.

The employer's engagement in learning and assessment opportunities will be paramount in securing timely achievement and a participative role should be encouraged.

In relevant circumstances, centres are recommended to provide career related information and guidance to their learners.

GUIDANCE ON LEARNING AND TEACHING

Some learners will have undertaken a related learning course prior to or in conjunction with this qualification – especially if they are following a nationally recognised Apprenticeship. However, those learners employed in the timber and related industries, completing this qualification without following a recognised training programme will come to the qualification with varying levels of existing knowledge and/or practical experience of some parts of the syllabus. Training needs should be identified and gaps in knowledge and competency should be filled with a planned delivery of an individual learning plan. This should be utilised in preparing for teaching and assessment. The sharing of knowledge which has the potential to lead to a high level of understanding should be encouraged by the use of staff with direct experience in the wood machining and related industries. This must, of course, be balanced against a sound understanding of the theoretical understanding.

The relationship between theory and practice is a theme that should be reflected in the assessments for the programme. Therefore in structured learning and individual work, learners should be aware of the requirement to develop a theoretical understanding to their practical work and a practical application to their theoretical understanding.

Those developing learning programmes should expect to achieve all the learning outcomes. It may be useful to have workbooks for use either at home or in the workplace.

QUALIFICATION DESCRIPTION

The PIABC Level 3 NVQ Diploma in Wood Machining follows the QCF principles for designing units and qualifications and contains the features listed as follows:

- Unit QCF reference number, title, level, guided learning hours and credit value.
- Each unit consist of:
 - Learning Outcomes that show what the learners will be able to understand, know or demonstrate.
 - Assessment Criteria that show what the learners can do or produce in order to show that they have met the learning outcome.
 - Some Units also indicate the intended scope of the performance criteria
- To successfully complete a Unit, learners must meet all the learning outcomes by showing that they have achieved all the assessment criteria with consideration to the intended scope.

UNIT CONTENT: LEARNING OUTCOMES AND ASSESSMENT CRITERIA

The PIABC Level 3 NVQ Diploma in Wood Machining is a nationally recognised qualification which requires the learner to possess or acquire the competencies and knowledge of the more complex wood machining tasks (on traditional machines and /or CNC) brought about by the production of bespoke products or infrequent procedures requiring particular thought and planning and use of guides, jigs, templates and the like. The qualification also requires knowledge of workflow planning in a machine shop environment to maximise output whilst controlling cost, safety and quality. Those achieving the diploma will be able to apply this knowledge in the production of components and/or products in a commercial setting, choosing appropriate machinery, possibly advising others and suggesting correct procedures for particular machine operations, functions and job specifications.

The qualification is intended for those who have prior knowledge and experience at Level 2 – holding a PIABC Level 2 NVQ in Wood Machining. The qualification contains Level 2 and Level 3 units. Learners who have already obtained relevant units can claim APL for the units already achieved.

MONITOR AND MAINTAIN A HEALTHY AND SAFE WORKING ENVIRONMENT

PIABC Unit No: WM301

Guided Learning Hours: 30

Qualification Accreditation No: A/600/8384

Unit Credits: 7

Unit Level: 3

Assessment Guidance

Emergency - Accident, fire, explosions, toxic fumes, electrical shocks

Hazard - A hazard is "anything that can cause harm".

Method Statements - Employers are required to ensure so far as is reasonably practicable the provision of a "safe system of work" which is aligned to the size and/or complexity of the work to be done. It shall show the means by which the work will be carried out.

Personal Protective Equipment - Personal protective equipment (PPE) is all equipment (including clothing affording protection against the weather) which is provided by the company and is intended to be worn or held by a person at work to protect against one or more risks to their health or safety. Examples of which are safety helmets, goggles, gloves, eye protection, high-visibility clothing, safety footwear and safety harnesses. Workers should be properly trained in the use of PPE.

Responsible Person - This will be the person who is responsible for you and your work in the workplace.

Risk - A risk is "the likelihood or chance, high or low, that somebody will be harmed by the hazard".

Risk Assessment - It is a legal requirement that the risks in the workplace have been assessed. It requires making decisions about hazards, whether they are significant and covered with satisfactory precautions to reduce the risk. It shall include details of the provision of personal protective equipment (see above), workplace/site layout, access, how falls of materials shall be prevented etc.

Working Environment - This refers to the type of work location. The working environment is something you would not be able to change

Working Practices - This includes: activities, procedures, use of materials or equipment and working techniques used in carrying out your job.

Learning Outcomes and Assessment Criteria

Learning Outcome – The learner will:

1. Be able to monitor and maintain health and safety in the workplace

Assessment Criterion - The learner can:

- 1.1 Identify health and safety procedures relevant to the work location and working environment
- 1.2 Identify aspects of the risk assessment and method statement which impacts on you, your work and others in your workplace
- 1.3 Inform others of the aspects of the risk assessment and method statement which will impact on them
- 1.4 Review current working practices for hazards which could cause harm
- 1.5 Optimise resources to minimise wastage and energy consumption
- 1.6 Control health and safety hazards within own job

**Learning Outcome –
The learner will:**

Assessment Criterion - The learner can:

- responsibility limits
- 1.7 Report hazards which you cannot control to the persons responsible for health and safety in the workplace
 - 1.8 Supervise others to ensure their conduct does not endanger their own health and safety or that of other persons
 - 1.9 Follow workplace policies and manufacturers' instructions for the safe use of tools, plant and equipment
 - 1.10 Follow sustainable working practices
 - 1.11 Follow agreed work location procedures in the event of an emergency and in the event of injury to self or others
 - 1.12 Confirm the use of personal protective equipment within the limits of your own responsibility
2. Know how to monitor and maintain health and safety in the workplace
- 2.1 Explain the legal duties of employers and employees as defined by the Health and Safety at Work Act 1974
 - 2.2 Explain the duties for health and safety as defined by any specific legislation covering your job role
 - 2.3 State hazards that may exist in the workplace
 - 2.4 Define the role and importance of risk assessments and method statements
 - 2.5 Explain the importance of conveying information on risk assessments and method statements to others
 - 2.6 Explain health and safety risks present in your job role and any others for whom you are responsible
 - 2.7 State the importance of using sustainable working practices
 - 2.8 Explain the importance of an awareness to hazards in the work place and in the specific work location
 - 2.9 Explain workplace health and safety procedures
 - including site evacuation procedures
 - procedures for dealing with injured persons
 - emergency procedures
 - 2.10 Define own responsibilities for health and safety and that of any others for whom you are responsible in your job description
 - 2.11 Name the responsible person(s) to whom to report health and safety matters
 - 2.12 Describe different types of personal protective equipment
 - 2.13 Explain when Personal Protective Equipment (PPE) should be used and the importance of taking care of those items for which you are responsible

COMPLETE COMPLEX AND NON-ROUTINE OPERATIONS ON WOOD AND WOOD-BASED PRODUCTS USING WOODWORKING MACHINERY

PIABC Unit No: WM302

Guided Learning Hours: 114

Qualification Accreditation No: H/503/8078

Unit Credits: 17

Unit Level: 3

Assessment Guidance

This unit is subject to the requirements set out in Proskills and Awarding Organisation Assessment Strategies.

Specification - Drawings, cutting lists, risk assessments and manufacturers' information. Health and safety legislation and official guidance

Operational Responsibilities - Those associated with the technical provision and carrying out of machining operations such as Approved Code of Practice (ACOP), PUWER etc

Welfare Responsibilities - Those associated with the carrying out of machining operations such as Personal Protective Equipment (PPE) regulations

Organisational Responsibilities - Those associated with the organisations own procedures

Resources - Traditional wood machining machines, wood and wood-based products, tooling, equipment, jigs, templates, dimensional aids, lubricants, ancillary equipment

Appropriate Action - The nature of the problem may be procedural *or* mechanical and impact upon company/machine shop procedure, safety, quality, production output, *or* costs.

Machines -

- Traditional wood machining machines
- Machine Processes
- Sawing processes
 - Dimension saw processes – tapered work, jigs, compound bevels
 - Cross Cut processes – bevelled, compound, angled, trenching
 - Band saw processes - tapered free-hand curves, guide pin & template, wedges, saddle
- Planing processes
 - Thicknesser processes: tapered, bevelled work (eg box jig), short stock, thin stock
 - Surfacer processes: short stock, long stock (pressure equipment, extension tables, and holding devices)
- Profiling processes
 - Spindle Moulder processes: Curved work, stopped work, dropping on, saddle
 - Conventional High-speed Router processes: Bed pin work, making/ using complex/multi jigs
 - Four Sided Planer Moulder processes: Set all cutters for complex or multi-feed operations
- Jointing processes
 - Tenon processes: to curved components, sloping/angled, scribed, saddle
 - Morticer processes: Non 90⁰

Learning Outcomes and Assessment Criteria

Learning Outcome – The learner will:

Assessment Criterion - The learner can:

1. Know how to comply with relevant legislation and official guidance when producing complex (or non-routine) wood or wood-based components
 - 1.1 Describe the technical **operational responsibilities** under current legislation/ official guidance
 - 1.2 Describe the **welfare responsibilities** under current legislation/ official guidance
 - 1.3 Describe the **Organisational responsibilities** under current legislation/ official guidance
2. Interpret information for producing complex (or non-routine) wood or wood-based components
 - 2.1 Interpret information from **specifications**
 - 2.2 Differentiate between **resources** to enable specification to be met
 - 2.3 Select appropriate resource to enable **specification** to be met
 - 2.4 Apply **appropriate action** to rectify problems that occur with chosen resources
 - 2.5 Confirm that selected resources are compatible and fit for purpose
3. Know how to Interpret information for producing complex (or non-routine) wood or wood-based components
 - 3.1 Critically compare characteristics of dimensional control aids
 - 3.2 Explain how the technical **specification** can be met by the design features of control aids
 - 3.3 Draw conclusions as to how the current legislation / official guidance can be met by the design features of chosen control aids, templates and jigs
 - 3.4 Explain the effects that control aids, templates and jigs have on
 - Safety
 - Cost
 - Quality
 - Workflow /Production
 - 3.5 Justify the environmental arrangements in place within the workplace, aligned with current associated legislation
4. Prepare and set up **machines** for producing complex (or non-routine) wood or wood-based components
 - 4.1 Plan production of the operation process to meet targets for:
 - Safety
 - Cost
 - Quality/ Specification
 - Workflow /Production
 - 4.2 Demonstrate the following work skills when preparing to produce complex (or non-routine) wood or wood-based components:
 - measuring,
 - marking out,
 - adjusting,
 - fitting,
 - finishing,
 - positioning and securing – including control aids
5. Know how to prepare and set up **machines** for producing complex (or non-routine) wood or wood-based components
 - 5.1 Explain how the technical **specification** can be met by the positioning of control aids, templates and jigs
 - 5.2 Compare and contrast the solutions available when selecting methods of positioning and securing control aids,

**Learning Outcome –
The learner will:**

6. Operate **machines** for producing complex (or non-routine) wood or wood-based components

Assessment Criterion - The learner can:

templates and jigs

- 6.1 Set up and carry out at least 6 **machine processes** using least two of the following **machines**:
- Sawing
 - Planing
 - Profiling
 - Jointing
 - CNC/NC/Machining Centres
- 6.2 Set up and change tooling to meet company requirements
- 6.3 State the needs of other occupations and how to communicate within a team when producing complex (or non-routine) wood or wood-based components
- 6.4 Describe how to maintain the tools and equipment used when producing complex (or non-routine) wood or wood-based components

CONFIRMING THE OCCUPATIONAL METHOD OF WORK IN THE WORKPLACE

PIABC Unit No: WM303

Guided Learning Hours: 37

Qualification Accreditation No: R/503/2924

Unit Credits: 11

Unit Level: 3

Assessment Guidance

This unit must be assessed in a work environment, in accordance with:

- the Additional Requirements for Qualifications using the title NVQ in QCF
- the Construction Skills Consolidated Assessment Strategy for Construction and the Built Environment.

Assessors for this unit must have verifiable, current industry experience and a sufficient depth of relevant occupational expertise and knowledge, and must use a combination of assessment methods as defined in the Consolidated Assessment Strategy.

Workplace evidence of skills cannot be simulated.

Learning Outcomes and Assessment Criteria

Learning Outcome – The learner will:

Assessment Criterion - The learner can:

- | | |
|--|--|
| 1. Assess available project data accurately to determine the occupational method of work. | 1.1 Interpret and extract information from drawings, specifications, schedules, manufacturer's information, methods of work, risk assessments and programmes of work.
1.2 Explain how to summarise the following project data: <ul style="list-style-type: none">– required quantities– specifications– detailed drawings– health and safety requirements– timescales– scope of works. 1.3 Explain the different methods of assessing available project data.
1.4 Explain how to use project data to interpret the work method, In relation to: <ul style="list-style-type: none">– standard work procedures– sequence of work– organisation of resources (people, equipment, materials)– work techniques– working conditions (health, safety and welfare)– risk assessment. |
| 2. Obtain additional information from alternative sources in cases where the available project data is insufficient. | 2.1 Collect and collate additional information from alternative sources to clarify the work to be carried out.
2.2 Explain different methods and techniques of obtaining additional information from the following alternative sources when available project data is insufficient: <ul style="list-style-type: none">– customers or representatives– suppliers– regulatory authorities– manufacturer's literature. |
| 3. Identify work methods that will make best use of resources | 3.1 Examine potential work methods to carry out the occupational work activity. |

**Learning Outcome –
The learner will:**

and meet project, statutory and contractual requirements.

