SEG Awards ABC Level 2 Certificate in Arboriculture

Qualification Guidance

England – 501/1411/6

Wales – C00/0291/1

About Us

At the Skills and Education SEG Awards (ABC)[1] we continually invest in high quality qualifications, assessments and services for our chosen sectors. As a UK leading sector specialist we continue to support employers and skills providers to enable individuals to achieve the skills and knowledge needed to raise professional standards across our sectors.

ABC has an on-line registration system to help customers register learners on its qualifications, units and exams. In addition it provides features to view exam results, invoices, mark sheets and other information about learners already registered.

The system is accessed via a web browser by connecting to our secure website using a username and password:
https://secure.ABCawards.co.uk/ors/secure_login.asp

Sources of Additional Information

The ABC website www.ABCawards.co.uk provides access to a wide variety of information.

Copyright

Specification Code, Date and Issue Number

The specification code is C9300-02.
The date of this specification is December 2020. The Issue number is 8.6.

[1] ABC Awards is a brand of the Skills and Education Group Awards, a recognised awarding organisation and part of the Skills and Education Group. Any reference to ABC Awards, its registered address, company or charity number should be deemed to mean the Skills and Education Group Awards.

Contents

This is a live document and as such will be updated when required. It is the responsibility of the approved centre to ensure the most up-to-date version of the Qualification Guide is in use. Any amendments will be published on our website and centres are encouraged to check this site regularly.

Introduction

The Certificate in Arboriculture is designed for those people working in arboriculture, in both the public and private sectors, to complement their training and experience, and to provide evidence of their knowledge of arboriculture.

This qualification will be put forward for inclusion on the ASL catalogue. Please check the ABC Awards website for the current status of this qualification.

Aims

The ABC Level 2 Certificate in Arboriculture aims to:

- provide learners with the opportunity to acquire the essential skills, knowledge and understanding required for employment in arboriculture and related industries, and to enable them to progress to advanced study
- provide a stimulating and supportive learning environment for learners to develop their potential contribution to arboriculture and associated industries
- develop underpinning knowledge within the subject area, by promoting and encouraging the development of new techniques and learning activities

Target Group

This qualification is designed for those learners working in arboriculture, in both the public and private sectors, which have identified it necessary to complement their training and experience and to provide evidence of their competence.

ABC expects approved centres to recruit with integrity on the basis of a learner's ability to contribute to and successfully complete all the requirements of a unit/s or the full qualification.

Progression Opportunities

This qualification provides access to continued Further Education, enhanced employability and/or an opportunity for employed learners to up-date existing skills.

Centres should be aware that reasonable adjustments which may be permitted for assessment may in some instances limit a learner's progression into the sector. Centres must, therefore, inform learners of any limits their learning difficulty may impose on future progression

Language

These specifications and associated assessment materials are in English only.

Qualification Summary

Qualification and Pathways ABC Awards Level 2 Certificate in Arboriculture	
Qualification Number	501/1411/6
Qualifications Wales Number	C00/0291/1
Regulated	The qualification identified above is regulated by Ofqual and Qualifications Wales
Assessment	Internal assessment, internal and external moderation
Grading	Pass
Progression	Centres should be aware that reasonable Adjustments which may be permitted for assessment may in some instances limit a learner's progression into the sector. Centres must, therefore, inform learners of any limits their learning difficulty may impose on future progression
Operational Start Date	01/09/2010
Review Date	31/08/2022
ABC Sector	Land Based/Environmental
Ofqual SSA Sector	03.2 Horticulture and Forestry
Support from sector bodies	This qualification is supported by Lantra, the Sector Skills Council for environmental and land-based industries
Contact	See ABC website for the Centre Support Officer responsible for this qualification

Level 2 Certificate in Arboriculture

Rules of Combination: Learners must achieve a minimum of 21 credits. This will be made up of 18 credits from the mandatory units and a minimum of 3 credits from the optional units.

Unit	Level	Credit Value	GL
Mandatory Units			
The interaction of soil environments and woody plants [T/602/3921]	2	4	30
Woody plant physiology [A/602/3922]	2	5	37
The supply, planting and aftercare of woody plants [A/602/3936]	2	3	22
Principles of tree surgery operations [L/602/3956]	2	3	22
Tree inspections and statute and common law applied to trees [Y/602/3958]	2	3	22
Optional Units			
The principles of aerial tree surgery and ground based arboricultural operations [R/602/3960]	2	3	22
Basic principles of woodlands, forestry and ecology [H/602/3963]	2	3	22
The principles of managing special trees [T/602/3966]	2	3	22
Principles of tree surgery equipment use and maintenance [A/602/3967]	2	3	22

Numbers in box brackets indicate unit number

Qualification Purpose	B. Prepare for further learning or training and/or develop knowledge and/or skills in a subject area B1. Prepare for further learning or training B2. Develop knowledge and/or skills in a subject area					
Entry Requirements	Post 16					
Age Range:	Pre 16		16 – 18	✓	19 +	✓

Recommended GLH[2]	155
Recommended TQT[3]	210
Credit Value	21
Learning Aims Reference	50114116
Type of Funding Available	See LARS (Learning Aim Rates Service)
Qualification Fee / Unit Fee	See ABC web site for current fees and charges
Additional Information	Please see ABC web site for resources available for this qualification

[2] See Glossary of Terms

[3] See Glossary of Terms

Unit Details

The Interaction of Soil Environments and Woody Plants

Unit Reference	T/602/3921
Level	2
Credit Value	4
Guided Learning Hours	30
Unit Summary	In this unit, learners will explore how soils are formed, soil structure and its physical characteristics. They will look at the importance of water, nutrients and organisms in the soil. Learners will explore conditions required for plant growth, the causes of poor quality soil and how to improve conditions for woody plant growth.
Learning Outcomes (1 to 7) **The learner will:**	**Assessment Criteria (1.1 to 7.2)** **The learner can:**
1. Understand how soil is formed	1.1. Describe how a soil is formed 1.2. Identify the role of organic matter in soil formation 1.3. Describe the properties of a minimum of three main constituents of soil 1.4. Describe the effects on the soil of these main constituents 1.5. Identify why aggregates are important to soil structure 1.6. Define the terms soil texture and structure

