RHS Qualifications

RHS Level 3 Certificate in the Principles of Garden Planning, Construction and Planting

Qualification Specification September 2015

Important Notice

This syllabus has been revised for September 2015. Learning outcomes and assessment criteria have changed. Tutors and learners must use this version of the syllabus to prepare for examinations in February and June 2016.
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1. **RHS Qualifications Contact Details**

RHS Qualifications is the Awarding Organisation of the Royal Horticultural Society.

RHS Qualifications  
RHS Garden Wisley  
Woking  
Surrey  
GU23 6QB  
UK

Tel: 01483 226500  
Email: qualifications@rhs.org.uk  
Approved Centre Web Portal: www.rhsq.org.uk

2. **Equality and Diversity Policy Statement**

RHS Qualifications is committed to policies that will promote equal opportunities in all its operations, regardless of age, disability, ethnic origin, gender, marital status, religion, sexual orientation or any other factor.

RHS Qualifications is committed to ensuring that there is no unfair discrimination in any of its operations and will take into account all current legislation in relation to the equality of opportunity.

RHS Qualifications will constantly monitor and review its policies and practices pertaining to equal opportunities, to ensure that they remain consistent with its equal opportunities objectives and continue to comply with all relevant legislation.

RHS Qualifications will strive to make awareness of and respect for equality and diversity, an integral part of the culture of the organisation.

A copy of the RHS Qualifications Equality and Diversity Policy is available on the Approved Centre Web Portal.
3. **RHS Level 3 Certificate in the Principles of Garden Planning, Construction and Planting**

3.1 **Introduction**

This qualification provides a route to employment in professional horticulture by assessing knowledge of the scientific principles underpinning horticultural practices, and supports career development for those already working in the profession. It also provides a foundation for further learning or training in the field of horticulture.

Whilst there are no formal pre-requisites for entry to the qualification, it is strongly recommended that students who undertake this qualification have obtained the RHS Level 2 Certificate in the Principles of Garden Planning, Establishment and Maintenance or equivalent before they commence on the course.

The qualification is accredited within the Qualifications and Credit Framework.

Accreditation Number: 601/7188/1

3.2 **Credit Value**

The qualification has a credit value of 15.

This equates to 150 learning hours. Learning time is defined as the time taken by learners at the level of the qualification, on average, to complete the learning outcomes of the units to the standard determined by the assessment criteria.

Guided Learning Hours (GLH) are the number of hours of face-to-face tutor contact recommended to complete the qualification. Guided Learning Hours are always less than the total learning hours, as learners are expected to complete a certain amount of study in their own time. The Guided Learning Hours for the qualification are 98 hours.

3.3 **Teaching Pattern**

The qualification is designed to be studied on a part-time basis. No particular teaching pattern is specified, and centres offering courses leading to the qualification are free to define their own teaching structure and teaching hours.
3.4 Qualification Structure

The qualification will be awarded to those who gain the credits for the following four mandatory units:

<table>
<thead>
<tr>
<th>RHS Ref</th>
<th>Unit</th>
<th>Credits</th>
<th>Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>R3111</td>
<td>Understanding garden survey techniques and design principles</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Unit reference number M/507/5862</td>
<td></td>
<td></td>
</tr>
<tr>
<td>R3112</td>
<td>Understanding the selection and use of landscaping elements in the garden</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Unit reference number A/507/5864</td>
<td></td>
<td></td>
</tr>
<tr>
<td>R3113</td>
<td>Understanding the setting out and construction of landscaping elements in the garden</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Unit reference number F/507/5865</td>
<td></td>
<td></td>
</tr>
<tr>
<td>R3114</td>
<td>Understanding a range of specialist elements in the establishment of garden and urban plantings</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Unit reference number J/507/5866</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

3.5 Assessment

Each unit will be assessed by a separate written examination covering all learning outcomes specified in the unit.

Examinations must be taken in a centre approved by RHS Qualifications, or under arrangements for exceptional supervision agreed by RHS Qualifications.

