



Royal
Botanic Garden
Edinburgh

RBGE Certificate in Practical Horticulture (CPH) Applicants' Handbook 2012-13



eden project



Contents

1. Course Overview	3
2. Course Structure and Dates	4
2.1 Course at Royal Botanic Garden Edinburgh	4
2.2 Course at Benmore Botanic Garden	5
3. Common Themes	5
4. Assessment Methods	6
4.1 Course Notes	6
4.2 Practical Exam	6
4.3 Certification & Grading	6
5. Course Fees and ILAs	7
6. Application Procedure	7
7. Equipment Required	7
8. Accessibility	8
9. Attendance and procedure if you miss a class	8
10. Unit Descriptors	8
CPH01 Looking at Plants	9
CPH02 Feeding & Watering	10
CPH03 Soil Care	11
CPH04 Seed Propagation	12
CPH05 Vegetative Propagation	13
CPH06 Growing Media & Potting	14
CPH07 Planting	15
CPH08 Pruning & Training	16
Application Form	17

1. Course Overview

The RBGE Certificate in Practical Horticulture (CPH) is for anyone who wants to gain the fundamental practical key skills of a horticulturist. While there is some theory provided to aid your understanding (in the form of short, highly visual presentations), the course is designed to be delivered and assessed using a predominantly practical approach. Therefore for the majority of your time in the classes you will be “doing stuff” and will be getting “dirty hands!”

There are many courses that teach horticultural theory, but this formal 10-day course (eight full-day taught units plus revision and assessment days), structured within a standard framework, focuses on the practical skills, taught by experienced and enthusiastic horticulturists.

The CPH is a formal qualification and students must therefore pass an assessment to achieve the award. A practical exam at the end of the program forms the bulk of the assessment marks, but students are also required to keep notes as a record of their classes. These notes, which are mainly designed to assist with exam revision, can be in the form of a notebook, or completed work sheets*. Students are also expected to practice their practical skills in their own time in addition to the formal classes, in order to prepare for the practical exam.

The CPH is endorsed by Botanic Gardens Conservation International (BGCI - who are the global organisation for botanic gardens) and is supported by the UK Stanley Smith Horticultural Trust, which is funding the development of delivery and support materials to facilitate the course being taught in a range of locations.

As well as in Edinburgh, the CPH is also delivered by partner centres supported and validated by RBGE. These include the Eden Project in Cornwall and the Nezahat Gökyiğit Botanic Garden in Istanbul, Turkey and St Andrews Botanic Garden in Fife, UK. RBGE staff are also delivering the CPH in countries as diverse as Oman and Laos, as part of their global capacity building and conservation programmes.

(* depending on the preference of the centre where the course is being offered)



2. Course Structure and Dates

The CPH programme is delivered at RBGE over 10 days. The individual units take place on Saturday or Sunday from 9.30am - 4.30pm within RBGE. Students who attend all eight units and complete the assessment are awarded the RBGE Certificate in Practical Horticulture. Please note you will not be able to swap between the two courses.

Unit Number	Unit Title	Saturday Sessions	Sunday Sessions
CPH-01	Looking at Plants	1 September 2012	2 September 2012
CPH-02	Feeding and Watering	22 September 2012	23 September 2012
CPH-03	Soil Care	13 October 2012	14 October 2012
CPH-07	Planting	3 November 2012	4 November 2012
CPH-08	Pruning & Training	16 February 2013	17 February 2013
CPH-04	Seed Propagation	9 March 2013	10 March 2013
CPH-06	Growing Media & Potting	6 April 2013	7 April 2013
CPH-05	Vegetative Propagation	27 April 2013	28 April 2013
	Revision Day	18 May 2013	19 May 2013
	Exam	8 June 2013	9 June 2013

(Please note the classes are not taught in numeric order as the units are matched to the growing season.)

3. Common Themes

The following themes will be considered throughout all the units.

- Health and safety
- Environmental and sustainability
- Tools and equipment, maintenance and use
- Plant identification
- Plant pests and diseases
- Sourcing information
- Record keeping

4. Assessment Methods

This is a predominantly practical course, designed to assess a practical level of understanding and competence. Candidates will be assessed in two ways:

4.1 Practical Exam (80% of assessment marks)

Students are required to undertake a full day practical exam at the end of the course, which covers elements of all eight units studied within the programme. The practical exam will include some identification tests but the bulk of the assessment will be tasks requiring the application of the practical horticultural skills developed during the course.

You are expected to show a significant level of competence in the practical test and are therefore recommended to spend some time outside the course practicing all the skills learnt, prior to the final assessment. You must pass the practical exam to be awarded the certificate.

4.2 Course Notes (20% of assessment marks)

After each session you will be given worksheets with questions about the session. The worksheets should be completed and handed in to the course tutor on the day of the practical exam, before the practical exam begins. The worksheets will be marked and returned to you when you get your results.

You are encouraged to take notes during the class as this will help you to complete the worksheets and help you to revise for the practical exam.