4. Confirm and communicate the selected work method to relevant personnel.

Assessment Criterion - The learner can:

- 3.2 Determine which work methods will make best use of relevant resources and meet health and safety requirements relating to technical and/or project criteria.
- 3.3 Explain how to identify work methods that make best use of resources and meet project, statutory and contractual requirements against technical criteria, in relation to:
 - health and safety welfare (principles of protection)
 - fire protection
 - access and egress
 - equipment availability
 - availability of competent workforce
 - pollution risk
 - waste and disposal
 - zero and low carbon outcomes
 - weather conditions.
- 3.4 Explain how to identify work methods that make best use of resources and meet project, statutory and contractual requirements against project criteria, in relation to:
 - conforming to statutory requirements
 - customer and user needs
 - contract requirements in terms of time, quantity and quality
 - environmental considerations.
- 3.5 Explain how different methods of work can achieve zero/low carbon outcomes.
- 4.1 Confirm the selected occupational work method that meets project, statutory and contractual requirements.
- 4.2 Communicate appropriately to relevant people on the selected occupational work method.
- 4.3 Describe the different techniques and methods of confirming and communicating work methods to relevant people.
- 4.4 Explain the principles of equality and diversity and how to apply them when working and communicating with others.

CONFIRMING WORK ACTIVITIES AND RESOURCES FOR AN OCCUPATIONAL WORK AREA IN THE WORKPLACE

PIABC Unit No: WM304

Guided Learning Hours: 33

Qualification Accreditation No: A/503/2772

Unit Credits: 10

Unit Level: 3

Assessment Guidance

This unit must be assessed in a work environment, in accordance with:

- the Additional Requirements for Qualifications using the title NVQ in QCF
- the Construction Skills Consolidated Assessment Strategy for Construction and the Built Environment.

Assessors for this unit must have verifiable, current industry experience and a sufficient depth of relevant occupational expertise and knowledge, and must use a combination of assessment methods as defined in the Consolidated Assessment Strategy.

Workplace evidence of skills cannot be simulated.

Learning Outcomes and Assessment Criteria

Learning Outcome – The learner will:

Assessment Criterion - The learner can:

- | | |
|--|---|
| 1. Identify work activities, assess required resources and plan the sequence of work. | 1.1 Identify work activities, assess required resources and plan the sequence of work.
1.2 Identify work activities and formulate a plan for their own sequence of work.
1.3 Explain the types of work relative to the occupational area and how to identify different work activities.
1.4 Explain methods of assessing the resources needed from a range of available information.
1.5 Explain the required information and the different methods used to prepare a work programme relative to the occupational area. |
| 2. Obtain clarification and advice where the resources required are not available. | 2.1 Seek advice and clarity from appropriate sources on resources available and the alternatives that can be used for the work when required resources are not available.
2.2 Explain the different sources and methods that can be used to obtain clarification and advice when the required resources are not available. |
| 3. Evaluate the work activities and the requirements of any significant external factors against the project requirements. | 3.1 Assess progress of work against project requirements, taking into account external factors relating to:
– other occupations and /or customers
– resources
– weather conditions
– health and safety requirements.
3.2 Explain different methods of evaluating work activities against the following project requirements:
– contract conditions |

**Learning Outcome –
The learner will:**

Assessment Criterion - The learner can:

- contract programme
 - health and safety requirements of operatives.
- 3.3 Evaluate the requirements of significant external factors that could affect the progress of work, in relation to:
 - other related programmes
 - special working conditions
 - weather conditions
 - other occupations/people
 - resources
 - health and safety requirements.
- 4. Identify work activities which influence each other and make the best use of these sources available.
 - 4.1 Determine work activities that have an influence on each other.
 - 4.2 Evaluate which work activities make the best use of available resources in relation to:
 - occupations and/or customers associated with the work
 - tools, plant and/or ancillary equipment materials and components.
 - 4.3 Explain different methods and sources that can identify which work activities influence each other.
 - 4.4 Describe how to determine the sequence of work activities and how long each work activity will take.
 - 4.5 Describe what zero and low carbon requirements are.
 - 4.6 Explain how work activities and different ways of using resources can impact on zero and low carbon requirements, and make a positive contribution to the environment.
- 5. Identify changed circumstances that require alterations to the work programme and justify them to decision makers.
 - 5.1 Evaluate project progress against the work programme to identify any changed circumstances.
 - 5.2 Inform line management and/or customers on the type and extent of any required changes to the work programme.
 - 5.3 Explain how to identify possible alterations to the work programme to meet changed circumstances relating to action lists, method statements, duration, schedules and/or occupation specific requirements.
 - 5.4 Explain how to assess contractual/work effects resulting from alterations to the work programme.
 - 5.5 Explain the methods used to justify to decision makers on the effects resulting from alterations to the work programme.

PRODUCING SAWN WOOD AND WOOD-BASED PRODUCTS IN THE WORKPLACE

PIABC Unit No: WM305

Guided Learning Hours: 67

Qualification Accreditation No: L/600/8566

Unit Credits: 20

Unit Level: 2

Assessment Guidance

This unit must be assessed in a work environment and in accordance with:

- the Additional Requirements for Qualifications using the title NVQ in QCF
- the ConstructionSkills' Consolidated Assessment Strategy for Construction and the Built Environment – Craft, Supervisory, Technical, Managerial and Professional Units and Qualifications with NVQ in the Qualification and Credit Framework (QCF) title and SVQs.

Assessors for this unit must use a combination of the following assessment methods:

- observation of normal work activities within the workplace that clearly confirms the required skills
- questioning the learner on knowledge criteria that clearly confirms the required understanding
- review other forms of evidence that can clearly confirm industry required skills, knowledge and understanding.

Assessors for this unit must have verifiable, current industry experience and a sufficient depth of occupational expertise and knowledge of producing sawn wood and wood-based products to be effective and reliable when confirming a learner's competence.

Note: Learning Outcome 7 – contract information can relate to drawings, specifications, schedules, cuttings lists, manufacturer's information and oral instruction.

Workplace evidence of skills cannot be simulated.

This unit must be assessed against **three** of the following endorsements:

- Band resaw
- Narrow band saw
- Parallel band saw
- Band mill
- Twin line resaw
- Hand fed circular rip saw
- Dimension/tilting arbour circular saw
- Sliding table panel saw
- Vertical wall panel saw
- Pullover cross cut saw
- Radial arm cross cut saw
- Straight line edger
- Multi-rip saw
- Beam saw
- Snip saw

Learning Outcomes and Assessment Criteria

Learning Outcome – The learner will:

Assessment Criterion - The learner can:

1. Interpret the given information relating to the work and resources when producing sawn wood and wood-based products.
 - 1.1 Interpret and extract information from drawings, specifications, schedules, cutting lists, risk assessments and manufacturers' information.
 - 1.2 Comply with information and/or instructions derived from risk assessments and method statement.
 - 1.3 State the organisational procedures developed to report and rectify inappropriate information and unsuitable resources and how they are implemented.
 - 1.4 Describe different types of information, their source and how they are interpreted in relation to:
 - drawings, specifications, schedules, cutting lists, risk assessments, manufacturers' information and legislation governing wood machining.
2. Know how to comply with relevant legislation and official guidance when producing sawn wood and wood-based products.
 - 2.1 Describe their responsibilities under current legislation and official guidance whilst working:
 - in the workplace, with tools, tooling and equipment, with materials and substances, movement of materials and by manual and mechanical lifting.
 - 2.2 Describe the organisational security procedures for tools, equipment and personal belongings in relation to workplace, company and operative.
 - 2.3 State what the accident reporting procedures are and who is responsible for making reports.
3. Maintain safe working practices when producing sawn wood and wood-based products.
 - 3.1 Use personal protective equipment (PPE) safely to carry out the activity in accordance with all current statutory legislation and approved Codes of Practice when producing sawn wood and wood-based products.
 - 3.2 Explain why and when personal protective equipment (PPE) should be used, relating to producing sawn wood and wood-based products, and the types, purpose and limitations of each type.
 - 3.3 State how emergencies should be responded to in accordance with organisational authorisation and personal skills when involved with fires, spillages, injuries, accidents and other task-related hazards.
4. Select the required quantity and quality of resources for the methods of work to produce sawn wood and wood-based products.
 - 4.1 Describe the characteristics, quality, uses, limitations and defects associated with the resources in relation to:
 - sawing machinery
 - wood materials
 - wood-based materials
 - lubricants
 - hand tools and ancillary equipment.
 - 4.2 Select resources associated with own work in relation to materials, components, tools, tooling and equipment, and dimensional control aids as appropriate.
 - 4.3 State how the resources should be used correctly, how problems associated with the resources are reported and

**Learning Outcome –
The learner will:**

Assessment Criterion - The learner can:

- how the organisational procedures are used.
- 4.4 Outline potential hazards associated with the resources and method of work.
- 4.5 Describe how to calculate quantity, length, area and wastage associated with the method/procedure to produce sawn wood and wood-based products.
5. Minimise the risk of damage to the work and surrounding area when producing sawn wood and wood-based products.
- 5.1 Protect the work, equipment and its surrounding area from damage in accordance with organisational procedures.
- 5.2 Minimise damage and maintain a clean work space.
- 5.3 Describe how to protect work and equipment from damage and the purpose of protection in relation to general workplace activities and other occupations.
- 5.4 Remove waste in accordance with legislation.
- 5.5 State why the removal of waste should be carried out in relation to the work.
6. Complete the work within the allocated time when producing sawn wood and wood-based products.
- 6.1 Demonstrate completion of the work within the allocated time.
- 6.2 State the purpose of the work programme and explain why deadlines should be kept in relation to:
- types of progress charts, timetables and estimated times
 - organisational procedures for reporting circumstances which will affect the work programme.
7. Comply with the given contract information to produce sawn wood and wood-based products to the required specification.
- 7.1 Demonstrate the following work skills when producing sawn wood and wood-based products:
- measuring, marking out, adjusting, fitting, finishing, positioning and securing.
- 7.2 Prepare, set up, operate and maintain at least three of the following machines to produce sawn wood and wood-based products to given working instructions:
- band resaw
 - narrow band saw
 - parallel band saw
 - band mill
 - twin line resaw
 - hand fed circular rip saw
 - dimension/tilting arbour circular saw
 - sliding table panel saw
 - vertical wall panel saw
 - pullover cross cut saw
 - radial arm cross cut saw
 - straight line edger
 - multi-rip saw
 - beam saw
 - snip saw.
- 7.3 Set up and change appropriate tooling to meet the requirements.
- 7.4 Describe how to apply safe work practices, follow procedures, report problems and establish the authority needed to rectify them, to:

**Learning Outcome –
The learner will:**

Assessment Criterion - The learner can:

- prepare and set up the sawing machinery
- operate the sawing machinery
- maintain the sawing machinery
- identify the compatibility of materials with machines
- identify how damage to materials and machines can be avoided
- identify the correct use of lubricants
- identify the relevant dimensional control aids and their uses
- identify and report defects and discrepancies in materials and machines
- set up and change appropriate tooling
- identify the types and suitability of tooling
- identify the scope and limitations of the machine
- select the appropriate machine for the work to be carried out
- use hand tools and equipment.

7.5 Safely use and store hand tools and ancillary equipment.

7.6 State the needs of other occupations and how to communicate within a team when producing sawn wood and wood-based products.

7.7 Describe how to maintain the tools and equipment used when producing sawn wood and wood-based products.

PRODUCING PLANED WOOD AND WOOD-BASED PRODUCTS IN THE WORKPLACE

PIABC Unit No: WM306

Guided Learning Hours: 20

Qualification Accreditation No: R/600/8567

Unit Credits: 15

Unit Level: 2

Assessment Guidance

This unit must be assessed in a work environment and in accordance with:

- the Additional Requirements for Qualifications using the title NVQ in QCF
- the Construction Skills' Consolidated Assessment Strategy for Construction and the Built Environment – Craft, Supervisory, Technical, Managerial and Professional Units and Qualifications with NVQ in the Qualification and Credit Framework (QCF) title and SVQs.

Assessors for this unit must use a combination of the following assessment methods:

- observation of normal work activities within the workplace that clearly confirms the required skills
- questioning the learner on knowledge criteria that clearly confirms the required understanding
- review other forms of evidence that can clearly confirm industry required skills, knowledge and understanding.

Assessors for this unit must have verifiable, current industry experience and a sufficient depth of occupational expertise and knowledge of producing wood and wood-based products using computer numerically controlled/numerically controlled (CNC/NC) machinery to be effective and reliable when confirming a learner's competence.

Note: Learning Outcome 7 – contract information can relate to drawings, specifications, schedules, cuttings lists, manufacturer's information and oral instruction.

Workplace evidence of skills cannot be simulated.

This unit must be assessed against **one** of the following endorsements:

- Surface planer and thicknesser
- Four sided planer and moulder

Learning Outcomes and Assessment Criteria

Learning Outcome – The learner will:

1. Interpret the given information relating to the work and resources when producing planed wood and wood-based products.

Assessment Criterion - The learner can:

- 1.1 Interpret and extract information from drawings, specifications, schedules, cutting lists, risk assessments and manufacturers' information.
- 1.2 Comply with information and/or instructions derived from risk assessments and method statement.
- 1.3 State the organisational procedures developed to report and rectify inappropriate information and unsuitable resources and how they are implemented.

- 1.4 Describe different types of information, their source and how they are interpreted in relation to:
 - drawings, specifications, schedules, cutting lists, risk assessments, manufacturers' information and legislation governing wood machining.
2. Know how to comply with relevant legislation and official guidance when producing planed wood and wood-based products.
 - 2.1 Describe their responsibilities under current legislation and official guidance whilst working:
 - in the workplace, with tools, tooling and equipment, with materials and substances, with movement of materials and by manual and mechanical lifting.
 - 2.2 Describe the organisational security procedures for tools, equipment and personal belongings in relation to workplace, company and operative.
 - 2.3 State what the accident reporting procedures are and who is responsible for making reports.
3. Maintain safe working practices when producing planed wood and wood-based products.
 - 3.1 Use personal protective equipment (PPE) safely to carry out the activity in accordance with all current statutory legislation and approved Codes of Practice when producing planed wood and wood-based products.
 - 3.2 Explain why and when personal protective equipment (PPE) should be used, relating to producing planed wood and wood-based products, and the types, purpose and limitations of each type.
 - 3.3 State how emergencies should be responded to in accordance with organisational authorisation and personal skills when involved with fires, spillages, injuries, accidents and other task-related hazards.
4. Select the required quantity and quality of resources for the methods of work to produce planed wood and wood-based products.
 - 4.1 Describe the characteristics, quality, uses, limitations and defects associated with the resources in relation to:
 - planing machinery
 - wood materials
 - wood based materials
 - lubricants
 - hand tools and ancillary equipment.
 - 4.2 Select resources associated with own work in relation to materials, components, tools, tooling and equipment, and dimensional control aids as appropriate.
 - 4.3 State how the resources should be used correctly, how problems associated with the resources are reported and how the organisational procedures are used.
 - 4.4 Outline potential hazards associated with the resources and method of work.
 - 4.5 Describe how to calculate quantity, length, area and wastage associated with the method/procedure to produce planed wood and wood-based products.
5. Minimise the risk of damage to the work and surrounding area when producing planed wood and wood-based products.
 - 5.1 Protect the work, equipment and its surrounding area from damage in accordance with organisational requirements.
 - 5.2 Minimise damage and maintain a clean work space.
 - 5.3 Describe how to protect work and equipment from damage and the purpose of protection in relation to general workplace activities and other occupations.

- 5.4 Remove waste in accordance with legislation.
- 5.5 State why the removal of waste should be carried out in relation to the work.
- 6. Complete the work within the allocated time when producing planed wood and wood-based products.
 - 6.1 Demonstrate completion of the work within the allocated time.
 - 6.2 State the purpose of the work programme and explain why deadlines should be kept in relation to:
 - types of progress charts, timetables and estimated times
 - organisational procedures for reporting circumstances which will affect the work programme.
- 7. Comply with the given contract information to produce planed wood and wood-based products to the required specification.
 - 7.1 Demonstrate the following work skills when producing planed wood and wood-based products:
 - measuring, marking out, adjusting, fitting, finishing, positioning and securing.
 - 7.2 Prepare, set up, operate and maintain at least one combination of the following machines to produce wood and wood-based products to given working instructions:
 - surface planer and thicknesser (can be a combined machine)
 - four sided planer and moulder (for planed all round).
 - 7.3 Set up and change appropriate tooling to meet the requirements.
 - 7.4 Describe how to apply safe work practices, follow procedures, report problems and establish the authority needed to rectify them, to:
 - prepare and set up the planing machinery
 - operate the planing machinery
 - maintain the planing machinery
 - identify how damage to materials and machines can be avoided
 - identify the correct use of lubricants
 - identify the compatibility of materials with machines
 - identify the relevant dimensional control aids and their uses
 - identify and report defects and discrepancies in materials and machines
 - set up and change appropriate tooling
 - identify the types and suitability of tooling
 - identify the scope and limitations of the machine
 - select the appropriate machine for the work to be carried out
 - use hand tools and equipment.
 - 7.5 Safely use and store hand tools and ancillary equipment.
 - 7.6 State the needs of other occupations and how to communicate within a team when producing planed wood and wood-based products.
 - 7.7 Describe how to maintain the tools and equipment used when producing planed wood and wood-based products.

PRODUCING PROFILED WOOD AND WOOD-BASED PRODUCTS IN THE WORKPLACE

PIABC Unit No: WM307

Guided Learning Hours: 70

Qualification Accreditation No: Y/600/8568

Unit Credits: 21

Unit Level: 2

Assessment Guidance

This unit must be assessed in a work environment and in accordance with:

- the Additional Requirements for Qualifications using the title NVQ in QCF
- the ConstructionSkills' Consolidated Assessment Strategy for Construction and the Built Environment – Craft, Supervisory, Technical, Managerial and Professional Units and Qualifications with NVQ in the Qualification and Credit Framework (QCF) title and SVQs.

Assessors for this unit must use a combination of the following assessment methods:

- observation of normal work activities within the workplace that clearly confirms the required skills
- questioning the learner on knowledge criteria that clearly confirms the required understanding
- review other forms of evidence that can clearly confirm industry required skills, knowledge and understanding.

Assessors for this unit must have verifiable, current industry experience and a sufficient depth of occupational expertise and knowledge of producing wood and wood-based products using computer numerically controlled/numerically controlled (CNC/NC) machinery to be effective and reliable when confirming a learner's competence.

Note: Learning Outcome 7 – contract information can relate to drawings, specifications, schedules, cuttings lists, manufacturer's information and oral instruction.

Workplace evidence of skills cannot be simulated.

This unit must be assessed against **two of the following** endorsements:

- Vertical spindle moulder (straight work)
- Four sided planer and moulder
- High-speed router
- Double-end tenoner
- Wood turning lathe
- Copying lathe
- Linear shaper
- Rotary shaper
- CNC/NC machines

Learning Outcomes and Assessment Criteria

Learning Outcome – The learner will:

Assessment Criterion - The learner can:

- | | |
|---|---|
| <p>1. Interpret the given information relating to the work and resources when producing profiled wood and wood-based products.</p> | <p>1.1 Interpret and extract information from drawings, specifications, cutting lists, risk assessments and manufacturers' information.</p> <p>1.2 Comply with information and/or instructions derived from risk assessments and method statement.</p> <p>1.3 State the organisational procedures developed to report and rectify inappropriate information and unsuitable resources and how they are implemented.</p> <p>1.4 Describe different types of information, their source and how they are interpreted in relation to:
– drawings, specifications, schedules, cutting lists, risk assessments, manufacturers' information and legislation governing wood machining.</p> |
| <p>2. Know how to comply with relevant legislation and official guidance when producing profiled wood and wood-based products.</p> | <p>2.1 Describe their responsibilities under current legislation and official guidance whilst working:
– in the workplace, with tools, tooling and equipment, with materials and substances, movement of materials and by manual and mechanical lifting.</p> <p>2.2 Describe the organisational security procedures for tools, equipment and personal belongings in relation to workplace, company and operative.</p> <p>2.3 State what the accident reporting procedures are and who is responsible for making reports.</p> |
| <p>3. Maintain safe working practices when producing profiled wood and wood-based products.</p> | <p>3.1 Use personal protective equipment (PPE) safely to carry out the activity in accordance with all current statutory legislation and approved Codes of Practice when producing profiled wood and wood-based products.</p> <p>3.2 Explain why and when personal protective equipment (PPE) should be used, relating to producing profiled wood and wood-based products, and the types, purpose and limitations of each type.</p> <p>3.3 State how emergencies should be responded to in accordance with organisational authorisation and personal skills when involved with fires, spillages, injuries, accidents and other task-related hazards.</p> |
| <p>4. Select the required quantity and quality of resources for the methods of work to produce profiled wood and wood-based products.</p> | <p>4.1 Describe the characteristics, quality, uses, limitations and defects associated with the resources in relation to:
– profiling machinery
– wood materials
– wood-based materials
– lubricants
– hand and/or powered tools and ancillary equipment.</p> <p>4.2 Select resources associated with own work in relation to materials, components, tools, tooling and equipment, and dimensional control aids as appropriate.</p> <p>4.3 State how the resources should be used correctly, how problems associated with the resources are reported and</p> |

**Learning Outcome –
The learner will:**

5. Minimise the risk of damage to the work and surrounding area when producing profiled wood and wood-based products.
6. Complete the work within the allocated time when producing profiled wood and wood-based products.
7. Comply with the given contract information to produce profiled wood and wood-based products to the required specification.

Assessment Criterion - The learner can:

- how the organisational procedures are used.
- 4.4 Outline potential hazards associated with the resources and method of work.
 - 4.5 Describe how to calculate quantity, length, area and wastage associated with the method/procedure to produce profiled wood and wood-based products.
 - 5.1 Protect the work, equipment and its surrounding area from damage in accordance with organisational procedures.
 - 5.2 Minimise damage and maintain a clean work space.
 - 5.3 Describe how to protect work and equipment from damage and the purpose of protection in relation to general workplace activities and other occupations.
 - 5.4 Remove waste in accordance with legislation.
 - 5.5 State why the removal of waste should be carried out in relation to the work.
 - 6.1 Demonstrate completion of the work within the allocated time.
 - 6.2 State the purpose of the work programme and explain why deadlines should be kept in relation to:
 - types of progress charts, estimated times and deadlines
 - organisational procedures for reporting circumstances which will affect the work programme.
 - 7.1 Demonstrate the following work skills when producing profiled wood and wood-based products:
 - measuring, marking out, adjusting, fitting, finishing, positioning and securing.
 - 7.2 Prepare, set up, operate and maintain at least two of the following machines to produce profiled wood and wood-based products to given working instructions:
 - vertical spindle moulder (straight work)
 - four sided planer and moulder
 - high-speed router
 - double-end tenoner
 - wood turning lathe
 - copying lathe
 - linear shaper
 - rotary shaper
 - CNC/NC machines.
 - 7.3 Set up and change appropriate tooling to meet the requirements.
 - 7.4 Describe how to apply safe work practices, follow procedures, report problems and establish the authority needed to rectify them, to:
 - prepare and set up the profiling machinery
 - operate the profiling machinery
 - maintain the profiling machinery
 - identify how damage to materials and machines can be avoided
 - identify the correct use of lubricants

**Learning Outcome –
The learner will:**

Assessment Criterion - The learner can:

- identify the compatibility of materials with machines
- identify the relevant dimensional control aids and their uses
- identify and report defects and discrepancies in materials and machines
- set up and change appropriate tooling
- identify the types and suitability of tooling
- identify the scope and limitations of the machine
- select the appropriate machine for the work to be carried out
- use hand tools and equipment.

7.5 Safely use and store hand tools and ancillary equipment.

7.6 State the needs of other occupations and how to communicate within a team when producing profiled wood and wood-based products.

7.7 Describe how to maintain the tools and equipment used when producing profiled wood and wood-based products.

PRODUCING WOOD AND WOOD-BASED PRODUCTS USING COMPUTER NUMERICALLY CONTROLLED/NUMERICALLY CONTROLLED (CNC/NC) MACHINERY IN THE WORKPLACE

PIABC Unit No: WM308

Guided Learning Hours: 73

Qualification Accreditation No: H/600/8573

Unit Credits: 22

Unit Level: 2

Assessment Guidance

This unit must be assessed in a work environment and in accordance with:

- the Additional Requirements for Qualifications using the title NVQ in QCF
- the ConstructionSkills' Consolidated Assessment Strategy for Construction and the Built Environment – Craft, Supervisory, Technical, Managerial and Professional Units and Qualifications with NVQ in the Qualification and Credit Framework (QCF) title and SVQs.

Assessors for this unit must use a combination of the following assessment methods:

- observation of normal work activities within the workplace that clearly confirms the required skills
- questioning the learner on knowledge criteria that clearly confirms the required understanding
- review other forms of evidence that can clearly confirm industry required skills, knowledge and understanding.

Assessors for this unit must have verifiable, current industry experience and a sufficient depth of occupational expertise and knowledge of producing wood and wood-based products using computer numerically controlled/numerically controlled (CNC/NC) machinery to be effective and reliable when confirming a learner's competence.

Note: Learning Outcome 7 – contract information can relate to drawings, specifications, schedules, cuttings lists, manufacturer's information and oral instruction.

Workplace evidence of skills cannot be simulated.

This unit must be assessed against the following endorsements (one from List A or two from List B):

List A:

- High-speed router
- Window centre

List B:

- Single-end tenoner
- Double-end tenoner
- Panel saw
- Morticing machines
- Lathe
- Four-sided planer
- Sanding machine
- Boring machine
- Shaping machine
- Edge bander
- Spindle moulder
- Beam saw

Learning Outcomes and Assessment Criteria

Learning Outcome – The learner will:

Assessment Criterion - The learner can:

- | | |
|---|---|
| 1. Interpret the given information relating to the work and resources when producing wood and wood-based products using computer numerically controlled/numerically controlled (CNC/NC) machinery. | 1.1 Interpret and extract information from drawings, specifications, schedules, cutting lists, risk assessments and manufacturers' information.
1.2 Comply with information and/or instructions derived from risk assessments and method statement.
1.3 State the organisational procedures developed to report and rectify inappropriate information and unsuitable resources and how they are implemented.
1.4 Describe different types of information, their source and how they are interpreted in relation to:
– drawings, specifications, schedules, cutting lists, risk assessments, manufacturers' information and legislation governing wood machining. |
| 2. Know how to comply with relevant legislation and official guidance when producing wood and wood-based products using computer numerically controlled/numerically controlled (CNC/NC) machinery. | 2.1 Describe their responsibilities under current legislation and official guidance whilst working:
– in the workplace, with tools, tooling and equipment, with materials and substances, with movement of materials and by manual and mechanical lifting.
2.2 Describe the organisational security procedures for tools, equipment and personal belongings in relation to site, workplace, company and operative.
2.3 State what the accident reporting procedures are and who is responsible for making reports. |
| 3. Maintain safe working practices when producing wood and wood-based products using computer numerically controlled/numerically controlled (CNC/NC) machinery. | 3.1 Use personal protective equipment (PPE) safely to carry out the activity in accordance with all current legislation and approved Codes of Practice when producing wood and wood-based products using computer numerically controlled/numerically controlled (CNC/NC) machinery.
3.2 Explain why and when personal protective equipment (PPE) should be used, relating to producing wood and wood-based products using computer numerically controlled/numerically controlled (CNC/NC) machinery, and the types, purpose and limitations of each type.
3.3 State how emergencies should be responded to in accordance with organisational authorisation and personal skills when involved with fires, spillages, injuries, accidents and other task-related hazards. |
| 4. Select the required quantity and quality of resources for the methods of work to produce wood and wood-based products using computer numerically controlled/numerically controlled (CNC/NC) machinery. | 4.1 Describe the characteristics, quality, uses, limitations and defects associated with the resources in relation to:
– CNC machinery
– NC machinery
– wood materials
– wood-based materials
– lubricants
– hand tools and ancillary equipment.