2. Understand the importance of the differing quantities of water found in a soil	2.1.	Describe how water moves within the soil
	2.2.	Identify how pore size affects water retention in a soil
3. Understand the role played in woody plants by the principal macro and micro nutrients	3.1.	Describe two ways in which soil type affects nutrient availability
	3.2.	Distinguish between two symptoms of nutrient deficiency found in named woody vegetation
	3.3.	Outline the nitrogen cycle
4. Understand the role of the beneficial organisms found in the soil.	4.1.	Describe two benefits that soil organisms can bring to soil composition
	4.2.	Describe two benefits that soil organisms can bring to the woody plant
5. Understand soil pH and the ranges found in soil	5.1.	Identify two implications for woody plants of a low and a high value of pH
	5.2.	Identify 5 trees and 5 shrubs suitable for each situation given below ○ a soil with a pH of 5.5 ○ a soil with a pH of above 7.5
6. Understand optimum soil conditions required for woody plant growth	6.1.	Identify signs and symptoms in woody plants of poor soil conditions
	6.2.	Identify a minimum of two methods of improving soil conditions for woody plant growth

	6.3.	Identify a minimum of two fertilizers for use with woody plants
	6.4.	Describe a minimum of two methods of application of fertilizer to mature trees
7. Understand the importance of pre-planting soil surveys for woody plants	7.1.	Identify the principal information that can be obtained from a soil survey
	7.2.	List four advantages of undertaking a soil survey prior to planting woody plants

Supporting Unit Information

The Interaction of Soil Environments and Woody Plants - T/602/3921 – Level 2

Indicative Content

Note: Indicative content provides an indication of the scope for the Learning Outcomes and Assessment Criteria. It is intended as a resource to help guide the delivery and assessment of the unit. Indicative content is NOT a statement of material which must be covered and evidenced for assessment.

1. How soil is formed, main rock constituents, how rocks are broken down. Identifying the horizons found in soil from the O horizon to parent rock, what is organic matter and role in soil formation, examining the effects on soil of the main components and identifying the terms aggregates, texture and structure.

2. Types and terms applied to water found in soils, how it moves within the soil downwards, sideways and upwards, examining pore size and how this affects water retention in the soil – saturated soils to loss by drainage.

3. The role of nutrients in plants both micro and macro, how soil type affects nutrient availability, identify typical symptoms of nutrient deficiency, outline the nitrogen cycle by diagram and brief description - Nitrogen in atmosphere, fixed to soil by bacteria in legumes, fixed to soil by soil bacteria, added to soil from animal waste as ammonia, bacteria converting ammonia to nitrites, bacteria converting nitrites to nitrates, nitrates taken up by plants, plants eaten by animals, de nitrification bacteria convert nitrate to atmospheric nitrogen and decomposers.

4. Identify and recognise the role of the beneficial organisms found in the soil – nitrifying bacteria, mycorrhizal fungi and earthworms, describe the benefits that they bring to the soil.

5. Define pH and recognising a neutral value, knowing what the terms calcifuge and calcicolous mean. Implications for woody plants of a low value or of a high value

6. Optimum conditions for tree growth and causes of poor soil conditions, how to improve growing conditions, types of fertilizer and methods of applying fertilizer

7. Know how to undertake a soil survey prior to planting trees and the advantages of doing so

Teaching Strategies and Learning Activities

Centres should adopt a delivery approach which supports the development of their particular learners. The aims and aspirations of all learners, including those with identified special needs, including learning difficulties/disabilities, should be considered and appropriate support mechanisms put in place.

Methods of Assessment

This unit will be internally assessed, internally and externally moderated via a learner's portfolio and other related evidence, against the unit outcomes and assessment criteria.

Minimum requirements when assessing this unit
ABC expects that staff will be appropriately qualified to assess learners against the outcomes and criteria within the units. Generally teaching staff should be qualified and/or vocationally experienced to at least a level above that which they are teaching.

Evidence of Achievement

Evidence presented to support achievement is not prescribed for each learning outcome. It **could** typically include:

- Product evidence
- Observation reports
- Oral/written questions and answers
- Reports/notes
- Worksheets/job sheets/workbooks
- Witness statements
- Taped evidence (video or audio)
- Photographic evidence
- Case studies/assignments/projects
- Interview/professional discussion
- Site risk assessment
- Tool / equipment inventory lists / maintenance schedules
- Pictorial identifications
- Letters / emails seeking clarification / confirmation of understanding

- Internet research / copies of items with relevant knowledge highlighted

This is not an exhaustive list and learners should be encouraged to develop the most appropriate evidence to demonstrate their achievement of the learning outcomes and assessment criteria.

All evidence must be clearly signposted and made available for the external moderator upon request.

All internal assessments must be accompanied by a signed Declaration of Authenticity (this document is available on the ABC web site).

Additional Information

Additional guidance for delivering and assessing ABC Awards qualifications and information about Internal Quality Assurance is available on the ABC Awards web site.

Woody Plant Physiology

Unit Reference	A/602/3922
Level	2
Credit Value	5
Guided Learning Hours	37
Unit Summary	This unit looks at the classification and naming system of trees, shrubs and climbers. Learners will explore the internal and external structure of woody plants. They will learn about the physiological processes and bio-mechanical structure of these plants. They will also explore defence mechanisms used by woody plants, the causes of ill health and treatment/preventative measures available to maintain healthy woody plants.
Learning Outcomes (1 to 8) The learner will:	**Assessment Criteria (1.1 to 8.5) The learner can:**
1. Understand the international system of plant naming	1.1. Define the terms of nomenclature used within the system. 1.2. Identify examples of woody plants to demonstrate an understanding of the terms commonly used in the naming system. 1.3. Write scientific names correctly
2. Understand the function of cells found in ring porous, diffuse porous and coniferous woody plants	2.1. Identify the function(s) of the cells found in woody plants 2.2. Identify the difference in cell structure between ring porous, diffuse porous and coniferous woody plants

3. Understand the main physiological processes that woody plants carry out and the main environmental factors which influence growth	3.1.	Describe the principles of the physiological processes of woody plants
	3.2.	Identify a minimum of three environmental factors which influence growth
	3.3.	Describe how the factors named in 3.2 influence growth
	3.4.	Identify what fuels the physiological processes
	3.5.	Define the terms potential energy and kinetic energy
	3.6.	Define the terms dynamic and static mass
4. Understand principles applied to the growth of woody plants	4.1.	Explain the two critical periods in the phenological cycle when the tree is vulnerable to attack
	4.2.	Outline the processes of secondary thickening
	4.3.	Define the terms dioecious and monoecious and identify two species representing each
	4.4.	Describe the methods of seed dispersal as used commonly by trees
	4.5.	Identify a minimum of three factors involved in germination of tree seeds
	4.6.	Define the term 'root to shoot' ratio
5. Understand the woody plant root system	5.1.	Identify the functions of tree roots

	5.2.	Identify a minimum of four factors affecting root distribution
	5.3.	Describe how trees are anchored in the ground
	5.4.	Identify two causes of a loss of anchorage
6. Understand what is meant by tree biomechanics	6.1.	Identify what is meant by the term biomechanics
	6.2.	Define a minimum of four key terms associated with tree biomechanics
	6.3.	Identify what is meant by the term thigmomorphogenesis
7. Understand the defence mechanisms used by woody plants	7.1.	Describe the formation of the walls/barriers formed as part of the CODIT model
	7.2.	Define the terms callus, woundwood and occlusion
8. Understand the causes, prevention or control of ill health in woody plants	8.1.	Identify the signs or symptoms of a named pest, disease and abiotic disorder
	8.2.	Give an example of a principal decay causing fungus for each named colonisation strategy
	8.3.	Give an example of a woody plant fungus for each named type of rot
	8.4.	Identify the significance for each a named pest, disease and abiotic disorder when found on a tree
	8.5.	For each named pest, disease and abiotic disorder, identify a

	preventative or cultural or chemical control measure

Supporting Unit Information

Woody Plant Physiology – A/602/3922 – Level 2

Indicative Content

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1. Correctly name the International Code of Nomenclature for algae, fungi, and plants. Identify and define Kingdom, division, class, family, genus, species, variety, cultivar, common name, inter specific hybrid, inter generic hybrid, graft hybrid (chimera) and clone. Write scientific names correctly

2. Identify (by illustrations) and identify the functions in dicotyledonous trees of the pith, parenchyma, vascular cambium, phloem, xylem, tracheids, rays, cork cambium, bark, green layer (photosynthetic), lenticel, resin duct, annual ring, sapwood and heartwood.

3. Plant adaptations such as dark green leaves and stems, bark, leaf and bark shedding, reduced numbers of stoma, needles, altering shape and growth rate Describe the principles of the following processes - photosynthesis, respiration, transpiration, transportation, defence, storage, reproduction, cell division/growth and anchorage. Identify environmental factors and how they influence growth – optimum or decrease or accelerate or add material. Carbohydrates and sugars (potential energy – (Shigo). Define potential and kinetic energy. (Shigo). Define dynamic and static mass (Shigo).

4. Define the term Phenology and name the main phenological periods in the tree season (Shigo) Dioecious and monoecious and what the terms mean. Define the term secondary thickening Look at methods of seed dispersal and germination. Define root to shoot ratio. Pollination and Fertilization and how this occurs.

5. Identify the 6 widely recognised tree root forms and 3 shapes. Functions of roots – anchorage, uptake of water, uptake of nutrients,

respiration, storage, to form symbiotic relationships. Factors affecting root distribution – soil compaction, water, nutrient and oxygen availability, soil type, ground topography, wind and species of tree. How trees are anchored in the ground. Cause or loss of anchorage.

6. Biomechanics - the study of the structure and function of the mechanical aspects of a biological systems. Tree Structure as an undamaged, self-optimised structure. Axiom of uniform stress and the minimum lever arm (body language of trees) Compression and tensile forks, slenderness, bulges, fibre buckling, cracks, ribs, hazard beam and hollowness. Thigmomorphogenesis - the growth and developmental response of trees to mechanical stimuli.

7. Mechanisms of defence – physical measures spines, thorns, prickles, bark, leaf adaptations, hairs – chemical measures, phenolics, tannins, resins, gums terpenes and cyanide production. Describe Compartmentalisation of decay in trees (COD IT model). Describe the creation of each wall and where in the tree, indicate cells involved, materials used and direction that resists decay *Explain if desired that D could stand for Dysfunction as opposed to Decay given current thinking. Describe woundwood and distinguish it from callus. Know what is meant by occlusion of a wound.

8. Signs - something which indicates the presence of a pest or disease. Symptoms – a physical feature, visible effect indicating the presence of a pest/ disease. Fungal colonisation strategies. Types of rot. Signs or symptoms of a named pest, disease and abiotic disorder. A fungi example required for each colonization strategy.
A fungi example required for each type of rot. Identify the significance of a named pest, disease and abiotic disorder when found on a tree.
For each named pest, disease and abiotic disorder, identify a preventative or cultural or chemical control measure.

Teaching Strategies and Learning Activities

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Methods of Assessment

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Minimum requirements when assessing this unit
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Evidence of Achievement

Evidence presented to support achievement is not prescribed for each learning outcome. It could typically include:

- Product evidence
- Observation reports
- Oral/written questions and answers
- Reports/notes
- Worksheets/job sheets/workbooks
- Witness statements
- Taped evidence (video or audio)
- Photographic evidence
- Case studies/assignments/projects
- Interview/professional discussion
- Site risk assessment
- Tool / equipment inventory lists / maintenance schedules
- Pictorial identifications
- Letters / emails seeking clarification / confirmation of understanding
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Additional Information

Additional guidance for delivering and assessing ABC Awards qualifications and information about Internal Quality Assurance is available on the ABC Awards web site.

The Supply, Planting and Aftercare of Woody Plants

Unit Reference	A/602/3936
Level	2
Credit Value	3
Guided Learning Hours	22
Unit Summary	In this unit, learners will look at the values of woody plants in the environment. They will develop an understanding of the plant handling process including lifting, storage and planting on site. They will also learn about the aftercare of woody plants
Learning Outcomes (1 to 5) **The learner will:**	**Assessment Criteria (1.1 to 5.2)** **The learner can:**
1. Understand the values of woody plants in the environment	1.1. List a minimum of ten values of woody plants in the environment 1.2. Identify five drawbacks of trees in the urban environment
2. Understand the plant handling process from lifting in the nursery through to storage at the planting site	2.1. Describe a correct procedure for transporting trees from the nursery or storage to site 2.2. Describe a correct process of protecting bare root stock at the site of planting prior to planting
3. Understand methods of planting woody plants	3.1. Describe a suitable method of planting: ○ Cell grown tree ○ Bare rooted whip tree ○ Standard tree ○ Container grown shrub

	3.2.	Describe a suitable method of staking and tying: ○ A bare root standard tree ○ A container grown heavy standard tree ○ An extra heavy standard tree
	3.3.	Describe a suitable method of backfilling a planting hole
	3.4.	Describe a suitable method of mulching a newly planted tree
	3.5.	Identify a minimum of two suitable mulch materials
	3.6.	Identify a minimum of two reasons for mulching a newly planted tree
	3.7.	Identify appropriate measures required when planting trees of a given size into an unfavourable site condition
4. Understand appropriate protection and support system requirements	4.1.	Identify one appropriate protection system and one appropriate support system for use with a newly planted street tree
	4.2.	Identify how a newly planted tree may be protected from rabbit and deer damage
	4.3.	Identify a minimum of two ways that a young tree may be protected from grass cutting machinery damage
	4.4.	Identify a minimum of two ways that newly planted trees may be protected from vandalism in the urban environment

5. Understand the aftercare requirements of newly planted stock	5.1.	Identify the elements of an aftercare programme for newly planted trees/shrubs to ensure successful establishment
	5.2.	Identify a minimum of three causes of newly planted tree stock failing to establish

Supporting Unit Information

The Supply, Planting and Aftercare of Woody Plants – A/602/3936 – Level 2

Indicative Content

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1. Values of woody plants from the categories of environmental, amenity/aesthetic, ecological and social and drawbacks that trees pose. Individual features of specimen trees such as size, shape, form, foliage, bark, flowers, fruits and other interest.