4.3 Certification & Grading

Successful candidates will be awarded the 'RBGE Certificate in Practical Horticulture', which will be graded as follows:

- Pass: 60%
- Merit: 75%
- Distinction: 85%

NB: Referred candidates may retake the practical assessment at a later date, though there will be a small re-assessment fee.

5. Course Fees and Individual Learning Accounts (ILAs)

The cost for the course is £450. When you submit your application form, please submit a deposit cheque for £100. Full payment for the course is required on acceptance of a place. This deposit cheque will be returned to any unsuccessful applicants.

Individual Learning Accounts are a Scottish Government scheme for people on low incomes. You can apply for an account of £200 which you can use towards your course fees on this or other eligible courses. Contact ILA Scotland www.ilascotland.org.uk or on 0808 100 1090 for more details.

6. Application Procedure

Candidates will be selected on the basis of the answers given to the questions on the application form at the back of the handbook. Please complete and return the form to us by Friday 27th July 2012.

PLEASE NOTE: you must apply using the application form at the back of this handbook. Applications using the short course booking form at the back of the RBGE course prospectus will not be considered.

7. Equipment Required

This is a practical course so each module will involve indoor and outdoor work. Each week you will need to bring:

Appropriate outdoor clothes (even indoor workstations can be cold).
Steel toe-capped work boots.
Packed lunch (tea and coffee will be provided).
Secateurs.

We can advise you about what to buy and where to buy these items. Please contact the Education Office for more information.

8. Accessibility

Some of the units require a certain amount of physical activity. Please contact us if you have any concerns about this so that we can make any arrangements if necessary. Having spoken to you we may unfortunately suggest the course is not suitable for you.

Courses at RBGE are taught in the RBGE Nursery and the main garden. The RBGE Nursery is on Inverleith Avenue South (off Inverleith Place). Courses at Benmore Botanic Garden will be taught in the Courtyard Gallery and in the garden at Benmore, which in places has rougher paths. There are accessible toilets in all locations.

9. Attendance and procedure if you miss a class

As this is a practical course, all students who wish to sit the practical exam must attend ALL of the classes to be eligible for the exam (though the Review Day is optional but strongly recommended). If you miss a class or are unable to attend you need to tell us as soon as you possible. Unfortunately you will not be able to join the other group on the Saturday or the Sunday. It may possible to arrange for a catch up day, there would be a fee of £100* for this, except under exceptional circumstances and by prior arrangement with RBGE.

If you are unable to attend a class or miss a class, please contact the Education Office in the first instance. Contact details are 0131 248 2937 email: education@rbge.org.uk

*If more than one student is attending the catch up day this fee will be reduced accordingly.

10. Unit Descriptors

Descriptors for all units are on the following pages. Each descriptor states the:

- Learning Aim
- Learning Objectives
- Assessment guidelines

Unit Number: CPH-01
Unit Title: Looking at Plants

Learning Aim:

Gain an overview of plants, how they are named and problems that can arise.

Learning Objectives:

After completing this unit, the students will be able to:

- State the basics of plant lifecycles (i.e. annual, biennial and perennial).
- Use botanical plant names.

Assessment:

- Plant identification: 10 plants from the list of 20 provided to students.
- Correction of incorrectly written botanical plant names (i.e. format not spelling).
- Completed course notebook.

Unit Number: CPH-02
Unit Title: Feeding & Watering

Learning Aim:

Gain an understanding of the principles and practices of feeding & watering plants.

Learning Objectives:

After completing this unit, the students will be able to:

- State fertilizer types and application methods.
- Identify a range of irrigation equipment.
- Calculate fertilizer application rates.
- Apply both liquid and granular fertilizer.
- Assess the irrigation needs of plants using appropriate irrigation terminology.
- Irrigate plants using a watering can and a hosepipe.

Assessment:

- Work out the correct amount of fertiliser to apply to a batch of plants/an area.
- Apply liquid or granular fertilizer to plants either in the ground or in containers.
- Assess the irrigation requirements of a batch of plants, irrigate as appropriate.
- Completed course notebook.

Unit Number: CPH-03
Unit Title: Soil Care

Learning Aim:

Gain an understanding of the principles and practices of looking after the soil.

Learning Objectives:

After completing this unit, the students will be able to:

- Evaluate soil structure & texture.
- Determine soil pH.
- Carry out primary soil cultivation (i.e. digging).
- Apply and/or incorporate organic matter to the soil.
- Carry out secondary cultivation (i.e. forking, hoeing & raking).
- Remove weeds and prevent weed re-growth
- Select the correct tools for cultivating soil.
- Maintenance of tools (including sharpening & cleaning).

Assessment:

- Primary and secondary cultivation of an area of soil, including weed removal.
- Completed course notebook.

Unit Number: CPH-04
Unit Title: Seed Propagation

Learning Aim:

Gain an understanding of the principles and practices of seed propagation.