Examinations must be conducted in accordance with the RHS Regulations for the Conduct of Examinations.

Examinations will be offered twice a year in February and June.

Past examination papers including the examiner’s comments are published for the past six examination sessions. These are available for download under the appropriate qualification section of the RHS website.

3.6 Language

Examinations will be offered in English.

3.7 Learning Resources

There is a wide range of books and other learning resources published which support the studies of those learning horticulture. RHS Qualifications does not recommend or endorse any specific learning resources as meeting the needs of learners studying for RHS qualifications. Learners are encouraged to seek guidance from their tutors on which resources best support their studies, or to choose the most appropriate resources for their needs from the wealth of material available.
3.8 Grading

Credits for a unit will be awarded to a candidate who achieves a mark of 50% or more in the written examination for that unit.

Where a candidate achieves a mark of 70% or more in the examination for the unit, the credits for the unit will be awarded with commendation.

<table>
<thead>
<tr>
<th>RHS Ref</th>
<th>Unit</th>
<th>Mark</th>
<th>Pass with Commendation</th>
<th>Pass</th>
</tr>
</thead>
<tbody>
<tr>
<td>R3111</td>
<td>Understanding garden survey techniques and design principles</td>
<td>80</td>
<td>56</td>
<td>40</td>
</tr>
<tr>
<td>R3112</td>
<td>Understanding the selection and use of landscaping elements in the garden</td>
<td>80</td>
<td>56</td>
<td>40</td>
</tr>
<tr>
<td>R3113</td>
<td>Understanding the setting out and construction of landscaping elements in the garden</td>
<td>80</td>
<td>56</td>
<td>40</td>
</tr>
<tr>
<td>R3114</td>
<td>Understanding a range of specialist elements in the establishment of garden and urban plantings</td>
<td>60</td>
<td>42</td>
<td>30</td>
</tr>
</tbody>
</table>

Where a candidate receives credits with commendation in all four mandatory units, the qualification will be awarded with commendation.

4. Approved Centres

Centres wishing to offer examinations leading to RHS qualifications must be approved by RHS Qualifications.

Applications for approval should be sent to the Quality Assurance and Relationships Officer at the contact details in section 1.

5. Candidate Registration

Candidates should be registered for examinations in the units of the qualification through the RHS Qualifications Web Portal.

Approved Centres undertake to obtain on behalf of their learners a Unique Learner Number (ULN) and a learner record, unless the learner chooses not to have one.

If centres supply an email address for candidates at the time of registration, candidates will be invited to open an account on the RHS Qualifications Web Portal, and will be able to view their examination history, their current registrations, and their results when available.
6. **Reasonable Adjustments and Special Consideration**

RHS Qualifications is committed to ensuring fair assessment for all candidates, and will facilitate access to its qualifications through reasonable adjustments to assessment arrangements for candidates with an identified specific need. An example of a reasonable adjustment which could be made is the production of a modified examination paper for a candidate with a visual impairment.

Special consideration is given following the examination to candidates who are present for the examination but may have been disadvantaged by temporary illness, injury or adverse circumstances which arose at, or near, the time of examination.

Full guidance is provided in the document ‘Guidance to Centres for Reasonable Adjustments and Special Consideration’. The document is available on the RHS website (www.rhs.org.uk), the RHS Qualifications Approved Centre Web Portal, or can be obtained from RHS Qualifications.

Applications for reasonable adjustments or special consideration must be made by the Approved Centre on behalf of the candidate. Application must be made within specified timescales.

7. **Enquiry about Results service**

The following service is available to candidates who have a query regarding their examination result:

**Re-mark and Feedback**

Re-marking of the examination paper by an independent examiner. Feedback will be provided identifying areas of strength and weakness with constructive suggestions for improvement.

Candidates requesting a re-mark need to be aware that grades may go down as a result of the re-marking.

Applications for the ‘Enquiry about Results Service’ must be made through the Approved Centre where the candidate registered for the examination. This service will be available for 28 days from the date of release of the results to Approved Centres on the RHS webportal.

8. **Examination Dates**

For a full list of examination dates please see the Qualifications and Credit Framework Examination Dates, this document is available on the Qualifications page on the RHS website and on the RHS Webportal.
9. Fees

For a full list of fees please see the Qualifications and Credit Framework Fees Notice, this document is available on the Qualifications page on the RHS website and on the RHS Webportal.

All fees are payable prior to confirmation of service or entry for the examination.

Late Entries

RHS Qualifications publishes annually, and distributes to Approved Centres, the closing dates of entry for each examination for the following year.

Entries submitted after the published closing date will be subject to a late entry fee. The total fee charged for late entries is twice the standard examination fee for each unit

Replacement Certificate (if lost, damaged or destroyed)

The fee for a replacement certificate can be found on the Qualifications and Credit Framework Fees Notice. Please send your request to the Qualifications Department.

Re-mark & Feedback

The fee for a remark and feedback can be found on the Qualifications and Credit Framework Fees Notice.

If a re-mark results in an upgrade of the result, the fee paid will be refunded.

10 Unit Equivalents

Below is a table listing unit equivalences that have been granted for this qualification. Candidates who have been awarded a unit credit certificate for the previous unit number will not receive a unit certificate for the equivalent unit number.

<table>
<thead>
<tr>
<th>Current Equivalent Unit Number</th>
<th>Previous Unit Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>M/507/5862</td>
<td>T/601/3633</td>
</tr>
<tr>
<td>A/507/5864</td>
<td>A/601/3794</td>
</tr>
<tr>
<td>F/507/5865</td>
<td>D/601/3836</td>
</tr>
<tr>
<td>J/507/5866</td>
<td>T/601/3857</td>
</tr>
</tbody>
</table>

11. Appeals Procedure

An Appeals procedure exists to conduct appeals lodged by candidates against decisions made by RHS Qualifications, concerning their examination performance, the granting of an award and/or the closure of their entry to an award on academic grounds.

The procedure is also followed in cases where there is irregularity or malpractice in the conduct of examinations and where RHS Qualifications has imposed a penalty on a candidate, tutor or invigilator, and the Centre wishes to appeal against this decision after results are published.
12. **Policy on Malpractice**

Malpractice consists of those acts which undermine the integrity and validity of the assessment or examination, the certification of qualifications and/or damage the authority of those responsible for conducting the assessment, examination and certification.

RHS Qualifications does not tolerate actions or attempted actions of malpractice by learners or centres in connection with RHS qualifications. RHS Qualifications may impose penalties and/or sanctions on candidates or centres where incidents, or attempted incidents, of malpractice have been proven.

A copy of the full policy is available on the RHS Qualifications Web Portal and on the RHS website.
Understanding garden survey techniques and design principles

RHS reference number: R3111
Unit reference number: M/507/5862
Unit equivalent to T/601/3633
Unit guided learning hours: 26
Unit Level: Level 3
Credit Value: 4

Unit purpose and aim(s): This unit will provide an understanding of garden styles, site appraisal and survey techniques, and the principles that underpin garden design.

<table>
<thead>
<tr>
<th>Learning Outcomes</th>
<th>Assessment Criteria</th>
<th>Indicative content</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1. Understand how to develop a client brief.</strong></td>
<td>1.1 Identify the information required from the client.</td>
<td>To include: likes and dislikes, aspirations, user profile (age, gender, disabilities, numbers, animals), intended usage (e.g. seating areas, children’s play area, sport/recreation, sunbathing, entertaining, growing fruit and vegetables), utility areas (e.g. waste bins, compost, shed, clothes drying, parking facilities). Maintenance arrangements, time scale, budget.</td>
</tr>
<tr>
<td></td>
<td>1.2 Describe how information is gathered to develop the client brief.</td>
<td>Questionnaire, photographic (e.g. magazines, brochures, mood boards), digital technology.</td>
</tr>
<tr>
<td><strong>2. Understand how to conduct a site appraisal.</strong></td>
<td>2.1 State what existing features and characteristics need to be recorded.</td>
<td>Features to include: Access, buildings, hard landscaping, (e.g. paving, steps, walls, fences, pergolas, utility areas), trees and vegetation, services (underground and overhead). Characteristics to include altitude, orientation, aspect, changes in level (topography), pollution, soil type, soil depth, soil pH, soil water content, drainage, views (from off-site, from house, within site, borrowed landscape), screening, exposure, shade, microclimate.</td>
</tr>
<tr>
<td></td>
<td>2.2 State what methods are used to collect and record site information.</td>
<td>Check list, questionnaire, photographic, digital technology, public records.</td>
</tr>
<tr>
<td>2.3 Explain the influence of features and characteristics on choice of design.</td>
<td>Access from road, access around site. Architecture of house and style of existing hard landscaping, (e.g. form, materials, colours, textures). Trees and vegetation: Tree Preservation Orders (TPOs), Conservation area, roots. Service benefits (water and electricity supply) and limitations (e.g. manhole covers, telegraph pole). Influence of site characteristics from 2.1 on plant choice and positioning of proposed features (e.g. seating areas, summer houses, steps, terracing, water features, statues, glass houses, vegetable and fruit plots, utility areas). Explain how the design process may be used to enhance the attributes and offset the limitations imposed by the site.</td>
<td></td>
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</tr>
<tr>
<td>3. Understand a range of basic surveying techniques.</td>
<td>3.1 Describe the linear surveying of a site using appropriate equipment. Definitions: base lines, triangulation, offsets, tie lines, running measurements. Methods used including conventional recording. Equipment to include: tape measures, pegs, ranging poles, field book, compass.</td>
<td></td>
</tr>
<tr>
<td>3.2 Describe the level surveying of a site using appropriate equipment.</td>
<td>Definitions: datum level/benchmark, back sight, intermediate sight, foresight, reduced level, change point, line of collimation. Methods used including conventional recording by the rise and fall method. Equipment to include: optical (Quickset/automatic) level and tripod, staff, booking sheets.</td>
<td></td>
</tr>
<tr>
<td>3.3 Interpret survey measurements from standard documentation.</td>
<td>Standard data produced from the surveys carried out from 3.1 and 3.2.</td>
<td></td>
</tr>
<tr>
<td>3.4 Describe scale drawings produced from survey data.</td>
<td>To include: site plans, sections and elevations, contour plans, the use of graphic symbols, scale and technical terminology.</td>
<td></td>
</tr>
<tr>
<td>4. Understand the principles of garden design.</td>
<td>4.1 Explain the principles of garden design.</td>
<td>To include: unity, symmetry and asymmetry, form and space, balance, focal point, scale and proportion, movement and rhythm, texture, colour, harmony.</td>
</tr>
<tr>
<td>-----------------------------------------------</td>
<td>-------------------------------------------------</td>
<td>------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td></td>
<td>4.2 Describe examples of the application of the principles in 4.1 to the design process.</td>
<td>Using examples of both hard and soft landscaping to illustrate the principles in the indicative content of 4.1.</td>
</tr>
<tr>
<td>5. Understand the historical development of garden design styles.</td>
<td>5.1 Describe representative characteristics of the following historical garden design styles.</td>
<td>To include: Medieval, Moorish, Renaissance (Italian, French and Dutch), English Landscape, Victorian, Modernist, Japanese.</td>
</tr>
<tr>
<td></td>
<td>5.2 Review the factors that influence the design of domestic gardens in the UK today</td>
<td>To include: historical style, foreign travel, TV/Media, horticultural shows/show gardens, environmental awareness, modern technology, materials and equipment available, outdoor living space.</td>
</tr>
</tbody>
</table>
Understanding the selection and use of landscaping elements in the garden

RHS reference number: R3112  
Unit reference number: A/507/5864  
Unit equivalent to A/601/3794  
Unit guided learning hours: 26  
Unit Level: Level 3  
Credit Value: 4

Unit purpose and aim(s): This unit provides an understanding of the contribution of hard and soft landscape features to the design and function of ornamental gardens open to the public and domestic gardens.