2. Lifting to arrival at a planting site – lifting, bundling, labelling, packaging, transportation and storage of stock on site – healing in.

3. Tree sizes from seedling to extra heavy standard as in BS 3936 Nursery Stock. Know stock types – bare root, cell grown, container grown – black pot, white bag, air pot, spring ring, containerised, root-balled. Describe healing-in for protection from drying out at planting site or covering and keeping roots moist. Describe planting methods. Describe Staking and tying. Describe backfilling. Describe a method of mulching. Identify Reasons for mulching – reduce water evaporation from the soil, prevent weed growth competition – aimed at helping establishment.
Identify appropriate measure when planting trees in an unfavourable site condition e.g. weedy, wet, dry, slope, windy, high alkalinity or reclaimed brown field site, appropriate measure required.

4. Aboveground support, underground support and guards. Protection from machinery damage, vandalism, rabbits and deer individually or by fences – take account of height or type of deer.

5. Three year after care programme to include tree/shrub replacement, re-firming, watering, mulch maintenance, formative pruning to BS 3998, tie and stake adjustment, weed control, pest and disease control.

Causes of failures (exclude vandalism) of trees to establish.

Teaching Strategies and Learning Activities

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Methods of Assessment

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Minimum requirements when assessing this unit
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Evidence of Achievement

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- Product evidence
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- Reports/notes
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- Photographic evidence
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Additional Information

The following learning lists are available on the ABC website:
Woody Vegetation Pests, Diseases and Disorders of Amenity Trees

Additional guidance for delivering and assessing ABC Awards qualifications and information about Internal Quality Assurance is available on the ABC Awards web site.

Principles of Tree Surgery Operations

Unit Reference	L/602/3956
Level	2
Credit Value	3
Guided Learning Hours	22
Unit Summary	This unit covers the principles of carrying out tree surgery operations. Learners will need to refer to current British Standards and current legislation and regulations relating tree surgery operations
Learning Outcomes (1 to 2) The learner will:	**Assessment Criteria (1.1 to 2.1) The learner can:**
1. Understand the principles of tree surgery operations	1.1. Define the following terms: ○ crown lifting ○ crown thinning ○ crown reduction and re-shaping ○ formative pruning ○ pollarding 1.2. Describe tree pruning operations as per BS 3998 1.3. Distinguish when deadwood removal is appropriate and inappropriate 1.4. Describe the treatment of cavities and water pockets 1.5. Identify the principles of fitting a brace or a prop in a tree

	1.6.	Identify the British Standard advised inspection period for a bracing system
	1.7.	Indicate in what circumstances the use of a bracing or propping system is appropriate
2. Understand tree surgery work needs to be carried out in accordance with best practice and in compliance with the relevant Acts and Regulations	2.1.	Identify the principal elements of the following Acts, Regulations and best practice that demonstrate an understanding of compliance: ○ Health and Safety at Work Act ○ Management of Health and Safety at Work Regulations ○ First Aid at Work Regulations ○ COSHH ○ Work at Height Regulations ○ Lifting Operations and Lifting Equipment Regulations ○ Provision and Use of Work Equipment Regulations ○ Personal Protective Equipment Regulations ○ Manual Handling Regulations ○ Reporting of Injuries, Diseases and Dangerous Occurrences Regulations ○ Wildlife legislation ○ AFAG and FISA leaflets ○ ICOP for Arboriculture - Tree work at Height ○ INDG 317 Chainsaws at work

Supporting Unit Information

Principles of Tree Surgery Operations – L/602/3956 – Level 2

Indicative Content

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1. Common reasons for pruning trees. Final pruning cut position as per BS3998. Difference between a wet and dry cavity and a water pocket. Why bracing is a specialist operation. Definitions descriptions - crown lifting, crown thinning, crown reduction and re-shaping, formative pruning, pollarding as per BS 3998. Distinguish when deadwood removal is appropriate or not. Describe treatments – cavities wet and dry, and water pockets as per BS 3998. Identify the principles of a fitting procedure for a flexible or rigid brace and/or a prop as per BS3998. Identify the default inspection periods for a brace. Indicate the circumstances for use of a brace or propping system.

2. Identify the principal elements of the following Acts, Regulations and best practice that demonstrate an understanding of compliance with Health and Safety at Work Act, Management of Health and Safety at Work regulations, First Aid at Work regulations, COSHH, Working at Height regulations, Lifting Operations and Lifting Equipment regulations, Provision and Use of Work Equipment regulations, Personal Protective Equipment regulations, Manual Handling regulations, Reporting of Injuries, Diseases and Dangerous Occurrences regulations, Wildlife and Countryside Act, Countryside Rights of Way Act and the Conservation of Habitats and Species regulations, AFAG/FISA leaflets and CS units/equivalents – related to the operations listed in 1.