4.2 Select resources associated with own work in relation to materials, components, tools, tooling and equipment and |

**Learning Outcome –
The learner will:**

Assessment Criterion - The learner can:

- dimensional control aids as appropriate.
- 4.3 State how the resources should be used correctly, how problems associated with the resources are reported and how the organisational procedures are used.
- 4.4 Outline potential hazards associated with the resources and method of work.
- 4.5 Describe how to calculate quantity, length, area and wastage associated with the method/procedure to produce wood and wood-based products using computer numerically controlled/numerically controlled (CNC/NC) machinery.
5. Minimise the risk of damage to the work and surrounding area when producing wood and wood-based products using computer numerically controlled/numerically controlled (CNC/NC) machinery.
- 5.1 Protect the work, equipment and its surrounding area from damage.
- 5.2 Minimise damage and maintain a clean work space.
- 5.3 Describe how to protect work and equipment from damage and the purpose of protection in relation to general workplace activities and other occupations.
- 5.4 Remove waste in accordance with legislation.
- 5.5 State why the removal of waste should be carried out in relation to the work.
6. Complete the work within the allocated time when producing wood and wood-based products using computer numerically controlled/numerically controlled (CNC/NC) machinery.
- 6.1 Demonstrate completion of the work within the allocated time.
- 6.2 State the purpose of the work programme and explain why deadlines should be kept in relation to:
– types of progress charts, estimated times and deadlines
– organisational procedures for reporting circumstances which will affect the work programme.
7. Comply with the given contract information to produce wood and wood-based products using computer numerically controlled/numerically controlled (CNC/NC) machinery to the required specification.
- 7.1 Demonstrate the following work skills when producing wood and wood-based products using computer numerically controlled/numerically controlled (CNC/NC) machinery:
– measuring, marking out, adjusting, fitting, finishing, positioning and securing.
- 7.2 Prepare, set up, operate and maintain the following CNC/NC machines (one from list A or two from list B) to produce wood and wood-based products to given working instructions:
List A:
– high-speed router
– window centre.
List B:
– single-end tenoner
– double-end tenoner
– panel saw
– morticing machines
– lathe
– four-sided planer
– sanding machine
– boring machine

**Learning Outcome –
The learner will:**

Assessment Criterion - The learner can:

- shaping machine
 - edge bander
 - spindle moulder
 - beam saw.
- 7.3 Set up and change appropriate tooling to meet the requirements.
- 7.4 Describe how to apply safe work practices, follow procedures, report problems and establish the authority needed to rectify them, to:
- prepare and set up the CNC/NC machinery
 - operate the CNC/NC machinery
 - maintain the CNC/NC machinery
 - identify the compatibility of materials with machines
 - identify how damage to materials and machines can be avoided
 - identify the correct use of lubricants
 - identify the relevant dimensional control aids and their uses
 - identify and report defects and discrepancies in materials and machines
 - set up and change appropriate tooling
 - identify the types and suitability of tooling
 - identify the scope and limitations of the machine
 - select the appropriate machine for the work to be carried out
 - use hand tools, power tools and equipment.
- 7.5 Safely use and store hand tools and ancillary equipment.
- 7.6 State the needs of other occupations and how to communicate within a team when producing wood and wood-based products using computer numerically controlled/numerically controlled (CNC/NC) machinery.
- 7.7 Describe how to maintain the tools and equipment used when producing wood and wood-based products using computer numerically controlled/numerically controlled (CNC/NC) machinery.

PRODUCING JOINTED WOOD AND WOOD-BASED PRODUCTS IN THE WORKPLACE

PIABC Unit No: WM309

Guided Learning Hours: 43

Qualification Accreditation No: D/600/8569

Unit Credits: 13

Unit Level: 2

Assessment Guidance

This unit must be assessed in a work environment and in accordance with:

- the Additional Requirements for Qualifications using the title NVQ in QCF
- the Construction Skills' Consolidated Assessment Strategy for Construction and the Built Environment – Craft, Supervisory, Technical, Managerial and Professional Units and Qualifications with NVQ in the Qualification and Credit Framework (QCF) title and SVQs.

Assessors for this unit must use a combination of the following assessment methods:

- observation of normal work activities within the workplace that clearly confirms the required skills
- questioning the learner on knowledge criteria that clearly confirms the required understanding
- review other forms of evidence that can clearly confirm industry required skills, knowledge and understanding.

Assessors for this unit must have verifiable, current industry experience and a sufficient depth of occupational expertise and knowledge of producing sawn wood and wood-based products to be effective and reliable when confirming a learner's competence.

Note: Learning Outcome 7 – contract information can relate to drawings, specifications, schedules, cuttings lists, manufacturer's information and oral instruction.

Workplace evidence of skills cannot be simulated.

This unit must be assessed against **two** of the following endorsements:

- Chisel morticer
- Chain morticer
- Slot morticer
- Dovetailer
- Vertical spindle moulder
- Stair router
- Single-end tenoner
- Double-end tenoner
- Round-end tenoner
- Router

Learning Outcomes and Assessment Criteria

Learning Outcome – The learner will:

Assessment Criterion - The learner can:

1. Interpret the given information relating to the work and resources when producing jointed wood and wood-based products.
 - 1.1 Interpret and extract information from drawings, specifications, schedules, cutting lists, risk assessments and manufacturers' information.
 - 1.2 Comply with information and/or instructions derived from risk assessments and method statement.
 - 1.3 State the organisational procedures developed to report and rectify inappropriate information and unsuitable resources and how they are implemented.
 - 1.4 Describe different types of information, their source and how they are interpreted in relation to:
 - drawings, specifications, schedules, cutting lists, risk assessments, manufacturers' information and legislation governing wood machining.
2. Know how to comply with relevant legislation and official guidance when producing jointed wood and wood-based products.
 - 2.1 Describe their responsibilities under current legislation and official guidance whilst working:
 - in the workplace, with tools, tooling and equipment, with materials and substances, movement of materials and by manual and mechanical lifting.
 - 2.2 Describe the organisational security procedures for tools, equipment and personal belongings in relation to workplace, company and operative.
 - 2.3 State what the accident reporting procedures are and who is responsible for making reports.
3. Maintain safe working practices when producing jointed wood and wood-based products.
 - 3.1 Use personal protective equipment (PPE) safely to carry out the activity in accordance with all current legislation and approved Codes of Practice when producing jointed wood and wood-based products.
 - 3.2 Explain why and when personal protective equipment (PPE) should be used, relating to producing jointed wood and wood-based products, and the types, purpose and limitations of each type.
 - 3.3 State how emergencies should be responded to in accordance with organisational authorisation and personal skills when involved with fires, spillages, injuries, accidents and other task-related hazards.
4. Select the required quantity and quality of resources for the methods of work to produce jointed wood and wood-based products.
 - 4.1 Describe the characteristics, quality, uses, limitations and defects associated with the resources in relation to:
 - jointing machinery
 - wood materials
 - wood based materials
 - lubricants
 - hand tools and ancillary equipment.
 - 4.2 Select resources associated with own work in relation to materials, components, tools, tooling and equipment and dimensional control aids as appropriate.
 - 4.3 State how the resources should be used correctly, how

**Learning Outcome –
The learner will:**

Assessment Criterion - The learner can:

- problems associated with the resources are reported and how the organisational procedures are used.
- 4.4 Outline potential hazards associated with the resources and method of work.
- 4.5 Describe how to calculate quantity, length, area and wastage associated with the method/procedure to produce jointed wood and wood-based products.
5. Minimise the risk of damage to the work and surrounding area when producing jointed wood and wood-based products.
- 5.1 Protect the work, equipment and its surrounding area from damage in accordance with organisational procedures.
- 5.2 Minimise damage and maintain a clean work space.
- 5.3 Describe how to protect work and equipment from damage and the purpose of protection in relation to general workplace activities and other occupations.
- 5.4 Remove waste in accordance with legislation.
- 5.5 State why the removal of waste should be carried out in relation to the work.
6. Complete the work within the allocated time when producing jointed wood and wood-based products.
- 6.1 Demonstrate completion of the work within the allocated time.
- 6.2 State the purpose of the work programme and explain why deadlines should be kept in relation to:
- types of progress charts, estimated times and deadlines
 - organisational procedures for reporting circumstances which will affect the work programme.
7. Comply with the given contract information to produce jointed wood and wood-based products to the required specification.
- 7.1 Demonstrate the following work skills when producing jointed wood and wood-based products:
- measuring, marking out, adjusting, fitting, finishing, positioning and securing.
- 7.2 Prepare, set up, operate and maintain at least two of the following machines to produce jointed wood and wood-based products to given working instructions:
- chisel morticer
 - chain morticer
 - slot morticer
 - dovetailer
 - vertical spindle moulder (attachments for dovetailing, finger jointing, stair trenching and tenoning
 - stair router
 - single-end tenoner
 - double-end tenoner
 - round-end tenoner
 - router.
- 7.3 Set up and change appropriate tooling to meet requirements.
- 7.4 Describe how to apply safe work practices, follow procedures, report problems and establish the authority needed to rectify them, to:
- prepare and set up the jointing machinery
 - operate the jointing machinery
 - maintain the jointing machinery

**Learning Outcome –
The learner will:**

Assessment Criterion - The learner can:

- identify how damage to materials and machinery can be avoided
- identify the correct use of lubricants
- identify the compatibility of materials with machines
- identify the relevant dimensional control aids and their uses
- identify and report defects and discrepancies in materials and machines
- set up and change appropriate tooling
- identify the types and suitability of tooling
- identify the scope and limitations of the machine
- select the appropriate machine for the work to be carried out
- use hand tools and equipment.

7.5 Safely use and store hand tools and ancillary equipment.

7.6 State the needs of other occupations and how to communicate within a team when producing jointed wood and wood-based products.

7.7 Describe how to maintain the tools and equipment used when producing jointed wood and wood-based products.

EVALUATE AND DEVELOP OWN SKILLS AND EXPERTISE IN FURNITURE AND RELATED INDUSTRIES

PIABC Unit No: WM310

Guided Learning Hours: 41

Qualification Accreditation No: F/600/8290

Unit Credits: 10

Unit Level: 3

Assessment Guidance

Evaluation/Evaluate - Evaluation is the systematic assessment of skills and expertise in order to compare them against preferred, professional standard and identify areas for improvement.

Current Professional Standards - Every profession and occupation develops expectations about good professional practice. These may or may not be set down. In the furniture, furnishings and interiors sector the national occupational standards provide clear and current specifications of high quality practice and different professional bodies may also have expectations built up and discussed through peer group meetings. In addition, the Health and Safety Executive publishes guidelines on standards of practice in relation to specific health and safety issues.

Development Goals - Development goals may be in terms of maintaining a current standard (e.g. by finding opportunities to practice a skill) or improving skills and expertise to raise current performance.

Development Methods - Development methods could include, among other things, self-guided practice and study, attendance at courses and other forms of structured learning opportunity, making use of reference materials and/or seeking advice and support from a mentor.

Learning Outcomes and Assessment Criteria

Learning Outcome - The learner will: Assessment Criterion - The learner can:

- | | |
|--|--|
| 1. Be able to evaluate own skills and expertise | 1.1 Clarify sources of information on current professional standards
1.2 Assess own skills and expertise against current standards
1.3 Seek constructive feedback on how own skills and expertise match current standards
1.4 Identify areas for development to maintain and improve own skills and expertise
1.5 Prioritise development goals against personal and employment requirements
1.6 Evaluate own skills and expertise regularly |
| 2. Know how to evaluate own skills and expertise | 2.1 Evaluate sources of information on standards and how they can be accessed
2.2 Evaluate information required to carry out an objective assessment
2.3 Explain how to obtain and use constructive feedback
2.4 Explain the importance of setting priorities
2.5 Clarify the importance of regular self-evaluation in order to |

Learning Outcome - The learner will: Assessment Criterion - The learner can:

3. Be able to develop own skills and expertise
- maintain and develop skills and expertise
- 3.1 Assess time and resources required to meet development goals
 - 3.2 Define and use development methods
 - suited to own goals and learning preferences
 - achievable within the resources available
 - 3.3 Review progress and the effectiveness of the development methods chosen
 - 3.4 Adjust the development methods used in order to meet own goals
 - 3.5 Select and use support to help meet own goals
 - 3.6 Judge the time and other resources that will be needed
 - 3.7 Define why it is important to take your own learning preferences into account when choosing a development method that will work for you
 - 3.8 Summarise the importance of reviewing own progress
 - 3.9 Ensure that the development method chosen is working
 - 3.10 Compare support that is available for own development through;
 - Learning/training providers
 - employers
 - peers
 - professional bodies
 - others

IMPROVE PROCESS AND QUALITY CONTROL IN A COMMERCIAL ENVIRONMENT

PIABC Unit No: WM311

Guided Learning Hours: 41

Qualification Accreditation No: T/600/8335

Unit Credits: 10

Unit Level: 3

Assessment Guidance

Procedures - Organisational specifications of how to carry out work activities in a manner that will ensure the required outcomes if the procedure is followed accurately. Standards of performance.

Resources - A range of resources which are used in any activity. These could include:

- methods for identifying improvements
- quality control, analysis methods
- methods of review
- information, documentation and specifications
- materials
- tools
- equipment

Work Objectives - This unit is suitable for any aspect of work within the furniture, furnishings and interiors industry. Objectives are typically described in terms of the following considerations:

- quantity
- quality
- cost
- time
- safety, health and environment

Others - People who are either working with the individual or are directly affected by his/her work. This includes colleagues and line management. Those in the organisation who have the authority to change procedures/practice.

Learning Outcomes and Assessment Criteria

Learning Outcome – The learner will:

1. Be able to identify and suggest improvements in the workplace

Assessment Criterion - The learner can:

1.1 Monitor and review quality control methods in the workplace

1.2 Monitor and review work procedures and work objectives

1.3 Identify developments in work processes and quality

1.4 Recommend potential developments to the existing work system

1.5 Ensure that these recommendations can be realistically achieved using available resources

1.6 Submit recommendations to relevant others in the organisation

1.7 Check that these developments meet all current health and safety considerations

**Learning Outcome –
The learner will:**

2. Know how to identify and suggest improvements in the workplace

3. Be able to identify potential developments and suggest improvements

4. Know how to identify potential developments and present the information

Assessment Criterion - The learner can:

2.1 Summarise methods of monitoring quality control in the work operation

2.2 Clarify methods of monitoring work processes in the operation

2.3 Summarise other methods of monitoring quality and work processes

2.4 Clarify current standards of workplace performance

2.5 Explain how to review information against current standards of performance

2.6 Summarise how to present information gained from the analysis of workplace performance

2.7 Clarify whom the information should be presented to in the organisation

2.8 Explain current health and safety considerations in the workplace

3.1 Collect information and feedback on current working practices and procedures

3.2 Assess current working practices and procedures against agreed standards of performance

3.3 Identify opportunities for improving current working practices and procedures

3.4 Make realistic suggestions for improvements to working practices and procedures

3.5 Demonstrate the benefits that could be achieved from improvements

3.6 Present suggestions for improvement in accordance with organisational procedures

3.7 Consider current health and safety guidelines

4.1 Clarify methods of collecting information on current working practice and procedures

4.2 Summarise sources of information on working practices and procedures within the organisation

4.3 Explain how to compare the information against agreed standards of performance

4.4 Summarise current work improvement techniques and methods

4.5 Clarify how to present the information showing the benefits to be gained

4.6 Clarify whom the information should be presented to in the organisation

4.7 Explain current health and safety considerations in the workplace

IMPROVE THE CUSTOMER RELATIONSHIP

PIABC Unit No: WM312
Qualification Accreditation No: K/600/8333
Unit Level: 3

Guided Learning Hours: 55
Unit Credits: 14

Assessment Guidance

Procedures - Organisational specifications of how to carry out work activities in a manner that will ensure the required outcomes if the procedure is followed accurately.

Customer - The person(s), organisation(s), or department(s) either inside or outside your organisation who you are providing goods and services for.

Customer Needs - Customer needs include:

- stated products or services
- unstated products or services

Organisational Needs - This unit is suitable for any aspect of work within the furniture, furnishings and interiors industry. Needs/objectives are typically described in terms of the following considerations:

- quantity
- quality
- cost
- time
- safety, health and environment

Relevant Others - People who are either working with the individual or are directly affected by his/her work, this includes colleagues and line management.

Problems/Conflict - Problems/conflicts in working relations may be able to be readily dealt with, or may require additional support obtained through following organisational procedures.

Communicate - To include spoken, written and/or electronic.

Documentation - To include all relevant documentation.

Organisation - The company or individual that you are working for and responsible to.

Authority - The responsibility that is given to an individual and/or organisation to enable them to perform a task efficiently and effectively.

Negotiate - The method whereby all parties reach an agreement

Learning Outcomes and Assessment Criteria

Learning Outcome – The learner will:

Assessment Criterion - The learner can:

- | | |
|--|--|
| 1. Be able to improve customer communications | 1.1 Evaluate the best method of communication to suit customers' needs
1.2 Maintain regular contact with customers to update them and obtain further information
1.3 Adapt behaviour to suit individual customers' feelings |
| 2. Be able to balance the needs of the customer and the organisation | 2.1 Demonstrate customers' needs and expectations
2.2 Present a sensitive and positive approach to customers when their needs and expectations cannot be met
2.3 Compare alternative solutions for customers
2.4 Assess the costs and benefits of alternative solutions to the organisation and the customers
2.5 Negotiate and agree satisfactory solutions with customers that are also acceptable to the organisation
2.6 Implement agreed solution with customers |
| 3. Be able to exceed customer expectations to develop relationships | 3.1 Describe extra efforts to improve relationships with customers
3.2 Recognise opportunities to exceed your customers' needs and expectations
3.3 Exceed customers' needs and expectations within the limits of your own authority
3.4 Summarise support from relevant others to exceed customers' needs and expectations |
| 4. Know how to represent the organisation in developing customer relationships | 4.1 Describe customers' rights and how these effect customer relations
4.2 Explain the specific aspects relating to: <ul style="list-style-type: none">• health and safety• data protection• equal opportunities• disability discrimination 4.3 Clarify legislation and regulations that affect delivery of products or services to customers
4.4 Describe industry, ethical standards organisational and professional codes of practice that affect delivery of products or services to customers
4.5 Evaluate contractual agreements between the customers and the organisation
4.6 Describe the organisational products or services that are relevant to your customer service role
4.7 Outline organisational guidelines that limit your job role
4.8 Explain the limits of your authority and when you need to seek agreement or permission from others
4.9 State organisational targets relevant to the job
4.10 Explain the implications for the organisation if organisational targets are not met
4.11 Describe your role in meeting organisational targets |

**Learning Outcome –
The learner will:**

Assessment Criterion - The learner can:

- 4.12 Clarify the importance of communicating in a clear, polite, confident way
- 4.13 Describe effective methods of communication with customers
- 4.14 Describe effective negotiation techniques with customers
- 4.15 Describe how to assess the costs and benefits of unusual agreements to both the customer and the organisation
- 4.16 Explain the importance of customer loyalty and improved internal customer relationships to your organisation

DEFINE AND DEVELOP STANDARD OPERATING PROCEDURES WITHIN THE FURNITURE, FURNISHINGS AND INTERIORS INDUSTRY

PIABC Unit No: WM313

Guided Learning Hours: 33

Qualification Accreditation No: F/600/8337

Unit Credits: 10

Unit Level: 3

Assessment Guidance

Standard Operating Procedures - Written specifications of how to carry out certain defined production activities in a manner that will ensure the required outcomes if the procedure is followed accurately. This unit covers the development of new and substantially revised standard operating procedures.

Information - A range of information sources would be drawn upon in devising a procedure. These could include:

- input and advice from specialists
- manufacturer/supplier data for equipment and materials
- results of risk assessments
- production target requirements

Objectives - A standard operating procedure would typically be prepared to meet with organisational requirements in the areas of:

- quantity
- quality
- cost
- time
- safety, health and environment

Relevant People - People who have expertise in and/or responsibility for the areas of work affected by the procedure. This is likely to include colleagues with production, safety, health and environment and quality specialisms.

Tests - Trials carried out to ensure that a proposed procedure will meet the required objectives. Tests need to be designed to cover the full range of conditions under which the procedure would be expected to apply and be repeated often enough to provide reliable evidence that the procedure works. Tests are normally carried out by third parties who have not been responsible for devising the procedure in order to maximise the objectivity of the tests.

Learning Outcomes and Assessment Criteria

Learning Outcome – The learner will:

Assessment Criterion - The learner can:

- | | |
|--|--|
| 1. Be able to devise standard operating procedures | 1.1 Evaluate the scope of the procedure and the objectives to be drafted
1.2 Obtain all relevant information for drafting the procedure
1.3 Produce sufficient detail in the procedure to ensure it will be implemented as intended
1.4 Design the procedure to meet the required quantity, quality, time and cost objectives
1.5 Draft the procedure in a clear, concise and logical format
1.6 Ensure the procedure complies with relevant safety, health and environmental considerations
1.7 Seek initial feedback and comment on the draft procedure from relevant people
1.8 Evaluate and incorporate feedback that strengthens the draft procedure |
| 2. Know how to devise standard operating procedures | 2.1 Explain the reason that standard operating procedures are used within the furniture, furnishings and interiors industry
2.2 Justify the level of detail included in a standard operating procedure
2.3 Describe sources of information to be used when drafting a standard operating procedure
2.4 State who is involved in establishing the scope and objectives of a procedure
2.5 Explain ways to evaluate alternatives and describe the consequences of different aspects of a procedure in order to meet objectives
2.6 State what safety, health and environment hazards are associated with the activity being described in the procedure
2.7 Explain how to include outcomes of risk assessments into a procedure
2.8 State whom to approach in order to obtain initial feedback on a procedure
2.9 Explain the factors to consider when evaluating feedback that could lead to amendments |
| 3. Be able to test and agree standard operating procedures | 3.1 Obtain authority to carry out tests
3.2 Ensure that there is sufficient expertise and thorough understanding of the procedure to conduct the test effectively
3.3 Design the tests to ensure they provide thorough, reliable and valid evidence of the effectiveness of the procedure
3.4 Conduct the tests in a safe and cost-effective manner
3.5 Accurately record the tests conducted, the conditions under which they were run and the results obtained
3.6 Evaluate the test results to identify any adjustments necessary to achieve the required objectives |

**Learning Outcome –
The learner will:**

**4. Know how to test and agree
standard operating procedures**

Assessment Criterion - The learner can:

- 3.7 Propose improvements to the procedure as a result of feedback from the tests
- 3.8 Report on and agree the revised procedure with the appropriate authority
- 3.9 Ensure that the agreed procedure is recorded
- 4.1 Explain why authorisation should be agreed before beginning a test
- 4.2 Explain the importance of tests being conducted by an independent party
- 4.3 Describe the steps to be taken to ensure that a test is reliable, valid and thorough
- 4.4 Explain what the implications are of not conducting reliable, valid and thorough tests
- 4.5 State the importance of keeping accurate and complete test records
- 4.6 Outline the data that test records should contain
- 4.7 Assess the importance of objectivity and accuracy in evaluating the effectiveness of a procedure and deciding on how to improve it
- 4.8 Describe ways of communicating information effectively in writing and verbally to people
- 4.9 State the formats to be followed for reporting on, recording and gaining formal agreement to a standard operating procedure

PROVIDE TECHNICAL ADVICE ON FURNITURE MANUFACTURE OPERATIONS

PIABC Unit No: WM314

Guided Learning Hours: 49

Qualification Accreditation No: L/600/8339

Unit Credits: 15

Unit Level: 3

Assessment Guidance

Manufacturing Operations - Such as assembly, veneering, polishing and finishing or upholstery.

Changes - Changes may be needed as a result of meeting new manufacturing requirements, adaptations to equipment or processes or the inclusion of new materials with different handling characteristics. They may have implications for techniques, equipment settings or the use of materials. Their effects may be felt in relation to the pace of operations and/or the efficiency with which they can be carried out.

Discussions - Discussions may be informal e.g. in quality circles or formal e.g. at manufacturing meetings.

Individuals - Discussions may be informal e.g. in quality circles or formal e.g. at manufacturing meetings.

Information and Advice - Information and advice are given in relation to the area of technical expertise of the person carrying out this role. This may be with regard to assembly, veneering, polishing and finishing or upholstery operations.

Problem - The kinds of problems on which technical information and advice may be needed are very varied. They may arise from one or more of the following causes: changes to the manufacturing operation (see above) operator errors, poor technique, tool and equipment fault or malfunction, material handling difficulties, health and safety compliance or product quality issues.