<table>
<thead>
<tr>
<th>Learning Outcomes</th>
<th>Assessment Criteria</th>
<th>Indicative content</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Understand the contribution made by hard landscaping features to garden design.</td>
<td>1.1 Identify how hard landscaping features may contribute to garden design.</td>
<td>This relates to both ornamental gardens open to the public and domestic gardens. Features to include: paths, seating areas, driveways, walls, fences, pergolas, ramps and steps, children's play areas, rock gardens, water features, containers.</td>
</tr>
<tr>
<td></td>
<td>1.2 Describe a range of materials suitable for these hard landscape features to meet aesthetic, functional and sustainable design requirements.</td>
<td>Materials to include: brick, stone, gravels, concrete, wood, bark, rubber, plastics, glass, fibre glass, metals, tarmac. Description of significant characteristics to include:</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Aesthetic requirements: colour, contrast, unity, harmony, texture;</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Functional: soft/hard, non-slip, hard wearing, life- span, maintenance requirements, safe (e.g. free of splinters, safety glass);</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Consider factors such as environmental sustainability, Forest Stewardship Council (FSC), locally sourced, recycled, carbon footprint, reclaimed, permeability.</td>
</tr>
</tbody>
</table>
1.3 Evaluate the suitability of hard landscaping materials and features to ensure accessibility for all garden users.

To include: those with visual impairment and limited mobility.

Selection of appropriate features and materials e.g. ramps, steps, handrails, textures, lighting, widths of paths and entrances, signage (e.g. wheelchair accessible, braille).

Awareness of Disability Discrimination Act (DDA) and accessibility legislation for public gardens.

1.4 Review how considerations of safety may influence the choice of features and materials in the garden.

Risk analysis (identification of hazard, garden user, risk level, consequences) of proposed features and materials.

**HAZARDS OF CONSTRUCTION NOT TO BE INCLUDED**

### 2. Understand the contribution made by soft landscaping features to the design of a garden.

2.1 Describe soft landscaping features that contribute to garden design.

This relates to both ornamental gardens open to the public and domestic gardens.

Features to include: hedges, beds for seasonal planting, herbaceous borders, shrub borders, trees, containers and lawns.

Describe the characteristics of FIVE NAMED plants to meet design requirements for EACH of the above features (excluding lawns).

2.2 Select plants suitable for a range of soft landscaping situations.

Describe FIVE NAMED plants suitable for EACH of the following: ground cover, sensory impact, north facing walls, south facing walls, dry shade, shallow chalk, heavy clay, free draining sand, acid soils (below pH 5.5), coastal areas.

Describe FIVE NAMED plants from different genera which will together provide continuity of interest through the year.

Significant characteristics of plants to include: height, spread, form, decorative merits and season of interest.
| 2.3 Select plants suitable for rock and water features. | Describe **FIVE NAMED** plants suitable for **EACH** of the following:
- permanently wet areas e.g. bog garden and marginal;
- ponds: to include deep water aquatics, oxygenators, floaters;
- scree/gravel gardens and rock gardens.
Significant characteristics of plants to include: height, spread, form, decorative merits and season of interest. |
|---|---|
| 2.4 Describe the design possibilities of grassed areas. | Design possibilities to include:
- Aesthetic requirements: colour, contrast, texture, space (void), mowing effects and heights, turf mazes, parterres;
- Functional: recreation and relaxation, access, viewing area;
- Sustainability: permeability, biodiversity.
Maintenance considerations for all of the above. |
| 2.5 Describe the use of planting plans. | State what is meant by a planting plan and the information that it conveys: plant names, positioning, spacing, list of plants (to include quantities, supply size and specification).
The use to include: informing the client and instructing the landscaper/gardener for costing and setting out purposes. |
Understanding the setting out and construction of landscaping elements in the garden

RHS reference number: R3113  
Unit reference number: F/507/5865  
Unit equivalent to D/601/3836  
Unit guided learning hours: 26  
Unit level: Level 3  
Credit Value: 4

Unit purpose and aim(s). This unit provides an understanding of the principles of setting out a site and constructing hard-landscape features in gardens.

<table>
<thead>
<tr>
<th>Learning Outcomes</th>
<th>Assessment Criteria</th>
<th>Indicative content</th>
</tr>
</thead>
</table>
| 1. Understand the planning involved in the realisation of a garden design. | 1.1 Explain the need to plan landscape works | Describe and state the significance of EACH of the following:  
- site assessment;  
- risk assessments (for all operations and materials in this unit);  
- specialist services;  
- setting out;  
- ground work;  
- construction (surfaces, vertical structures, rock and water).  
Site assessment to include: e.g. access for construction, services, storage areas, site security, toilet facilities, waste disposal.  
Specialist services which may need to be involved e.g. structural engineers, electricians, machine operators,  
(Their specialist knowledge does not form part of this unit).  
State the importance of planning an appropriate sequence for all tasks.  
Explain what is meant by a specification for landscape works. |
| 2. Understand the practical procedures for setting out a site. | 2.1 Describe how to set out the major features of a design on the ground. | Describe the information that is provided by scale plans to include: hard and soft landscape design plans, technical setting-out plans (planting and construction).

Methods and equipment for transferring features from scale plans to the ground, to include: points, straight lines, squares, rectangles, circles, irregular curved shapes.

Methods
- base line;
- triangulation;
- off-sets;
- right angles.

Equipment (role and limitations)
- measuring tapes;
- pins;
- pegs;
- string lines;
- spray paint;
- sand lines.

**NOT REQUIRED, BUT HAVE AN AWARENESS OF:**
- digital measuring methods;
- global positioning systems (GPS).

2.2 Describe how to set out the required levels on site. | Describe the information that is provided by scale drawings to include: sections and elevations, contour plans, technical setting-out plans (spot levels).

Methods and equipment for establishing a site datum (ordnance benchmark, temporary benchmark) and transferring levels (including falls),

To include the role and limitations of:
- measuring tapes;
- pegs;
- string lines;
- boning rods;
- spirit levels/straight edges;
- optical (Quickset/automatic) level;
- laser level;
- site rails/profile boards. |
### NOT REQUIRED BUT HAVE AN AWARENESS OF:
- total stations, theodolites;
- digital measuring methods;
- global positioning systems (GPS).

### 3. Understand the reasons for correct groundwork procedures.

<table>
<thead>
<tr>
<th>NOT REQUIRED BUT HAVE AN AWARENESS OF:</th>
</tr>
</thead>
<tbody>
<tr>
<td>- total stations, theodolites;</td>
</tr>
<tr>
<td>- digital measuring methods;</td>
</tr>
<tr>
<td>- global positioning systems (GPS).</td>
</tr>
</tbody>
</table>

#### 3.1 Describe the correct handling, storage and reinstatement of soil during site construction.

For the preparation of hard and soft landscape areas using mechanised and manual methods for **EACH** of the following situations:

- to achieve levels where re-grading is to take place;
- where hard landscaping is to take place;
- machinery movement and storage areas.

Describe the following procedures:

- vegetation removal (including methods);
- stripping of top soil;
- transportation;
- storage (including the separation of topsoil and subsoil, storage heaps/mound/ bunds/stockpiles, size, angle of repose, location, weed control, covering, short term cropping, fencing, signage);
- subsoiling;
- reinstatement (levels and depths).

State where **EACH** of the above is appropriate and explain how soil quality is maintained.

Describe how biosecurity measures are used to prevent the distribution of weeds, pests and diseases.
| 3.2 Select the type of drainage system required in various situations. | Situations to include subsoil and surface water disposal. Types of drainage system to include:
- open ditches;
- french drains;
- pipe systems.

Describe the construction for EACH of the above drainage systems to include where appropriate: patterns, depths, falls, types of pipes.

soakaways, gulleys/channels, traps, inspection chambers, aggregates, membranes.

Significance of Regulations (e.g. local byelaws, planning law relating to Sustainable Urban Drainage Systems (SUDS), Environment Agency and building regulations) affecting disposal of water from gardens.

Identify water storage and recycling opportunities arising from the drainage systems above. |
|---|---|
| 3.3 Describe the foundations for hard landscaping | State the purposes of foundations.

Preparing the site prior to the installation of foundations to include where, appropriate:

- subgrade;
- formation level;
- membranes;
- consolidation;
- dimensions.

Describe appropriate foundations for:

- an in-situ concrete path;
- an aggregate/gravel driveway;
- a concrete slab patio;
- a permeable car parking area;
- a low, brick freestanding garden wall;
- a concrete block retaining garden wall;
- a panel fence;
- a pergola. |
| 4. Know materials and construction procedures for garden surfaces. | 4.1 Describe a range of appropriate materials for garden surfaces. | To include: paths, seating areas, driveways (for parking and light use), steps and ramps.  
To include: concrete (in-situ, units), gravels (chippings/shingle, self-binding), clay pavers/bricks, natural stone, timber decking.  
Edging as appropriate to include: wood, brick, pre-cast concrete, natural stone.  
Specifications to include as appropriate: colour, dimensions, surface finish, durability, maintenance requirements.  
Sustainability issues (e.g. reuse, recycling, reclamation, carbon footprint).  
Define the terms ‘flexible’ (e.g. block paving, gravels), ‘rigid’ (e.g. in-situ concrete).  
Define the term ‘permeable’ in relation to hard surfaces (e.g. specialised blocks, grasscrete and gravels). Significance of planning law relating to Sustainable Urban Drainage Systems (SUDS). |
|---|---|---|
| 4.2 Describe the procedures for laying the surface materials mentioned in 4.1. | Describe the construction of:  
- an in-situ concrete path;  
- a block paved driveway;  
- an aggregate/gravel driveway;  
- a concrete slab patio;  
- a permeable car parking area;  
- a short flight of steps;  
- a ramp.  
To include edging for the above as appropriate. |
5. Know materials and construction procedures for garden walls, fences and pergolas.

<table>
<thead>
<tr>
<th>Section</th>
<th>Description</th>
<th>Materials and Components</th>
<th>Specifications</th>
<th>Sustainability Issues</th>
</tr>
</thead>
<tbody>
<tr>
<td>5.1</td>
<td>Describe materials suitable for the construction of garden walls.</td>
<td>To include: free standing and retaining walls.</td>
<td>Materials and components to include: bricks, concrete blocks (reconstituted stone and dense aggregate), natural stone, wood, gabions, damp proof courses, mortar mixes, pointing, coping, drainage.</td>
<td>Specifications to include as appropriate: colour, dimensions, surface finish, durability and maintenance requirements. Sustainability issues (e.g. reuse, recycling, reclamation, carbon footprint).</td>
</tr>
<tr>
<td>5.2</td>
<td>Describe materials suitable for garden fences.</td>
<td>To include: panel (including trellis), close boarded and picket, strained wire.</td>
<td>Materials and components to include: timber, metal and concrete posts, gravel boards, rails, panels, pales, post caps, fixings, strainers.</td>
<td>Specifications to include as appropriate: colour, dimensions, durability (to include timber types and pre-treatment), maintenance requirements. Sustainability issues e.g. carbon footprint (including end of life), Forestry Stewardship Council (FSC).</td>
</tr>
<tr>
<td>5.3</td>
<td>Describe the materials suitable for pergolas and arches.</td>
<td>Components to include: timber, metal and brick/stone uprights; timber, rope, metal beams; fixings.</td>
<td>Specifications to include as appropriate: colour, dimensions, durability (to include timber types and pre-treatment), maintenance requirements.</td>
<td>Sustainability issues e.g. carbon footprint (including end of life), Forestry Stewardship Council (FSC).</td>
</tr>
<tr>
<td>5.4 Describe the construction of walls, fences and pergolas.</td>
<td>To include: the procedures for construction of:</td>
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<td>----------------------------------------------------------</td>
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<tr>
<td>- a low brick freestanding garden wall;</td>
<td>- a low brick freestanding garden wall;</td>
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</tr>
<tr>
<td>- a concrete block retaining garden wall;</td>
<td>- a concrete block retaining garden wall;</td>
<td></td>
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<tr>
<td>- timber sleeper raised bed;</td>
<td>- timber sleeper raised bed;</td>
<td></td>
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<tr>
<td>- a panel fence;</td>
<td>- a panel fence;</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>- a strained wire fence;</td>
<td>- a strained wire fence;</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>- a close boarded fence;</td>
<td>- a close boarded fence;</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- a pergola.</td>
<td>- a pergola.</td>
<td></td>
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<td></td>
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</tbody>
</table>