Teaching Strategies and Learning Activities

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Additional Information

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Woody Vegetation, Pests, Diseases and Disorders of Amenity Trees

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Tree Inspections and Statute and Common Law Applied to Trees

Unit Reference	Y/602/3958
Level	2
Credit Value	3
Guided Learning Hours	22
Unit Summary	In this unit, learners will explore the development of a systematic and logical method of inspecting trees for obvious signs and symptoms of defects. They will learn about the aspects of common and statute law appropriate to carrying out tree surgery works.
Learning Outcomes (1 to 4) **The learner will:**	**Assessment Criteria (1.1 to 4.5)** **The learner can:**
1. Understand the processes of undertaking safety inspections of trees	1.1. Undertake a systematic inspection of trees identifying a minimum of five obvious structural defects that would be a cause of concern. 1.2. Classify by broad category the risk posed by a tree with an obvious defect in connection with a target
2. Understand the need to select the appropriate recommendation following inspection	2.1. Provide a recommendation action(s) and timescale(s) for a tree inspected 2.2. Describe the implications of a given pruning recommendation on a named tree species 2.3. Identify 6 features of a tree which could lead to harm being caused to a target 2.4. Identify 4 control measure which can be used to reduce or mitigate the risk

		posed to a target by a retained tree with a known defect
3. Understand how aspects of common law are applied to trees.	3.1.	Interpret common law in a scenario containing any three issues from o Overhanging branches o Trespassing roots o Dangerous trees o Poisonous trees
4. Understand how aspects of statutory legislation apply to the protection of trees	4.1.	Identify what information is required when making an application to work on a protected tree
	4.2.	Identify the processes that Local Planning Authorities (LPA's) have in place when determining an application
	4.3.	Identify the information required for carrying out works in a Conservation Area
	4.4.	Identify a minimum of four exceptions for each of the following: o Working on tree with a TPO o Working on a tree in a Conservation Area
	4.5.	Identify when a felling licence is o Required o Not required

Supporting Unit Information

Tree Inspections and Statute and Common Law Applied to Trees – Y/602/3958 - Level 2

Indicative Content

Note: Indicative content provides an indication of the scope for the Learning Outcomes and Assessment Criteria. It is intended as a resource to help guide the delivery and assessment of the unit. Indicative content is NOT a statement of material which must be covered and evidenced for assessment.

1. A systematic and diagnostic methodology of inspecting trees. Processes of collecting data. Mandatory information – tree id, condition, recommendations, work priority as a timescale. Optional – species if known, height, crown spread, dbh, age class, next inspection date etc, or equivalent headings. Use of non-specialist equipment that can aid tree inspection. Define hazard and risk. Risk category very high, high, medium, low or none.

2. Appropriate recommendations – remove tree, pruning, bracing, propping, move target, guard and restrict access. Tree defects – examples – compression forks, included bark, hazard beam, decay, cavities, splits, cracks, bulges, over extended limbs, deadwood, loss of anchorage. Any recommendation covered in BS 3998. Defects – low branches, dense crown, over extended branches, a very large crown for the space, compression fork with included bark, advanced fungal decay at the tree base, hazard beam, 70%+ and <70% hollow, further investigation – more competent person, felling, pruning, bracing, chemical application, do nothing, soil amelioration, wound repair or move the target. The implications - could include future management requirements, epicormic growth, fungi colonisation, spreading disease, further decline, potential energy reduction, unsightly, potential for damage to a neighbouring tree, flower and fruit loss, sun scorch, death, etc.
The features - compression forks, included bark, hazard beam, decay, cavities, splits, cracks, bulges, over extended limbs, deadwood, loss of anchorage etc.
Four controlled measures and state if it reduces or mitigates risk - remove tree, pruning, bracing, propping, move target, guard, restrict access.

3. Define common law and explain how it applied to dangerous trees (as in unsafe), overhanging branches, trespassing roots, poisonous trees and the right to light.

4. Statute law – made by an Act of parliament. Define the purpose of - Tree preservation orders. Define the purpose of – CA. LPA requires notice of intent to carryout tree work. Penalties – fines and tree replacement. The appeal to PINS related to a refusal or non-determination is a free process. Complete an application form for TPO works. LPA processes – need to determine application within 8 weeks taking opinion into account but can ask for an extension. CA a notice (section 211 notice) for tree work. TPO exceptions to requiring permission. CA no permission is required but LPA have 6 weeks to decide if tree warrants TPO and cannot condition notice of intent. Felling licence requirement for the removal of living timber per calendar quarter from woods/forests.

Teaching Strategies and Learning Activities

Centres should adopt a delivery approach which supports the development of their particular learners. The aims and aspirations of all learners, including those with identified special needs, including learning difficulties/disabilities, should be considered and appropriate support mechanisms put in place.

Methods of Assessment

This unit will be internally assessed, internally and externally moderated via a learner's portfolio and other related evidence, against the unit outcomes and assessment criteria.

Minimum requirements when assessing this unit
ABC expects that staff will be appropriately qualified to assess learners against the outcomes and criteria within the units. Generally teaching staff should be qualified and/or vocationally experienced to at least a level above that which they are teaching.

Evidence of Achievement

Evidence presented to support achievement is not prescribed for each learning outcome. It could typically include:

- Product evidence

- Observation reports
- Oral/written questions and answers
- Reports/notes
- Worksheets/job sheets/workbooks
- Witness statements
- Taped evidence (video or audio)
- Photographic evidence
- Case studies/assignments/projects
- Interview/professional discussion
- Site risk assessment
- Tool / equipment inventory lists / maintenance schedules
- Pictorial identifications
- Letters / emails seeking clarification / confirmation of understanding
- Internet research / copies of items with relevant knowledge highlighted

All evidence must be clearly signposted and made available for the external moderator upon request.

All internal assessments must be accompanied by a signed Declaration of Authenticity (this document is available on the ABC web site).

Additional Information

The following learning lists are available on the ABC website
Woody Vegetation, Pests, Diseases and Disorders of Amenity Trees

Additional guidance for delivering and assessing ABC Awards qualifications and information about Internal Quality Assurance is available on the ABC Awards web site.

The Principles of Aerial Tree Surgery and Ground Based Arboricultural Operations

Unit Reference	R/602/3960
Level	2
Credit Value	3
Guided Learning Hours	22
Unit Summary	In this unit, learners will explore the principles and practices of carrying out ground based and arboricultural aerial operations. They will learn about the equipment used and its maintenance with adherence to Health and Safety legislation and current best practice
Learning Outcomes (1 to 4) **The learner will:**	**Assessment Criteria (1.1 to 4.1)** **The learner can:**
1. Understand the practices of carrying out aerial tree surgery operations	1.1. Identify correct branch removal techniques 1.2. Identify six potential tree and site related hazards to consider prior to aerial tree work 1.3. Describe a technique of accessing a tree with a rope and harness 1.4. Describe a technique of limb or stem removal using a chainsaw 1.5. Identify tools that are used for aerial pruning operations 1.6. Identify a method of dismantling a tree

	1.7.	Describe how timber can be controlled using ropes during dismantling operations
	1.8.	Identify the procedures for ensuring a work site is guarded from the general public
2. Understand the requirements of daily and routine maintenance and service checks carried out on a chainsaw	2.1.	Identify a minimum of four factors to take into account when preparing to operate a chainsaw
	2.2.	Identify the pre-start checks on a chainsaw
	2.3.	Identify the daily maintenance routine required for a chainsaw
	2.4.	Identify the correct cold start procedure for a chainsaw
	2.5.	Identify the correct PPE requirements for using a chainsaw ○ On the ground ○ Off the ground
3. Understand the processes of maintaining and storing personal protective, lifting and tree surgery equipment	3.1.	State how and why lifting equipment is identified
	3.2.	Identify time frames for examining lifting equipment
4. Understand the practices of carrying out ground based arboricultural operations	4.1.	Identify six potential hazards and risks associated with tree felling operations and state how those risks may be reduced or eliminated

Supporting Unit Information

The Principles of Aerial Tree Surgery and Ground Based Arboricultural Operations – R/602/3960 – Level 2

Indicative Content

Note: Indicative content provides an indication of the scope for the Learning Outcomes and Assessment Criteria. It is intended as a resource to help guide the delivery and assessment of the unit. Indicative content is NOT a statement of material which must be covered and evidenced for assessment.