Learning Outcomes and Assessment Criteria

Learning Outcome – The learner will:

Assessment Criterion - The learner can:

- | | |
|--|---|
| 1.. Be able to provide information and advice to individuals | 1.1 Establish the aspect of the manufacturing operation on which information and advice is needed |
| | 1.2 Provide information and advice that is: <ul style="list-style-type: none">• relevant to the problem being met• accurate• current• meets health and safety requirements |
| | 1.3 Provide an accurate reflection of the required practice to suit individual's needs |
| | 1.4 Communicate in a way that is suited to the individual's level of understanding of the operation |
| | 1.5 Check and confirm that the individual has an accurate understanding of the advice and information provided |
| | 1.6 Use technical terms correctly |
| | 1.7 Report additional training requirements through the correct organisational procedures |
| 2. Know how to provide information and advice to individuals | 2.1 Explain terms used in the furniture manufacturing operations |
| | 2.2 Describe when technical information and advice is needed |
| | 2.3 Explain the importance of providing information and advice that is accurate, to the point and current. |
| | 2.4 Ensure information and advice meets health and safety requirements |
| | 2.5 Explain the implications of the HASAWA and COSHH Regulations and the Environmental Protection Act |
| | 2.6 Explain relevant organisational risk assessment details and control measures |
| | 2.7 State the importance of communicating technical information at an appropriate pace to the individual |
| | 2.8 Explain how to gauge an individual's level of technical understanding |
| | 2.9 Explain the importance of checking that information and advice has been correctly understood |
| | 2.10 Explain why demonstrations are useful for communicating technical information and advice |
| | 2.11 Describe how to recognise when an individual has additional training needs |
| | 2.12 Explain your limits of authority when responding to individuals training needs |
| 3. Be able to contribute to the improvement of manufacturing | 3.1 Monitor the effectiveness and efficiency of manufacturing operations |

**Learning Outcome –
The learner will:**

operations

4. Know how to contribute to the improvement of manufacturing operations

Assessment Criterion - The learner can:

- 3.2 Assess scope for improvements in manufacturing operations
- 3.3 Assess the benefits and drawbacks of changes to manufacturing operations
- 3.4 Ensure that health and safety requirements are included when considering improvements to manufacturing operations
- 3.5 Identify and report opportunities for improvement through organisational procedures
- 3.6 Contribute to discussions on the progress, effectiveness and efficiency of manufacturing operations
- 3.7 Respond to requests for information about manufacturing operations for which you have responsibility
- 4.1 Explain terms used in the furniture manufacture operations
- 4.2 Explain the importance of routine monitoring of the effectiveness and efficiency of manufacturing operations
- 4.3 Describe what to take into account when evaluating operations
- 4.4 Explain the importance of considering the potential benefits and possible drawbacks of changes to manufacturing operations
- 4.5 Explain the implications of the HASAWA and COSHH Regulations and the Environmental Protection Act
- 4.6 Explain relevant organisational risk assessment details and control measures
- 4.7 Describe how to report improvement opportunities
- 4.8 Explain the importance of clarity and accuracy when taking part in discussions
- 4.9 State who is likely to ask for information
- 4.10 Explain the importance of providing prompt responses

PRODUCE AND MAINTAIN JIGS AND TEMPLATES

PIABC Unit No: WM315

Guided Learning Hours: 16

Qualification Accreditation No: R/600/8343

Unit Credits: 8

Unit Level: 3

Assessment Guidance

Damage - Problems and faults may occur in the production or maintenance of jigs and templates. Some problems may be serious enough to mean that the jig or template cannot be used as intended; other problems may simply mean some additional maintenance is needed before it can be used (e.g. cleaning). Solving problems may require direct action by the individual carrying out the work or reference to an authority within the organisation.

Jigs - Jigs may be simple, (e.g. straight lines, limited numbers of positions), or complex (e.g. complicated angles and curves, and multiple positions).

Materials - Jigs and templates may be made of wood, metal or plastic.

Templates - Any templates that are suitable for the reproduction of accurate dimensions over a specified number of occasions. For the reproduction of simple shapes or complex ones.

Learning Outcomes and Assessment Criteria

Learning Outcome – The learner will:

Assessment Criterion - The learner can:

- | | |
|---|---|
| 1. Be able to produce jigs and templates | 1.1 Ensure complete work specification is ready
1.2 Select materials of a suitable size for the item to be produced
1.3 Accurately measure and mark out
1.4 Use materials efficiently and minimise waste
1.5 Protect jigs and templates from damage when using them
1.6 Cut, shape and finish jigs and templates to the specified requirements
1.7 Work efficiently to avoid re-working areas of the jig or template
1.8 Store completed jigs and templates under suitable conditions
1.9 Maintain records of the details of completed jigs and templates
1.10 Follow safe and effective working practices in line with current health and safety legislation |
| 2. Know how to produce jigs and templates | 2.1 Explain how to read and interpret technical specifications
2.2 Describe different materials used to produce jigs and templates for cutting, laying up and shaping wood and metal components
2.3 Explain how to establish a suitable datum to ensure that measurements are accurate
2.4 Describe techniques used to produce jigs and templates
2.5 Explain why the sequence of actions used to produce a jig or template is important to efficiency
2.6 Describe the steps to take to protect jigs and templates from damage
2.7 State why it is important to protect jigs and templates from damage
2.8 State how to protect jigs and templates
2.9 Describe the conditions required to maintain jigs and templates in good order
2.10 Explain records that need to be kept
2.11 Explain the importance of keeping accurate clear records
2.12 Explain the implications of the Health and Safety at Work Act (HASAWA) and Control of Substances Hazardous to Health (COSHH) Regulations when producing Jigs & Templates 3
2.13 Explain where to find out about relevant organisational risk assessment details and control measures for using tools and equipment to produce Jigs & Templates 3 |
| 3. Be able to maintain jigs and templates | 3.1 Routinely examine jigs and templates for signs of damage
3.2 Check jigs and templates using correct specifications
3.3 Assess suitability for continuing use of jigs and templates |

**Learning Outcome –
The learner will:**

Assessment Criterion - The learner can:

- 3.4 Identify damage that affects the use of a jig or template
- 3.5 Deal safely and promptly with damage that can be effectively repaired
- 3.6 use appropriate methods and equipment to clean jigs and templates
- 3.7 Remove and report jigs and templates which are damaged beyond use
- 3.8 Follow safe and effective working practices in line with current health and safety legislation
- 3.9 Keep accurate, clear and up to date records of jig and template checks and maintenance
- 4. Know how to maintain jigs and templates
 - 4.1 Explain the importance of examining jigs and templates on a routine basis
 - 4.2 Describe how to read and interpret technical specifications
 - 4.3 Describe the damage that can occur to jigs and templates used with different types of furniture production equipment
 - 4.4 State what the tolerance levels are when assessing if a jig or template is beyond use
 - 4.5 Describe damage that you are competent to repair and when to seek assistance
 - 4.6 Explain the importance of using appropriate solvents, cleaning materials and cleaning agents when cleaning jigs and templates
 - 4.7 Explain records that need to be kept
 - 4.8 Explain the importance of keeping accurate clear records
 - 4.9 Explain the implications of the Health and Safety at Work Act (HASAWA) and Control of Substances Hazardous to Health (COSHH) Regulations
 - 4.10 Explain where to find out about relevant organisational risk assessment details and control measures

SOLVE AND PREVENT FURNITURE MANUFACTURE PROBLEMS

PIABC Unit No: WM316

Guided Learning Hours: 47

Qualification Accreditation No: Y/600/8344

Unit Credits: 15

Unit Level: 3

Assessment Guidance

Causes - Problems can be caused by a variety of reasons, some of which may be easy to identify, others of which may be more complex and difficult to discern. Typical causes could be to do with:

- equipment malfunction
- material fitness for purpose
- operator error
- product design error

Information - Information on a problem will derive from systems, quality records, equipment manuals and other documentary sources such as trade publications. Information may be both current information about actual or potential problems, or historical in that it refers to previous occurrences of the same or a similar problem

Problems - Problems may be intermittent or continual. They may pose manufacturing implications in terms of non-achievement of work flow or outcome requirements and/or they may pose hazards to people, property or the environment.

Relevant People - Anyone who is involved in manufacturing activities which may be affected by a problem and whose actions can help identify, solve and prevent the problem from occurring.

Solutions - This unit covers solutions which provide temporary limitation of a problem's consequences and solutions which are intended to be permanent and to prevent the problem occurring. Either type of solution may depend on one or more of the following:

- equipment modification
- changes to materials
- operator training
- changes to process and/or outcome specifications
- changes to standard operating procedures

Systems - Systems to provide feedback on problems are established by the organisation and may depend on regular reports via documentation or verbal feedback, first-hand monitoring and inspection activities and/or computer based analyses of processes and outcomes.

Learning Outcomes and Assessment Criteria

Learning Outcome – The learner will:

Assessment Criterion - The learner can:

- | | |
|--|---|
| 1. Be able to identify and investigate manufacturing problems | 1.1 Ensure that systems to report problems are effective
1.2 Ensure that systems to report problems allow for early identification
1.3 Ensure that relevant people use the systems to report problems
1.4 Review feedback on manufacturing processes and outcomes on a regular basis
1.5 Confirm potential problems promptly
1.6 Review and use all information relevant to the problem
1.7 Investigate the problem using a logical, safe and cost-effective approach
1.8 Evaluate the information to draw valid conclusions about the nature and causes of the problem
1.9 Keep accurate and complete records of the problem and its cause |
| 2. Know how to identify and investigate manufacturing problems | 2.1 Describe reporting and feedback systems used to identify manufacturing problems
2.2 Explain the operational and commercial implications of not identifying problems at an early stage
2.3 State how often information on manufacturing problems and processes should be reviewed
2.4 Explain how to confirm that a problem exists
2.5 Describe the importance of reviewing all information on possible problems
2.6 Explain the importance of following a logical approach to check causes as a priority
2.7 Explain how to analyse information to draw conclusions
2.8 State the importance of problem record keeping
2.9 Explain the organisation requirements for record-keeping |
| 3. Be able to deal with manufacturing problems | 3.1 Respond to problems to minimise loss and damage
3.2 Identify solutions to manufacturing problems using current and accurate information
3.3 Assess the consequences, costs and benefits of alternative solutions to a problem
3.4 Select the optimum course of action to solve the problem and prevent future occurrences
3.5 Ensure that relevant people know how to resolve problems and their role in the process
3.6 Implement the solution as soon as possible
3.7 Monitor the effectiveness of a solution and adjust as necessary to achieve required results
3.8 Maintain accurate and complete records of the decision making process and actions to be taken |
| 4. Know how to deal with | 4.1 Explain the importance of fast action to limit the effects of |

**Learning Outcome –
The learner will:**

manufacturing problems

Assessment Criterion - The learner can:

- a problem
- 4.2 Describe information that should be used when deciding on how to tackle a problem
- 4.3 Explain the importance of objectivity and thoroughness in assessing problem solutions
- 4.4 State organisational and safety considerations that may impact on problem solutions
- 4.5 Describe effective written and verbal communication to different groups of people
- 4.6 State specific problems that affect organisation manufacturing procedures and management practices
- 4.7 Describe solutions to specific manufacturing procedures and management practice problems within the organisation
- 4.8 Explain the importance of monitoring a solution
- 4.9 Describe how to achieve monitoring in an effective manner
- 4.10 State the importance of keeping records about problems and methods used to solve and prevent them
- 4.11 State the organisation requirements for record-keeping

PRODUCE FURNITURE PRODUCTION SPECIFICATIONS

PIABC Unit No: WM317

Guided Learning Hours: 30

Qualification Accreditation No: K/600/8347

Unit Credits: 9

Unit Level: 3

Assessment Guidance

Client - The person(s), organisation(s) or department(s) either inside or outside your organisation for whom you are providing a service

Product or Process - What needs to be produced for the client to meet their requirements, as detailed in the specification. May be any item of furniture to be produced on a commercial basis.

Formats - The appropriate methods of presenting the information.

Information Systems - Where the specification information is recorded.

Learning Outcomes and Assessment Criteria

Learning Outcome – The learner will:

1. Be able to produce specifications for furniture products
2. Understand how to produce specifications for furniture products

Assessment Criterion - The learner can:

- 1.1 Produce a product or process specification that meets the requirements of the client
- 1.2 Incorporate all details into the specification
- 1.3 Ensure that the specification can be implemented
- 1.4 Ensure that the specification complies with all relevant regulations and guidelines
- 1.5 Agree the specification with the client throughout the design process
- 1.6 Produce a rationale for specification changes and requirements that cannot be achieved
- 1.7 Produce the specification in the agreed formats with the necessary supporting documents
- 1.8 Record the specification in the appropriate information systems
- 2.1 Describe the design principles and processes that apply to the furniture items being produced
- 2.2 Explain the general and furniture item-specific principles and processes that apply to furniture production
- 2.3 Explain how the principles and processes affect the details to be included in the specification
- 2.4 Explain health and safety legislation, regulations and safe working practices and procedures that are required for the specifications including the implications of the Health and Safety at Work Act (HASAWA) and Control of Substances Hazardous to Health (COSHH) Regulations
- 2.5 Explain where to find out about relevant organisational risk assessment details and control strategies
- 2.6 State the legislative and regulatory frameworks that

**Learning Outcome –
The learner will:**

Assessment Criterion - The learner can:

govern furniture production

- 2.7 Explain the requirement for compliance with relevant national and international furniture standards
- 2.8 Describe the organisational procedures and systems for creating, disseminating, storing and maintaining furniture specifications
- 2.9 Describe the organisational procedures in relation to patents, copyright, and intellectual property issues
- 2.10 Explain the information that should be included in furniture specifications including:
 - the conventions
 - units of measurement
 - terms used
 - preferred organisational formats

OPERATE CAD EQUIPMENT

PIABC Unit No: WM318

Guided Learning Hours: 46

Qualification Accreditation No: M/600/8348

Unit Credits: 10

Unit Level: 3

Assessment Guidance

Computer Systems - To include relevant knowledge of computer operating systems. The importance of shutting down, starting up correctly and how to use technical manuals to aid operation of the system.

Software Application - To include the relevant software packages for computer aided design used by the organisation.

Standards - To include organisational, national and international standards where appropriate.

Peripheral Equipment - To include the various types and application of peripherals such as printers, plotters, scanners, digitisers, tablets, light pens and also to include checking the connection of these peripheral pieces of equipment.

Problems - Problems and faults may occur with achieving any aspect of the equipment set up and operation. Some problems may be serious enough to mean that the equipment cannot be used as intended; other problems may need some minor adjustments to the computer and/ or peripheral equipment. Solving the problem may require direct action by the individual or reference to another within the organisation.

Learning Outcomes and Assessment Criteria

Learning Outcome – The learner will:

Assessment Criterion - The learner can:

- | | |
|---|--|
| 1. Be able to operate computer and peripheral hardware | 1.1 Maintain the workstation in a safe and tidy condition |
| | 1.2 Check that the computer peripherals are securely connected to the outlet ports and all leads are in good condition |
| | 1.3 Follow correct sequence to power up, check peripheral operating status and close down equipment |
| | 1.4 Solve problems that arise |
| 2. Know how to operate computer and peripheral hardware | 2.1 Describe the specific work area health and safety requirements (e.g. VDU regulations, electrical supply requirements) |
| | 2.2 Describe how to identify potential hazards in the workplace |
| | 2.3 Describe ways of maintaining good housekeeping arrangements |
| | 2.4 Assess the various types of display screen equipment that is available |
| | 2.5 Assess the various types and application of peripherals such as printers, plotters, scanners, digitisers and tablets, light pens |
| | 2.6 Explain how to check peripheral devices are correctly |

**Learning Outcome –
The learner will:**

Assessment Criterion - The learner can:

- connected
- 2.7 Explain how to identify correct cables/leads and connectors
 - 2.8 Explain how to identify typical equipment faults
 - 2.9 Describe action to be taken when dealing with equipment faults
 - 2.10 Explain the use of computer operating systems
 - 2.11 Explain the requirement for start-up and shutdown procedures
 - 2.12 Explain the importance of adherence to start-up and shutdown procedures
 - 2.13 Describe the use of technical manuals to check for correct hardware connections
 - 2.14 Explain own responsibilities under the data protection act, Software Copyright, Computer Misuse Act
- 3. Be able to produce drawings using computer aided drawing software
 - 3.1 Access and terminate the correct software application
 - 3.2 Identify the type of drawing required and choose a suitable start point
 - 3.3 Use appropriate techniques to create the required drawing to organisational standards
 - 3.4 Save drawings in appropriate locations
 - 3.5 Produce hard copies of the finished drawings
- 4. Know how to produce drawings using computer aided drawing software
 - 4.1 Explain the national, international and organisational standards with regard to engineering drawings
 - 4.2 Describe the various types of drawing layouts that are used for mechanical, fabrication and electrical/electronic applications
 - 4.3 Illustrate the symbols and abbreviations used on drawings
 - 4.4 Explain how to determine the scale to be used and methods of indicating this on the drawing
 - 4.5 Describe the methods of constructing drawings and the application and use of drawing tools
 - 4.6 Describe the methods of constructing lines and curves, circles and ellipses
 - 4.7 Illustrate the types and application of dimension lines
 - 4.8 Explain how to enter text onto drawings
 - 4.9 Explain the procedures and methods for editing drawings and text
 - 4.10 Explain how to produce hard copies
 - 4.11 Assess the advantages and disadvantages of printers and plotters

PLAN AND MANAGE DESIGN WORK

PIABC Unit No: WM319

Guided Learning Hours: 65

Qualification Accreditation No: F/600/8371

Unit Credits: 17

Unit Level: 3

Assessment Guidance

Client - The client may be an individual, organisation or department either inside or outside the organisation for whom you are providing a service.

Problems - Problems may be associated with the provision of resources or may present themselves within project constraints such as time, cost, safety, quality and legislation. Technical problems may include the use, storage and adaptation of materials and components.

Information - Information may be captured in verbal, written or pictorial form.

Resources - Resources such as accommodation, transport, materials, labour, equipment and finance

Design Service - The agreed work to be completed, recorded in the most appropriate way. The work to be carried out may be shown as a quotation, job sheet, schedule, or service level agreement provided within your organisation or agreed directly with the client.

Work Programme - The work programme may be presented in any, or all of the following forms:

- notes
- charts
- schedules
- minutes from meetings
- diagrams

Design Objectives - The key design-related objectives within the design service.

Evaluate - A recorded judgement or calculation of the quality, importance or value of performance – ideally drawing upon a number of information sources, which may include colleagues and/or the client. The evaluation is likely to be in written narrative form, however may contain graphical or numerical data and will ideally feed back into the organisation. The evaluation process may be carried out on a cyclical basis throughout the design service or as a conclusion to the service.

Learning Outcomes and Assessment Criteria

Learning Outcome – The learner will:	Assessment Criterion - The learner can:
1. Be able to identify factors that affect the design service	1.1 Review how to respond to a client brief 1.2 Identify strengths, weaknesses, opportunities and threats in relation to new projects 1.3 Evaluate factors that may cause problems in undertaking the project 1.4 Confirm accuracy of judgements by seeking advice on additional information 1.5 State how to seek advice and assistance
2. Know how to identify factors that affect the design service	2.1 Explain how to negotiate and liaise 2.2 Clarify factors likely to affect the design service (e.g. time, cost and the law) 2.3 Evaluate the strengths and weaknesses of design service offered on similar projects 2.4 Explain SWOT analysis techniques 2.5 Clarify what previous projects may affect the design 2.6 Explain what laws related to design services may affect the design
3. Be able to identify resource requirements for projects	3.1 Determine the limit of your role and responsibilities 3.2 Identify skills and any external agents needed to complete the work 3.3 Identify physical resources needed to complete the work 3.4 Estimate budget required to provide the design service 3.5 Ensure project costs will be recompensed by fees for the work 3.6 Prepare and present clear and accurate information on personnel, physical resources and finances 3.7 Determine the limit of personal responsibility within the project, team or organisation 3.8 Identify financial and resource constraints 3.9 Provide information on: <ul style="list-style-type: none">• costs for design development (e.g. for materials, support services, accommodation and equipment)• costs for design realisation (e.g. from manufacturer/suppliers, for materials/components, services, labour and equipment), and 3.10 external agents with suitable skills (e.g. specialist freelancers, sub-contractors or agencies)
4. Know how to identify resource requirements for projects	4.1 Explain skills needed in relation to project requirements (e.g. own skills, assistance by others and support service) 4.2 Explain how to estimate physical resource requirements (e.g. for materials, accommodation and equipment) 4.3 Explain how to estimate costs and prepare budgets 4.4 Explain how to analyse and present financial information
5. Be able to plan and monitor	5.1 Liaise with the decision-maker and others in the planning

**Learning Outcome –
The learner will:**

progress

6. Know how to plan and monitor progress

7. Be able to evaluate design service provided to clients

8. Know how to evaluate design service provided to clients

Assessment Criterion - The learner can:

process

5.2 Determine your role and responsibilities within the work programme

5.3 Schedule and present clear and realistic proposals to meet design objectives

5.4 Produce a schedule that reflects ongoing design priorities and any necessary changes

5.5 Continuously monitor progress against the plan

5.6 Ensure design response is delivered to meet agreed objectives and timescales

5.7 Deal with unforeseen difficulties as they arise

6.1 Explain negotiation and liaison techniques

6.2 Explain how to estimate and schedule design development time

6.3 Explain how to produce a design development timetable

6.4 Clarify how to use planning tools

6.5 Describe ways of monitoring progress against agreed objectives and time-scales

6.6 Explain limits of personal responsibility within the project, team or organisation

6.7 Explain project planning and management monitoring techniques

6.8 Clarify organisational policies, procedures and objectives

7.1 Evaluate own performance, plans, project management and contribution to the design service

7.2 Identify criteria to use in the evaluation process

7.3 Evaluate the effectiveness and efficiency of the design service and

7.4 Identify strengths and weaknesses that could impact on future commissions

7.5 Evaluate the design service considering relevant data and own and others views

7.6 Identify and agree changes to working practices to improve future responses

7.7 Identify personal development needs with the decision-maker

7.8 Agree how personal development needs can be met

7.9 Identify strengths and weaknesses of design service provided on current projects

8.1 Explain ways to improve working practices

8.2 Explain how to identify personal development needs

**Learning Outcome –
The learner will:**

Assessment Criterion - The learner can:

- 8.3 Explain ways of conducting interviews to clarify perceptions and analyse results
- 8.4 Summarise evaluation techniques (quantitative and qualitative)
- 8.5 Summarise training and development opportunities

CONDUCT A HEALTH AND SAFETY RISK ASSESSMENT OF A FURNITURE/ INTERIORS-RELATED

PIABC Unit No: WM320

Guided Learning Hours: 36

Qualification Accreditation No: H/600/8380

Unit Credits: 8

Unit Level: 3

Assessment Guidance

Control(s) - The means by which the risks identified are eliminated or reduced to acceptable levels.

Hazard* - A hazard is something with the potential to cause harm (this can include articles, substances, plant or machines, methods of work, the working environment and other aspects of work management). **Definition taken from: HSE "Management of health and safety at work – Approved Code of Practice & Guidance". Reference L21 (ISBN 0-7176-2488-9).*

Other People - Refers to everyone covered by the Health and Safety at Work Act including: visitors, members of the public, colleagues, contractors, clients, customers, patients and students.

Risk* - A risk is the likelihood of potential harm from a hazard being realised. The extent of the risk depends on:

- (i) the likelihood of that harm occurring;
- (ii) the potential severity of that harm, i.e. of any resultant injury or adverse health effect; and
- (iii) the population which might be affected by the hazard, i.e. the number of people who might be exposed. **Definition taken from: HSE "Management of health and safety at work – Approved Code of Practice & Guidance". Reference L21 (ISBN 0-7176-2488-9).*

Workplace - The single or multiple areas in which you carry out your work.

Working Practices - All activities, procedures, use of materials, substances or equipment and working techniques used in carrying out a work or job related task. This includes procedures for reporting Hazards and unsafe working practices.

Workplace Instructions - An organisation's instructions, method statements, safe systems of work, guidelines and processes on how to behave and perform tasks in the workplace. Within these national occupational standards "Workplace instructions" has been used to include:

Policies

- A statement which directs the present and future decisions of an organisation.
- It is intended to influence and determine decisions, actions, and other matters.
- Typically, a policy designates a required process or procedure within an organisation.
- They are often initiated because of some external requirement.

Procedures

- A series of steps following in a regular definite order that implements a policy
- A series of steps or instructions, describing a way of doing things.

- A series of steps to be performed in a regular definite order under specified conditions.
- Documented processes that are used when work affects more than one function or department of an organisation.
- A series of clearly defined steps (and decisions) that explains or describes how one goes about completing a task.

This includes the documentation prepared by the employer about the procedures to be followed for health, safety and welfare matters.

This may be the employer's safety policy, general health and safety statements and written safety procedures covering aspects of the workplace that should be drawn to the attention of employees and that of everyone covered by the Health and Safety at Work etc. Act 1974 (visitors, members of the public, colleagues, contractors, clients, customers, patients, students).

Instructions covering, for example:

- a) the use of safe working methods and equipment
- b) the safe use of hazardous substances
- c) smoking, eating, drinking and drugs
- d) what to do in the event of an emergency
- e) personal presentation

Learning Outcomes and Assessment Criteria

Learning Outcome – The learner will:

Assessment Criterion - The learner can:

- | | |
|--|--|
| 1. Identify hazards in the workplace | 1.1 Clearly define why and where the risk assessment will be carried out
1.2 Confirm that all the information available to you on statutory health and safety regulations is up-to-date and from reliable sources
1.3 Recognise your own limitations and seek expert advice and guidance on operational controls when appropriate
1.4 Select a method for identifying hazards appropriate to the workplace being assessed
1.5 Make sure your investigation fully identifies those areas in the workplace where hazards with a potential for serious harm to health and safety are most likely to occur
1.6 Identify hazards which could result in serious harm to people at work or other people

record hazards in a way which meets legal, good practice and workplace requirements |
| 2. Know how to Identify hazards in the workplace | 1.7 Report the results of the process to the responsible people in an agreed format and timescale
2.1 Summarise the responsibilities for risk assessments as required by current legislation
2.2 State your legal responsibilities for health and safety in the workplace as required by the current legislation
2.3 Define your own responsibilities for health and safety as |

**Learning Outcome –
The learner will:**

Assessment Criterion - The learner can:

- defined by any specific legislation covering your job role
- 2.4 Explain the workplace hazards that are most likely to cause harm to health and safety
 - 2.5 Explain the importance of remaining alert to the presence of hazards in the work place
 - 2.6 Describe methods of identifying hazards, including direct observation, examining records, or interviews
 - 2.7 Summarise the purpose, legal implications and importance of carrying out risk assessments
3. Assess the workplace and recommend control measures
- 3.1 Review all legal requirements that are appropriate to your workplace and working practices to make sure effective control measures are in place
 - 3.2 Confirm that industry standards and all other reasonable precautions are in place
 - 3.3 Identify hazards that could be eliminated
 - 3.4 For hazards that cannot be eliminated identify the measures needed to control them to make sure the people carrying out the work will not be harmed
 - 3.5 Assess the level of risk and consider how the risks can be controlled to minimise harm
 - 3.6 List unacceptable risks in priority order including all breaches of relevant health and safety legislation and workplace instructions
 - 3.7 Prepare a risk assessment report containing recommendations for minimising risks
 - 3.8 Present the results of the risk assessment to the responsible people in the agreed format and timescale
4. Know how to Assess the workplace and recommend control measures
- 4.1 Summarise the procedures for carrying out a risk assessment
 - 4.2 Summarise the particular health and safety risks which may affect your own job role and the precautions to be taken
 - 4.3 Define the resources required for a risk assessment to take place
 - 4.4 Explain what to do with the results of the risk assessment
 - 4.5 Explain the importance of dealing with, or promptly reporting, risks
 - 4.6 Describe your own limitations, job responsibilities and capabilities
 - 4.7 State where to find expert advice and guidance
 - the work areas and people for whom you are carrying out the assessment
 - 4.8 Identify work activities of the people in the workplace where you are carrying out the risk assessment
 - 4.9 Describe effective communication methods
 - 4.10 State information sources for risk assessments

**Learning Outcome –
The learner will:**

5. Review your workplace assessment of risks

Assessment Criterion - The learner can:

- 5.1 Compare the latest risk assessment to the current workplace and working practices
- 5.2 Accurately identify any significant differences between previous and new working practices
- 5.3 Investigate the action taken as a result of your recommendations
- 5.4 Accurately identify new hazards arising from changes in the workplace or working practices
- 5.5 Make changes to your risk assessment in line with the review
- 5.6 Promptly inform everyone affected by the changes

MAKE SURE YOUR OWN ACTIONS WITHIN THE FURNITURE/INTERIORS-RELATED WORKPLACE AIM TO PROTECT THE ENVIRONMENT

PIABC Unit No: WM321

Guided Learning Hours: 30

Qualification Accreditation No: M/600/8382

Unit Credits: 7

Unit Level: 3

Assessment Guidance

Control(s) - The means by which the risks identified are eliminated or reduced to acceptable levels.

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- A series of steps to be performed in a regular definite order under specified conditions.
- Documented processes that are used when work affects more than one function or department of an organisation.
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This may be the employer's safety policy, general health and safety statements and written safety procedures covering aspects of the workplace that should be drawn to the attention of employees and that of everyone covered by the Health and Safety at Work etc. Act 1974 (visitors, members of the public, colleagues, contractors, clients, customers, patients, students).

Instructions covering, for example:

- a) the use of safe working methods and equipment
- b) the safe use of hazardous substances
- c) smoking, eating, drinking and drugs
- d) what to do in the event of an emergency
- e) personal presentation

Learning Outcomes and Assessment Criteria

Learning Outcome – The learner will:

Assessment Criterion - The learner can:

- | | |
|--|--|
| 1. Identify the risks to the environment arising as a result of workplace activities | 1.1 Identify the people in the workplace to whom you should report environmental matters
1.2 Make sure you are up-to-date on environmentally-friendly working practices which are relevant to you workplace
1.3 Identify any current working practices in your job role which could cause harm to the environment
1.4 Identify any materials, products or equipment used in any part of your job role which could cause harm to the environment
1.5 Report any differences between legal regulations and workplace instructions and the actual use of materials or products hazardous to the environment
1.6 Promptly report to the people responsible for environmental matters those hazards which present high risks |
| 2. Know how to identify the risks to the environment arising as a result of workplace activities | 2.1 State the legislation relating to environmental matters which affect your workplace
2.2 Describe your responsibilities for the environment as defined by any specific legislation covering your job role
2.3 Evaluate the particular risks to the environment which may be present in your workplace and/or in your own job role
2.4 Explain how to use resources and materials effectively |

**Learning Outcome –
The learner will:**

Assessment Criterion - The learner can:

- and efficiently
- 2.5 Explain the importance of remaining alert to the presence of hazards to the environment in the whole work place
3. Minimise risks to the environment arising as a result of workplace activities
- 3.1 Follow the relevant legal requirements and workplace environmental procedures for your job role
- 3.2 Within your capability and the scope of your job responsibilities, control those environmental hazards
- 3.3 Promptly report risks to the environment that you are unable to deal with
- 3.4 Pass on any suggestions for limiting risks to the environment to the responsible persons
- 3.5 Follow suppliers', manufacturers' and workplace instructions for the safe use and storage of materials, products and equipment
- 3.6 Follow the correct instructions for handling materials and products which can be hazardous to the environment
- 3.7 Follow the correct instructions for disposing of materials and products which can be hazardous to the environment
4. Know how to minimise risks to the environment arising as a result of workplace activities
- 4.1 Explain the importance of dealing with, or promptly reporting, risks to the environment
- 4.2 State the substances and processes categorised as hazardous to the environment
- 4.3 Describe the workplace instructions, precautions and procedures relating to controlling risks to the environment
- 4.4 Define your responsibilities for materials and equipment which can be hazardous to the environment detailed in your job description
- 4.5 Identify the responsible persons to whom to report environmental matters
- 4.6 State the specific workplace environmental procedures covering your job role
- 4.7 Identify the suppliers, manufacturers and workplace instructions for the use of equipment, materials and products which can be hazardous to the environment
- 4.8 State the working practices for your own job role
- 4.9 Review the correct handling procedures for materials which can be hazardous to the environment
- 4.10 Summarise your own responsibilities for controlling hazards to the environment
- 4.11 Summarise the workplace instructions for handling hazards to the environment which you are unable to deal with

ALLOCATE AND CHECK YOUR TEAM'S WORK

PIABC Unit No: WM322

Guided Learning Hours: 24

Qualification Accreditation No: D/600/8491

Unit Credits: 5

Unit Level: 3

Assessment Guidance

Behaviours which underpin effective performance

1. You make time available to support others.
2. You clearly agree what is expected of others and hold them to account.
3. You prioritise objectives and plan work to make best use of time and resources.
4. You state your own position and views clearly and confidently in conflict situations.
5. You show integrity, fairness and consistency in decision-making.
6. You seek to understand people's needs and motivations.
7. You take pride in delivering high quality work.
8. You take personal responsibility for making things happen.
9. You encourage and support others to make the best use of their abilities.
10. You are vigilant for possible risks and hazards.

Industry/sector specific knowledge and understanding

1. Industry/sector specific legislation, regulations, guidelines, codes of practice relating to carrying out work
2. Industry/sector requirements for the development or maintenance of knowledge, understanding and skills

Context specific knowledge and understanding

1. The members, purpose and objectives of your team
2. The work required of your team
3. The available resources for undertaking the required work
4. The organisation's written health and safety policy statement and associated information and requirements
5. Your team's plan for undertaking the required work
6. The skills, knowledge and understanding, experience and workloads of team members
7. Your organisation's policy and procedures in terms of personal development
8. Reporting lines in the organisation and the limits of your authority
9. Organisational standards or levels of expected performance
10. Organisational policies and procedures for dealing with poor performance
11. Organisational grievance and disciplinary policies and procedures
12. Organisational performance appraisal systems

Learning Outcomes and Assessment Criteria

Learning Outcome – The learner will:

1. Be able to allocate work amongst the team

Assessment Criterion - The learner can:

1.1 Confirm the work required of the team with your manager and seek clarification, where necessary, on any outstanding points and issues.

1.2 Plan how the team will undertake its work, identifying any priorities or critical activities and making best use of the available resources.

1.3 Allocate work to team members on a fair basis taking account of their skills, knowledge and understanding, experience and workloads and the opportunity for development.

1.4 Brief team members on the work they have been allocated and the standard or level of expected performance.

1.5 Encourage team members to ask questions, make suggestions and seek clarification in relation to the work they have been allocated.

2. Know how to allocate work amongst the team

2.1 Different ways of communicating effectively with members of a team

2.2 The importance of confirming/clarifying the work required of the team with your manager and how to do this effectively

2.3 How to plan the work of a team, including how to identify any priorities or critical activities and the available resources

2.4 How to identify and take due account of health and safety issues in the planning, allocation and checking of work

2.5 Why it is important to allocate work across the team on a fair basis and how to do so

2.6 Why it is important to brief team members on the work they have been allocated and the standard or level of expected performance and how to do so

2.7 Ways of encouraging team members to ask questions and/or seek clarification and make suggestions in relation to the work which they have been allocated.

3. Be able to check team performance

3.1 Check the progress and quality of the work of team members on a regular and fair basis against the standard or level of expected performance and provide prompt and constructive feedback.

3.2 Support team members in identifying and dealing with problems and unforeseen events.

3.3 Motivate team members to complete the work they have been allocated and provide, where requested and where possible, any additional support and/or resources to help completion.

3.4 Monitor the team for conflict, identifying the cause(s) when it occurs and dealing with it promptly and effectively.

3.5 Identify unacceptable or poor performance, discuss the

**Learning Outcome –
The learner will:**

**4. Know how to check team
performance**

Assessment Criterion - The learner can:

- cause(s) and agree ways of improving performance with team members.
- 3.6 Recognise successful completion of significant pieces of work or work activities by team members and the overall team and advise your manager.
- 3.7 Use information collected on the performance of team members in any formal appraisal of performance.
- 4.1 Effective ways of regularly and fairly checking the progress and quality of the work of team members
- 4.2 How to provide prompt and constructive feedback to team members
- 4.3 How to select and apply a limited range of different methods for motivating, supporting and encouraging team members to complete the work they have been allocated, improve their performance and for recognising their achievements
- 4.4 The additional support and/or resources which team members might require to help them complete their work and how to assist in providing this
- 4.5 Why it is important to monitor the team for conflict and how to identify the cause(s) of conflict when it occurs and deal with it promptly and effectively
- 4.6 Why it is important to identify unacceptable or poor performance by members of the team and how to discuss the cause(s) and agree ways of improving performance with team members
- 4.7 The type of problems and unforeseen events that may occur and how to support team members in dealing with them
- 4.8 How to log information on the ongoing performance of team members and use this information for performance appraisal purposes

MANAGE AND MOTIVATE WORK TEAMS

PIABC Unit No: WM323

Guided Learning Hours: 24

Qualification Accreditation No: H/600/8492

Unit Credits: 5

Unit Level: 3

Assessment Guidance

Behaviours which underpin effective performance

1. You create a sense of common purpose.
2. You take personal responsibility for making things happen.
3. You encourage and support others to take decisions autonomously.
4. You act within the limits of your authority.
5. You make time available to support others.
6. You show integrity, fairness and consistency in decision-making.
7. You seek to understand people's needs and motivations.
8. You model behaviour that shows respect, helpfulness and co-operation.

Industry/sector specific knowledge and understanding

1. Legal, regulatory and ethical requirements in the industry/sector

Context specific knowledge and understanding

1. The members, purpose, objectives and plans of your team
2. The personal work objectives of members of your team
3. The types of support and advice that team members are likely to need and how to respond to these

Standards of performance for the work of your team

Learning Outcomes and Assessment Criteria

Learning Outcome – The learner will:

1. Be able to manage team objectives

Assessment Criterion - The learner can:

- 1.1 Set out and positively communicate the purpose and objectives of the team to all members.
- 1.2 Involve members in planning how the team will achieve its objectives.
- 1.3 Ensure that each member of the team has personal work objectives and understands how achieving these will contribute to achievement of the team's objectives.
- 1.4 Encourage and support team members to achieve their personal work objectives and those of the team and provide recognition when objectives have been achieved.
- 1.5 Win, through your performance, the trust and support of the team for your leadership.

2. Know how to manage team objectives

- 2.1 Describe the different ways of communicating effectively with members of a team
- 2.2 Explain how to set objectives which are SMART (Specific, Measurable, Achievable, Realistic and Time-bound)
- 2.3 Explain how to plan the achievement of team objectives and the importance of involving team members in this process
- 2.4 Explain the importance of and being able to show team members how personal work objectives contribute to achievement of team objectives

3. Be able to provide motivation of team members

- 3.1 Steer the team successfully through difficulties and challenges, including conflict within the team.
- 3.2 Encourage and recognise creativity and innovation within the team.
- 3.3 Give team members support and advice when they need it especially during periods of setback and change.
- 3.4 Motivate team members to present their own ideas and listen to what they say.
- 3.5 Encourage team members to take the lead when they have the knowledge and expertise and show willingness to follow this lead.
- 3.6 Monitor activities and progress across the team without interfering.

4. Know how to provide motivation of team members

- 4.1 Summarise different styles of leadership
- 4.2 State how to select and successfully apply a limited range of different methods for motivating, supporting and encouraging team members and recognising their achievements
- 4.3 Describe types of difficulties and challenges that may arise, including conflict within the team, and ways of identifying and overcoming them
- 4.4 Explain the importance of encouraging others to take the lead and ways in which this can be achieved
- 4.5 State the benefits of and how to encourage and recognise

**Learning Outcome –
The learner will:**

Assessment Criterion - The learner can:

creativity and innovation within a team

ASSESSMENT

Assessment principles should follow recognised good practice. The qualification is made up of units from different standard setting bodies and their Assessment Strategies should be used.

All Learning outcomes and Assessment criteria should be met.

Simulation is not permitted

The overall achievement threshold for the individual units is not subject to change.

QUALIFICATION CERTIFICATION

All learning outcomes and assessment criteria are to be achieved. Whilst there is no grading to this Diploma (pass, credit etc), the training delivery and feedback should promote the notion of continued improvement and craftsmanship.

The overall achievement threshold for the qualification is not subject to change.

GLOSSARY

Term	Definition
Learning Outcome	This describes what a learner needs to know, understand or do as a result of the process of learning.
Assessment Criteria	These are the requirements learners are expected to meet to demonstrate that a learning outcome has been achieved.
Centre	The organisation that is approved by PIABC for the purposes of preparing learners for assessment.

FURTHER INFORMATION

Please contact PIABC Limited directly at:

PIABC Limited, The Boilerhouse, Springfield Business Park, Caunt Road, Grantham, NG31 7FZ

Tel: 01476 513884

Email: piabc@iom3.org