Details to include:
- overall dimensions of features;
- sequence of construction;
- tools and equipment (manual/mechanised).
Understanding a range of specialist elements in the establishment of garden and urban plantings

RHS reference number: R3114
Unit reference number: J/507/5866
Unit equivalent to T/601/3857
Unit guided learning hours: 20
Unit level: Level 3
Credit Value: 3

Unit purpose and aim(s). This unit provides an understanding of the opportunities that exist for the use of specialist elements in the planting of a variety of gardens, including urban and amenity green spaces.

<table>
<thead>
<tr>
<th>Learning Outcomes</th>
<th>Assessment Criteria</th>
<th>Indicative content</th>
</tr>
</thead>
</table>
| **1. Understand the practices of establishing and maintaining planting in a range of specialist areas.** | 1.1 Describe the characteristics of a range of specialist areas. | Garden and urban situations to include the following:  
- woodland;  
- prairie;  
- wildlife;  
- wildflower meadows;  
- sensory;  
- potager;  
- courtyards;  
- container gardens;  
- roof gardens;  
- living walls;  
- green roofs;  
- street plantings;  
- community gardens;  
- amenity bedding (to include: traditional, carpet, three-dimensional and sub-tropical). |
| **1.2 Identify establishment and management issues associated with specialist areas.** | 1.2 Identify establishment and management issues associated with specialist areas. | For the situations listed in 1.1  
To include (where appropriate):  
- site selection;  
- site preparation;  
- hazards;  
- vandalism;  
- security;  
- micro climates;  
- shade;  
- temperature;  
- irrigation; |
<table>
<thead>
<tr>
<th>1.3 Prepare a seasonal schedule for amenity bedding schemes.</th>
<th>To include: establishment and maintenance of traditional spring OR summer bedding from ground preparation to removal of display.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.4 Understand how water conservation can be applied in soft landscaping.</td>
<td>Water conservation issues related to situations listed in 1.1. Describe how hard surfaces can be adapted to reduce run-off through the use of plants. Considerations to include:  - recycling of rainwater and grey water;  - use of mulches (organic and inorganic);  - choice of plants;  - use of rain gardens.</td>
</tr>
</tbody>
</table>

### 2. Understand pruning in the establishment and maintenance of specialist plantings.

<table>
<thead>
<tr>
<th>2.1 Describe the use of specialist pruning techniques.</th>
<th>To include fruit, ornamental trees and shrubs. To include the following forms of apple - espalier, cordon, stepover, and fan-trained peach.  - pollarding (e.g. <em>Salix</em>);  - pleaching, (e.g. <em>Tilia cordata</em>, <em>Carpinus betulus</em>);  - topiary (e.g. <em>Buxus, sempervirens</em>, <em>Taxus baccata</em>);  - cloud pruning (hedge and tree forms).</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.2 Describe establishment and maintenance pruning.</td>
<td>To include formative and maintenance pruning, (where appropriate) for the techniques listed in 2.1.  - tools and equipment;  - timing (formative year 1, year 2, year 3);  - timing (time of year);  - position of cut;  - tying in. Reasons to be given for EACH of the above.</td>
</tr>
</tbody>
</table>