1. Rope and harness (work positioning seat), MEWP, Ladder. Basics of working safely in trees. Potential tree and site related hazards to consider prior to aerial tree work. Access - Rope and harness –thrusting, foot locking, climbing aids, from a MEWP. Climbing ions and strop. Technique of limb or stem removal using a chainsaw. Tools for use in the tree for pruning – chainsaw, hand saw, pole saw. A method of dismantling a tree and controlled with ropes. Procedures for protecting public. Code of Practice for setting out signs at New Roads and Street Works

2. Identify safety features of a chainsaw. Preparing a chainsaw for use. daily maintenance routine. Safe refuelling procedure. Correct PPE requirements when operating a chainsaw.

3. Appropriate storage methods for PPE and safety equipment – in accordance with manufacturer's instructions.
Describe how to maintain a range of lifting equipment items – in accordance with manufacturer's instructions.
Identification of lifting equipment and time frames for examination.

4. Identify three correct tree felling techniques used in different scenarios
Define the terms snedding or delimbing.
Describe techniques of crosscutting using a chainsaw.
Identify tools that are used to assist felling and crosscutting operations.
Identify safe working distances.
Current best practice must be observed with all of the above through AFAG, FISA, ICoP INDG, HSE etc
Hazards and risks associated with tree felling operations.

Teaching Strategies and Learning Activities

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Methods of Assessment

This unit will be internally assessed, internally and externally moderated via a learner's portfolio and other related evidence, against the unit outcomes and assessment criteria.

Minimum requirements when assessing this unit
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Evidence of Achievement

Evidence presented to support achievement is not prescribed for each learning outcome. It could typically include:

- Product evidence
- Observation reports
- Oral/written questions and answers
- Reports/notes
- Worksheets/job sheets/workbooks
- Witness statements
- Taped evidence (video or audio)
- Photographic evidence
- Case studies/assignments/projects
- Interview/professional discussion
- Site risk assessment
- Tool / equipment inventory lists / maintenance schedules
- Pictorial identifications
- Letters / emails seeking clarification / confirmation of understanding
- Internet research / copies of items with relevant knowledge highlighted

All evidence must be clearly signposted and made available for the external moderator upon request.

All internal assessments must be accompanied by a signed Declaration of Authenticity (this document is available on the ABC web site).

Additional Information

The following learning lists are available on the ABC website
Woody Vegetation, Pests, Diseases and Disorders of Amenity Trees

Additional guidance for delivering and assessing ABC Awards qualifications and information about Internal Quality Assurance is available on the ABC Awards web site.

Principles of Woodlands, Forestry and Ecology

Unit Reference	H/602/3963
Level	2
Credit Value	3
Guided Learning Hours	22
Unit Summary	In this unit, learners will explore the history of woodland/forestry in Great Britain from 1600 A.D. up to the development of community forests, identifying types of woodland/forestry system and management principles. The unit also covers an introduction to ecology and woodland ecosystems.
Learning Outcomes (1 to 6) **The learner will**	**Assessment Criteria (1.1 to 6.2)** **The learner can**
1. Understand how woodland/forestry cover has changed from 1600A.D. to the present day	1.1. Identify 3 major influences that have shaped woodlands in recent times
2. Understand woodland structure and how a woodland develops	2.1. Define a minimum of two successional stages related to woodland development 2.2. Describe a minimum of four operations commonly used in woodland management 2.3. Describe the horizontal structure of a woodland 2.4. Describe the vertical structure of a woodland

	2.5.	Identify the four layers of the vertical structure
	2.6.	Give four examples of plant species found in each of the vegetation layers
3. Understand the principles of common silvicultural systems of tree management.	3.1.	Describe two common silvicultural systems
	3.2.	Outline two advantages and two disadvantages of each system
	3.3.	Identify what is meant by the term continuous cover forestry
4. Understand the main types of woodland management	4.1.	Give a definition for one main type of woodland found in the UK
	4.2.	Identify the key principles of managing one of the main types of woodland
5. Understand the main aims/objectives of community woodlands and forests.	5.1.	Identify the main aims/objectives of community forests/woodlands as outlined by government and national policy
6. Understand how a woodland ecosystem and a simple woodland food chain or web functions	6.1.	Identify a minimum of four influences on a woodland ecosystem
	6.2.	Identify the effects that one catastrophic event can have on an ecosystem

Supporting Unit Information

Principles of Woodlands, Forestry and Ecology – H/602/3963 – Level 2

Indicative Content

Note: Indicative content provides an indication of the scope for the Learning Outcomes and Assessment Criteria. It is intended as a resource to help guide the delivery and assessment of the unit. Indicative content is NOT a statement of material which must be covered and evidenced for assessment.

1. The history of woodland cover from 1600 A.D. and the changes that have occurred up to and including designation of community woodlands and the National Forest.

2. Woodlands develop from pioneer species through to climax species and succession to regeneration. A woodland may develop 4 layers during that period.
Successional stages in woodland development. Operations carried out in a woodland. Horizontal structure and Vertical Structure. Four layers and examples of species of plant found typically in each vegetative layer.

3. Definitions of silviculture, arboriculture, urban forestry and community woodlands and forests. Silvicultural systems - Clear fell, selection or shelterwood. Continuous Cover Forestry (CCF) – term given to a forestry approach (not a system) (selection and shelterwood) that maintains a cover of trees as a management principle – not a clear felling system.

4. Definitions - ancient woodland, semi-natural woodland, new native woodland, coppice with standards and pasture woodland. Management principles.

5. Community forestry, as currently practised in most developing countries. – Multi-purpose use by the community. Identify what aims and objectives are.

6. Define ecosystem, ecotone and food chain/web. Producer, primary consumer, secondary consumer, tertiary, consumer and decomposer in relation to ecology. Identify – 4 influences. Simple food chains. Influences on a woodland ecosystem.

Identify the effects of one catastrophic event.

Teaching Strategies and Learning Activities

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Methods of Assessment

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Minimum requirements when assessing this unit
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Evidence of Achievement

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- Reports/notes
- Worksheets/job sheets/workbooks
- Witness statements
- Taped evidence (video or audio)
- Photographic evidence
- Case studies/assignments/projects
- Interview/professional discussion
- Site risk assessment
- Tool / equipment inventory lists / maintenance schedules
- Pictorial identifications
- Letters / emails seeking clarification / confirmation of understanding

- Internet research / copies of items with relevant knowledge highlighted

All evidence must be clearly signposted and made available for the external moderator upon request.

All internal assessments must be accompanied by a signed Declaration of Authenticity (this document is available on the ABC web site).

Additional Information

The following learning lists are available on the ABC website
Woody Vegetation, Pests, Diseases and Disorders of Amenity Trees

Additional guidance for delivering and assessing ABC Awards qualifications and information about Internal Quality Assurance is available on the ABC Awards web site.

The Principles of Managing Special Trees

Unit Reference	T/602/3966
Level	2
Credit Value	3
Guided Learning Hours	22
Unit Summary	This unit covers the recognition of special trees, why they are valuable and the principles of managing them
Learning Outcomes (1 to 6) The learner will:	**Assessment Criteria (1.1 to 6.1) The learner can:**
1. Understand the values of special trees	1.1. Recognise a minimum of ten values unique to the group of special trees
2. Understand the characteristics of an ancient tree	2.1. Identify why the characteristics of an ancient tree are valuable 2.2. Describe the aging process including re-iterative growth 2.3. Identify two of each of the following connected to ancient trees: ○ saproxylic invertebrates ○ beneficial fungi ○ red list (red data book) species
3. Understand the features of a veteran tree	3.1. Identify six key features of a veteran tree 3.2. Describe how these features have developed
4. Understand the principles of	4.1. Identify the overall aim of ancient and veteran tree management

managing ancient and veteran trees	4.2.	Describe six common threats to ancient and veteran trees that may cause their loss
	4.3.	Identify a minimum of six principles of managing ancient and veteran trees
	4.4.	Identify the decision-making process with regards to ancient and veteran trees
	4.5.	Describe the benefits of phasing management over a period of time (typically years).
	4.6.	Identify three types of inadvertent damage that may be caused during management.
	4.7.	Identify two ways, other than pruning a tree, to reduce the risk.
	4.8.	Define the following terms. ○ Retrenchment pruning. ○ Pole thinning. ○ Veteranisation.
5. Understand the implications of undertaking tree work that may affect protected species	5.1.	Identify the key implications of the Wildlife and Countryside Act, Countryside Rights of Way Act and the Conservation of Habitat Regulations in relation to: ○ Carrying out work where a protected species or habitat may be present ○ Penalties for a breach of the legislation ○ The procedure to adopt if it is highly suspected bats may be present in a tree that requires pruning works

	○ The correct procedure if bats are actually found during tree work operations

Supporting Unit Information

The Principles of Managing Special Trees – T/602/3966 – Level 2

Indicative Content

Note: Indicative content provides an indication of the scope for the Learning Outcomes and Assessment Criteria. It is intended as a resource to help guide the delivery and assessment of the unit. Indicative content is NOT a statement of material which must be covered and evidenced for assessment.

1. Define what is meant by a special tree. Values of special trees. TROBI – Tree Register of the British Isles.

2. Aging an ancient tree. Ancient tree characteristics. Aging process including re-iterative growth.
Saproxylic invertebrates, beneficial fungi and red list (red data book) species connected to ancient trees.

3. Concept of veteranising a tree. Key features and how these have developed.

4. Principles of management of ancient and veteran trees.

Overall aim, threats, management principles, decision making processes. Define the terms Retrenchment pruning, Pole thinning and veteranisation. Reducing risk related to old trees. Inadvertent damage that may be caused during management.

5. What is a protected species, rare and endangered. Penalties for destroying of disturbing.
W&C Act – intentional, CROW Act – reckless and Conservation of Habitat Regs – deliberate. Identify the key implications.
Procedure if a protected species is suspected to be present prior to work and if a species is found during works.

Teaching Strategies and Learning Activities

Centres should adopt a delivery approach which supports the development of their particular learners. The aims and aspirations of all learners, including those with identified special needs, including learning difficulties/disabilities, should be considered and appropriate support mechanisms put in place.

Methods of Assessment

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Minimum requirements when assessing this unit
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Evidence of Achievement

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- Interview/professional discussion
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- Pictorial identifications
- Letters / emails seeking clarification / confirmation of understanding
- Internet research / copies of items with relevant knowledge highlighted

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Additional Information

The following learning lists are available on the ABC website
Woody Vegetation, Pests, Diseases and Disorders of Amenity Trees.

Additional guidance for delivering and assessing ABC Awards qualifications and information about Internal Quality Assurance is available on the ABC Awards web site.

Principles of Tree Surgery Equipment Use and Maintenance

Unit Reference	A/602/3967
Level	2
Credit Value	3
Guided Learning Hours	22
Unit Summary	This unit covers equipment use and its maintenance with adherence to Health and Safety legislation and current best practice
Learning Outcomes (1 to 4) **The learner will:**	**Assessment Criteria (1.1 to 4.3)** **The learner can:**
1. Understand the setting up procedure, safe operation and routine maintenance required for a MEWP	1.1. Identify the PPE requirements 1.2. Identify the site safety checks required when preparing to work 1.3. Identify the correct procedure when working from the platform 1.4. Identify the daily maintenance requirements 1.5. Describe the machine safety checks required prior to starting work 1.6. Identify the current examination regime for MEWPs
2. Understand the setting up procedure, safe operation and routine maintenance required for a brushwood chipper	2.1. Identify the PPE requirements 2.2. Identify the checks required on the chipper prior to starting 2.3. Identify the safety checks required of the site prior to starting the chipper

	2.4.	Identify the safe method of operation of the chipper
	2.5.	Identify the maintenance requirements of the chipper
	2.6.	Describe four hazards and four control measures associated with brushwood chipping.
3. Understand the setting up procedure, safe operation and routine maintenance required for a stump grinder	3.1.	Identify the PPE requirements
	3.2.	Identify the checks required prior to starting the stump grinder
	3.3.	Identify the safety checks required of the site and machine prior to starting the stump grinder
	3.4.	Identify the safe aspects of operating the stump grinder
	3.5.	Identify the maintenance requirements
	3.6.	Describe the four hazards and four controls associated with stump grinding
4. Understand the signage for tree operations adjacent to a highway	4.1.	Identify the correct PPE for highway working
	4.2.	Identify the correct street works signs for highway operations in a 30mph limit using a give and take set up
	4.3.	Define each of the following as associated with highway work site set up and signage: ○ works area ○ working space ○ safety zone ○ lead in taper ○ longways clearance

	○ sideways clearance ○ exit taper

Supporting Unit Information

Principles of Tree Surgery Equipment Use and Maintenance - A/602/3967 – Level 2

Indicative Content

Note: Indicative content provides an indication of the scope for the Learning Outcomes and Assessment Criteria. It is intended as a resource to help guide the delivery and assessment of the unit. Indicative content is NOT a statement of material which must be covered and evidenced for assessment.

1. Appropriate and inappropriate uses of a MEWP connected to tree work. PPE requirements, safety checks, working procedure, daily maintenance, safety checks.

2. Emergency procedure if an operator is dragged towards entry to the hopper, PPE, pre-start checks, safety checks, safe method of operation, maintenance, hazards of operation and control measures.

3. Use of a Cable Avoidance Tool (CAT scanner), safety checks, safe operation, maintenance, hazards of operation and control measures.

4. Procedure for the correct sequence of setting out and removal of signage, use of specialist firms, PPE, correct signs and correct signage.

Methods of Assessment

This unit will be internally assessed, internally and externally moderated via a learner's portfolio and other related evidence, against the unit outcomes and assessment criteria.

Minimum requirements when assessing this unit
ABC expects that staff will be appropriately qualified to assess learners against the outcomes and criteria within the units. Generally teaching staff should be qualified and/or vocationally experienced to at least a level above that which they are teaching.

Evidence of Achievement

Evidence presented to support achievement is not prescribed for each learning outcome. It could typically include:

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Additional Information

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Additional guidance for delivering and assessing ABC Awards qualifications and information about Internal Quality Assurance is available on the ABC Awards web site.

Appendices

Recognition of Prior Learning (RPL), Exemption and Credit Transfer

ABC Awards policy enables learners to avoid duplication of learning and assessment in a number of ways:

- Recognition of Prior Learning (RPL) – a method of assessment that considers whether a learner can demonstrate that they can meet the assessment requirements for a unit through knowledge, understanding or skills they already possess and do not need to develop through a course of learning.
- Exemption - which is deemed to be of equivalent value to a unit within ABC qualification but which does not necessarily share the exact learning outcomes and assessment criteria. It is the assessor's responsibility, in conjunction with the Internal Moderator, to map this previous achievement against the assessment requirements of the ABC qualification to be achieved in order to determine its equivalence.
    - Any queries about the relevance of any certificated evidence, should
    - Be referred in the first instance to your centre's internal moderator
    - And then to ABC.
- It is important to note that there may be restrictions upon a learner's ability to claim exemption or credit transfer which will be dependent upon the currency of the unit/qualification and a learner's existing levels of skill or knowledge.
- Where past certification only provides evidence that could be
    - considered for exemption of part of a unit, learners must be able to offer additional evidence of previous or recent learning to supplement their evidence of achievement.
- Credit Transfer – ABC may attach credit to a qualification, a unit or a component. Credit transfer is the process of using certificated credits achieved in one qualification and transferring that achievement as a valid contribution to the award of another qualification. Units/Components transferred must share the same learning outcomes and assessment criteria along with the same unit number. Assessors must ensure that they review and verify the evidence through sight of:
    - original certificates OR

    - copies of certificates that have been signed and dated by the internal moderator confirming the photocopy is a real copy and make these available for scrutiny by the External Moderator.
- Equivalencies – opportunities to count credits from the unit(s) from other qualifications or from unit(s) submitted by other recognised organisations towards the place of mandatory or optional unit(s) specified in the rule of combination. The unit must have the same credit value or greater than the unit(s) in question and be at the same level or higher.

For this qualification achievement of equivalent units is identified in the table below.

Unit title	**Equivalent unit URN**
The interaction of soil environments and woody plants	T/602/3921
Woody plant physiology	A/602/3922
The supply, planting and aftercare of woody plants	A/602/3936
Principles of tree surgery operations	L/602/3956
Tree inspections and statute and common law applied to trees	Y/602/3958
The principles of aerial tree surgery and ground based arboricultural operation	R/602/3960
Basic principles of woodlands, forestry and ecology	H/602/3963
The principles of managing special trees	T/602/3966
Principles of tree surgery equipment use and maintenance	A/602/3967

ABC encourages its centres to recognise the previous achievements of learners through Recognition of Prior Learning (RPL), Exemption and Credit Transfer. Prior achievements may have resulted from past or present employment, previous study or voluntary activities. Centres should provide advice and guidance to the learner on what is appropriate evidence and present that evidence to the external moderator in the usual way.

Certification

Learners will be certificated for all units and qualifications that are claimed.

ABC's policies and procedures are available on the ABC web site in the Examination Officers' Guide.

Glossary of Terms

GLH (Guided Learning Hours)
GLH is where the learner participates in education or training under the immediate guidance or supervision of a tutor (or other appropriate provider of education or training). It may be helpful to think – 'Would I need to plan for a member of staff to be present to give guidance or supervision?'

GLH is calculated at qualification level and not unit/component level.

Examples of Guided Learning include:

- Face-to-face meeting with a tutor
- Telephone conversation with a tutor
- Instant messaging with a tutor
- Taking part in a live webinar
- Classroom-based instruction
- Supervised work
- Taking part in a supervised or invigilated assessment
- The learner is being observed.

TQT (Total Qualification Time)
'The number of notional hours which represents an estimate of the total amount of time that could reasonably be expected to be required, in order for a learner to achieve and demonstrate the achievement of the level of attainment necessary for the award of a qualification.' The size of a qualification is determined by the TQT.

TQT is made up of the Guided Learning Hours (GLH) plus all other time taken in preparation, study or any other form of participation in education or training but not under the direct supervision of a lecturer, supervisor or tutor.

TQT is calculated at qualification level and not unit/component level.

Examples of unsupervised activities that could contribute to TQT include:

- Researching a topic and writing a report
- Watching an instructional online video at home/e-learning
- Watching a recorded webinar
- Compiling a portfolio in preparation for assessment
- Completing an unsupervised practical activity or work
- Rehearsing a presentation away from the classroom
- Practising skills unsupervised
- Requesting guidance via email – will not guarantee an immediate response.