

## National Unit Specification: general information

**UNIT** Tree Identification (Intermediate 2)

**NUMBER** D2LG 11

**COURSE** Forestry Practice (Intermediate 2)

### SUMMARY

This unit enables candidates to acquire tree identification skills, underpinned by a knowledge of plant classification and the physical characteristics of trees.

### OUTCOMES

- 1 Describe the component parts of a tree.
- 2 Outline the principles of plant classification.
- 3 Identify forest and woodland trees found in the UK.

### RECOMMENDED ENTRY

Entry for this unit is at the discretion of the centre.

### CREDIT VALUE

1 credit at Intermediate 2.

### CORE SKILLS

Information on the automatic certification of any core skills in this unit is published in *Automatic Certification of Core Skills in National Qualifications* (SQA, 1999).

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## Administrative Information

**Superclass:** SG

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## National Unit Specification: statement of standards

### UNIT Tree Identification (Intermediate 2)

Acceptable performance in this unit will be the satisfactory achievement of the standards set out in this part of the unit specification. All sections of the statement of standards are mandatory and cannot be altered without reference to the Scottish Qualifications Authority.

#### OUTCOME 1

Describe the component parts of a tree.

##### Performance criteria

- a) The floral characteristics of trees are correctly identified and described.
- b) The general characteristics of tree shoots are correctly identified and described.
- c) The stem and wood characteristics of trees are correctly identified.

##### Evidence requirements

Please refer to *Evidence requirements for the unit* at the end of the Statement of Standards.

#### OUTCOME 2

Outline the principles of plant classification.

##### Performance criteria

- a) The general principle of a taxonomic structure is correctly outlined.
- b) The use of taxonomic characters is correctly outlined.
- c) The principles underlying simple plant identification keys are correctly outlined.

##### Evidence requirements

Please refer to *Evidence requirements for the unit* at the end of the Statement of Standards.

## National Unit Specification: statement of standards (cont)

**UNIT**            Tree Identification (Intermediate 2)

### **OUTCOME 3**

Identify forest and woodland trees found in the UK.

#### **Performance criteria**

- a)        The identification of common trees, without the use of a botanical key, is accurate.
- b)        The identification of common trees, using a simple botanical key, is accurate.
- c)        The identification of broadleaves from green cuttings is correct.
- d)        The identification of conifers from green cuttings is correct.
- e)        The identification of trees from standing specimens is correct.

#### **Evidence requirements**

Please refer to *Evidence requirements for the unit* at the end of the Statement of Standards.

### **EVIDENCE REQUIREMENTS FOR THE UNIT**

#### **Outcomes 1 and 2**

Written and/or oral evidence of the candidate's ability to satisfy Performance Criteria (a) to (c).

#### **Outcome 3**

Written and/or oral evidence of the candidate's ability to satisfy Performance Criteria (a) to (e).

## **National Unit Specification: support notes**

### **UNIT**            Tree Identification (Intermediate 2)

This part of the unit specification is offered as guidance. The support notes are not mandatory.

While the exact time allocated to this unit is at the discretion of the centre, the notional design length is 40 hours.

### **GUIDANCE ON THE CONTENT AND CONTEXT FOR THIS UNIT**

#### **Outcome 1**

A general outline of the biological function and processes of the tree component parts and the link to the structure of trees. The general characteristics of tree flowers, buds, shoots, stem and wood structure in terms of name, location and function.

#### **Outcome 2**

The historical development of trees; the place of trees in the plant and animal kingdoms; an outline of plant classification and groups; the distinction between Angiosperms and Gymnosperms; the basis of adaptation and selection of species and individuals. The development of classifications; the use of taxonomic characters; examples of simple identification keys and the basis of their development and operation.

#### **Outcome 3**

Candidates are introduced to and given guidance in the use of simple tree keys; a wide range of tree species are identified, using the more common and important species and developing into less common species. The use of Latin names should be required knowledge in addition to common names. Make use of different specimen types and tree conditions – green cuttings and standing specimens.

### **GUIDANCE ON LEARNING AND TEACHING APPROACHES FOR THIS UNIT**

#### **Outcome 1**

As well as formal lectures, use is made of tree specimens and the opportunity to examine trees and their component parts in the natural environment. Video and microscopic resource materials should be used. This outcome could be integrated into outcomes 2 & 3 to give a clear linkage and relevance to tree identification and plant classification. This outcome could also be linked to any biology or ecology study which is taking place as part of the programme of study.

#### **Outcome 2**

Use is made of formal lectures with hand out materials and study exercises. The principle of classification is introduced through non-biological examples and then transferred into the context of plants. Existing twig and flower specimens; structured study time is made available to develop tree key skills.

## National Unit Specification: support notes (cont)

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### **Outcome 3**

Visits to neighbouring woodlands and arboreta are carried out and use is also made of slides of tree specimens. Candidates are introduced to and given guidance in the use of tree key and encouraged to produce tree collections based on specimens legitimately collected. Use is made of “spotter” formative tests. The candidates are encouraged to link their identification skills to a wider biological and ecological knowledge and understanding.

### **GUIDANCE ON APPROACHES TO ASSESSMENT FOR THIS UNIT**

Centres may use the instruments of assessments which are considered by the assessors to be most appropriate and fully satisfy the outcomes, performance criteria and range statements. Examples of instruments of assessment which could be used are as follows:

Outcome 1 & 2 have an integrated assessment based on an assignment/report. The assignment should include a clear description of tree components, linked to an outline of plant classification and identification methods.

Outcome 3 use of a practical identification test using numbered specimens, a degree of latitude should be built into the arrangement of the specimens to allow the candidate to achieve success without having to identify all correctly e.g. identify 9 conifer cuttings from the 10 present. Some specimens should be designated as having to be identified through the use of a simple key with the steps identified.

### **SPECIAL NEEDS**

This unit specification is intended to ensure that there are no artificial barriers to learning or assessment. Special needs of individual candidates should be taken into account when planning learning experiences, selecting assessment instruments or considering special alternative outcomes for units. For information on these, please refer to the SQA document *Guidance on Special Assessment and Certification Arrangements for Candidates with Special Needs/Candidates whose First Language is not English* (SQA, 1998).