Learning Objectives:

After completing this unit, the students will be able to:

- State the advantages and disadvantages of seed propagation.
- List the key environmental storage factors that affect seed viability.
- Clean seed prior to sowing.
- Prepare an outdoor soil seedbed.
- Flat drill & v-drill sow seeds in the prepared soil bed.
- Correctly fill & prepare containers with seed sowing media.
- Broadcast & space sow seeds in the filled containers.
- Label & water all sown seeds.

Assessment:

- Prepare an outdoor seedbed.
- Sow seeds both by space sowing and broadcast methods in either containers or outdoor seedbed.
- Seeds must be covered, labelled and watered if appropriate.
- Completed course notebook.

Unit Number: CPH-05
Unit Title: Vegetative Propagation

Learning Aim:

Gain an understanding of the principles and practices of vegetative propagation.

Learning Objectives:

After completing this unit, the students will be able to:

- State the advantages and disadvantages of vegetative propagation.
- State the different methods of vegetative propagation.
- Select appropriate vegetative propagation material.
- Collect, prepare & insert a range of cuttings.
- State the factors important in the propagation environment (inc. media).
- Carry out the aftercare of propagated material (inc. labelling and watering).
- Divide herbaceous plants.

Assessment:

- Propagate two different plants. At least one of these must be by cuttings.
- Collect, prepare and insert the vegetative material. Labelling must be carried out correctly.
- Completed course notebook.

Unit Number: CPH-06
Unit Title: Growing Media & Potting

Learning Aim:

Gain an understanding of the principles and practices growing plants in pots and different growing media.

Learning Objectives:

After completing this unit, the students will be able to:

- State the reasons for growing plants in containers.
- Select appropriate pots for a range of different plants.
- Identify the properties of a range of different growing media ingredients.
- Mix a batch of growing media.
- Prick-out seedlings into small pots.
- Pot-on plants into a larger pot size.
- Demonstrate potting correctly in relation to depth of plant, level of growing media, positioning of plant in centre of pot and firmness of media.
- Carry out the immediate aftercare of plants that have been potted e.g. standing down and irrigating.

Assessment:

- Prepare and mix growing media.
- 'Prick-out' and/or 'pot-on' a batch of plants.
- Irrigate the batch of plants using a watering can or hosepipe.
- Completed course notebook.

Unit Number: CPH-07
Unit Title: Planting

Learning Aim:

Gain an understanding of the principles and methods of planting plants in soil.

Learning Objectives:

After completing this unit, the students will be able to:

- State planting techniques for a range of different types and sizes of plants.
- State a range of tree support mechanisms and when to use them.
- State the reasons for using mulches & a range of materials that can be used.
- Prepare & mark out an area for planting
- Plant out the area with small plants following a given plan.
- Demonstrate the planting and support of a standard sized tree
- Water & mulch post-planting.
- Select & maintain tools.

Assessment:

- Plant an individual specimen tree or large shrub, involving the use of a support mechanism, or plant out a number of small plants following a given plan.
- Completed course notebook.

Unit Number: CPH-08
Unit Title: Pruning & Training

Learning Aim:

Gain an understanding of the principles of pruning and training plants

Learning Objectives:

After completing this unit, the students will be able to:

- List the reasons for pruning and training plants.
- Describe alternate methods for pruning and training plants.
- Clean and sharpen bypass secateurs.
- Use secateurs to prune plants correctly.
- Use a hand saw to carry out 3-point pruning to remove thicker branches.
- Select correct tools and materials for pruning and training.
- Tie plants to canes or other support structures.

Assessment:

- Carry out the appropriate training and/or pruning of a given plant(s).
- Completed course notebook.



Application Form

RBGE Certificate in Practical Horticulture (CERT PH)

Please send your completed form to:

Education Administrator (Cert PH)
Royal Botanic Garden Edinburgh
20a Inverleith Row
Edinburgh
EH3 5LR

Candidates will be selected on the basis of the answers given to the questions below. Please complete and return this form to us by Friday 27th July 2012.

1. Personal Details

Title Mr / Mrs / Ms / Miss / Dr / Other _____

Name: _____

Contact Numbers:

Address: _____

Daytime: _____

Evening: _____

Mobile: _____

Email Address

Reasons for applying for this course?

Existing Qualifications & Experience (in brief)

Where did you hear about this course?

Do you have any additional support needs? Please give details.

2. Application Details (please tick any boxes that apply)

First Choice

Saturdays (A)

Sundays (B)

Second Choice

Saturdays (A)

Sundays (B)

3. Payment Details

	Total Amount	ILA Amount	Remainder to pay
Course Fees	£450	n/a	£450
ILA	£450	£200	£250

* I would like to use my Individual Learning Account (ILA) to pay part of my course fees.

Name as it appears on your ILA Account _____

ILA account number _ _ _ _ _

Payment Method:

Please do not send any money with this form, you will be asked for payment when you are offered a place on the course.

For office use only:

Date application received		Reference Number	
Offered place	Yes / No	Date:	Place accepted
			Yes / No
			Date: