

National Course Assessment

Forestry Practice Intermediate 2 C02V 11

Practical Assignment

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1. Practical Assignment overview

This national project specification provides details of the assessment tasks and the evidence which candidates are expected to produce. It contains a degree of choice in terms of the way the Practical Assignment is taken forward by centres so that it fits available resources and candidates' interests and personal strengths.

The Practical Assignment is not concerned exclusively with practical activity, but is designed to emphasise skills relating to the application of practical skills, and related knowledge and understanding to a situation that involves task management.

Candidates are provided with a brief and are expected to demonstrate attainment relating to:

- ◆ interpreting the brief
- ◆ gathering information to clarify the brief
- ◆ deciding on a product, or activity/event, or performance to develop
- ◆ selecting and managing materials/resources
- ◆ producing the product, or organising the activity/event or delivering the performance
- ◆ evaluating the product or activity/event or performance(through feedback)

Evidence requirements are as follows:

- ◆ a plan of action
- ◆ evidence of a product or an organised activity/event or a performance
- ◆ evidence which documents the processes underpinning the practical hands-on activity
- ◆ evidence showing an evaluation of the Practical Assignment

Copies of Units are available from the SQA Sales, telephone 0141-242 2168; fax 0141-242 2244; e-mail sales@sqa.org.uk

The Scottish Qualifications Authority Helpdesk is available on 0141-242 2214.

Note:

Please note that individual project specifications should be read in conjunction with the relevant *Arrangements for Project-based National Courses*. The *Arrangements* document provides an overview of the Project-based National Courses for the given SQA. The guidance document, *Project-based National Courses: procedural guide for centres*, which gives full details of operational procedures, should also be used.

This specification forms part of Section F of the *Arrangements* document. It can be used until such a time that SQA advises centres that a new or revised version is available and should be used in its place.

2. Recommended entry

We strongly advise that candidates should have completed the Units in the National Course prior to embarking on the Practical Assignment. However, there may well be candidates who, for whatever reason, choose to undertake the Practical Assignment on a stand-alone basis. Any such candidates who have not completed or embarked upon the Units of the National Course *prior* to undertaking the practical assignment should have demonstrated attainment in (and/or attained) the following qualifications:

Study of material of a similar level and subject matter in:

- ◆ earlier National Units

and/or

- ◆ National Units from GSVQ (eg Land-based Industries)

and/or

- ◆ SVQ Forestry Units

and/or

- ◆ related past forestry syllabi

This National Course is aimed at individuals who may be embarking on the study of forestry or forestry related topics for the first time.

Candidates who achieve the National Course assessment will not be certificated for the Course until they have successfully completed the component Units.

3. Practical Assignment briefs

The assignment briefs from which candidates may choose are:

Brief 1

The candidate is required to visit two given sites — A and B.

Site A is a new planting or restock area, where the candidate should:

- ◆ Select suitable hand-tools and remove surface vegetation in preparation for tree planting.
- ◆ Notch plant or pit plant three tree species on the bare site.

In doing this the candidate should also:

- ◆ Identify the tree species.
- ◆ Identify the component parts of the tree planting stock.
- ◆ Describe the use of stakes, tree shelters and post planting operations.
- ◆ Describe the correct lifting and plant handling procedures.

Site B is a post planting area, where the candidate should:

- ◆ Select and use appropriate hand-tools for the weeding of a small area of woodland enclosing 10 trees which make up the forest crop.

Brief 2

The candidate should:

- ◆ Develop and present a tree collection of 10 species made up of both conifer and broadleaf trees.
- ◆ Identify the tree species using a named taxonomic key.
- ◆ Indicate the component parts of the tree specimens and the steps followed in the use of the taxonomic key.

The candidate should also:

- ◆ For a named new planting or restock site describe the procedures involved in storing, handling and planting trees with appropriate use of stakes and tree shelters.
- ◆ Indicate the likely post-planting maintenance actions.
- ◆ Then notch plant or pit plant three trees to the appropriate standard on the site.

Brief 3

For a given area of post planting stage mixed woodland, the candidate should:

- ◆ Use a named taxonomic key to identify three of the main tree species present.
- ◆ Indicate the component parts of the tree specimens and the steps followed in the use of the taxonomic key.

- ◆ Describe the likely past action for the lifting, handling, storage, planting and post-planting maintenance of the area and trees.
- ◆ Give an indication of the hand-tools which would have been used.

The candidate should also:

- ◆ Weed and clean a small area of the woodland enclosing 10 of the main crop trees using selected hand-tools.
- ◆ Identify and remove the competing weed species.

4. Outcome coverage

| Course Structure | | |
|--|--------------|-------------|
| Unit title | Credit value | Unit number |
| Forest Weeding and Cleaning Using Hand-Tools | 1.0 | D857 11 |
| Tree Planting | 1.0 | D2LH 11 |
| Tree Identification | 1.0 | D2LG 11 |

All Practical Assignments for Project-based National Courses cover a minimum of two thirds of the Outcomes from the component Units. For this project these are:

Unit: Forest Weeding and Cleaning Using Hand-Tools

1. Select and describe the most appropriate tools for weeding and cleaning forest crops
2. Use hand-tools for weeding and cleaning forest crops
3. Carry out repair and maintenance of hand-tools

Unit: Tree Planting

1. Describe the procedures for the storage of trees
2. Describe lifting and handling procedures for trees
3. Plant bare-rooted and container-grown trees
4. Describe the use of stakes and tree shelters
5. Describe post-planting maintenance of trees

Unit: Tree Identification

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

It is strongly advised that candidates should have completed the assessments for the individual component Units before undertaking this National Course assessment.

5. Subject/occupationally-related knowledge and skills

The Practical Assignment allows candidates to develop and apply skills in:

All briefs:

- ◆ tree identification

Brief 1:

- ◆ use of hand-tools
- ◆ tree planting

Brief 2:

- ◆ tree identification (in detail)
- ◆ tree planting

Brief 3:

- ◆ weeding/cleaning

It also allows candidates to further develop and apply knowledge of:

All briefs:

- ◆ tree identification methods
- ◆ tree establishment operations

Brief 1:

- ◆ tree components

Briefs 2 and 3:

- ◆ tree handling

All activities relate to given sites as described in the briefs:

Brief 1:

- ◆ removal of ground vegetation, tree identification, planting of three trees and weeding

Brief 2:

- ◆ development of a tree specimen collection, with tree identification and planting of three trees

Brief 3:

- ◆ tree identification and weeding and cleaning of the forest crop

6. Candidate evidence requirements and allocation of marks

General information

The three stages of the Practical Assignment for all Project-based National Courses at Intermediate 2 are:

- ◆ planning
- ◆ developing
- ◆ evaluating

Here we describe evidence requirements which apply to each of the three stages of the Practical Assignment for all Project-based National Courses at Intermediate 2. Where there are any specific evidence requirements relating to this Course, these are given later in this section.

Planning

Candidates must produce a 500 word (or equivalent) plan of action. The plan should include an introduction and a main body. Centres should ensure that candidates either already have, or are taught, the necessary skills to devise their own plan before they start the project.

For the introduction of the plan, candidates should:

- ◆ provide a rationale for selecting a particular brief
- ◆ interpret the brief
- ◆ gather information to clarify the brief
- ◆ define the aims and objectives of the Practical Assignment

For the main body of the plan candidates should:

- ◆ identify information sources
- ◆ identify materials and resources
- ◆ establish timescales for completion of stages of the Practical Assignment

The plan of action should be produced in a supervised environment although candidates may carry out the preparation beforehand. Candidates may communicate with each other when producing their plans of action but each plan must be tailored to the candidate's own project and the action points should relate to the work to be carried out by the individual candidate.

The work produced should always be the candidate's own. However, teachers and tutors are expected to provide candidates with advice, guidance and constructive criticism as necessary when they are devising their plans. It is important to note that, as the plan underpins the rest of the project, centres should ensure that no candidate proceeds to the development stage until the candidate has devised a plan that is potentially workable. The level of support that candidates need to devise a viable plan of action will of course vary from candidate to candidate. Centres should indicate the level of support needed for each candidate on the flyleaf for the project provided by the SQA. This should not inhibit centres from providing constructive comment nor the candidate from acting on their own initiative and taking on board the advice. In some cases however, if the level of support and intervention needed is more than that which would normally be seen as reasonable, the authenticity of the candidate's work may be called into question. If the level of input given by the teacher or tutor is above normal (for example, the

quality of the plan would mean that the project would be unworkable if the plan was not revised) then candidates cannot score more than 20 of the 40 marks allowed for the planning stage.

Developing

Candidates must provide evidence that:

- ◆ testifies to the quality of the hands-on practical activity
- ◆ documents the processes underpinning the activity

Specific evidence requirements for this Course are given later in this section.

All of the evidence should be produced in a supervised environment. Candidates may communicate with each other but should produce work which can be clearly attributed to the candidate as being his or her own.

Evaluating

Candidates must produce an extended evaluation report which should:

- ◆ provide a brief summary of what the assignment was about
- ◆ review and update the action plan in the light of experience
- ◆ assess the effectiveness of the action plan
- ◆ summarise any unforeseen events and how they were handled
- ◆ identify knowledge and skills which have been gained and/or developed
- ◆ assess the strengths, weaknesses and quality of any hands-on activity
- ◆ assess the effectiveness of the research methods used
- ◆ determine to what extent the assignment met the original brief

The evaluation report should be 500 words (or equivalent) at Intermediate 2. Candidates may carry out the preparation for the report beforehand.

Candidates at Intermediate 2 should be allowed up to one hour 30 minutes to complete an evaluation (including the summary).

Candidates should be allowed to take one side of an A4 page of notes (maximum of 200 words or equivalent allowed) which they have prepared, into the room with them. They should not be allowed to take a draft of the evaluation report into the room with them. The centre has the responsibility for ensuring that the notes brought in are the candidate's own work.

For this activity the accommodation should be arranged to reflect centre-invigilated conditions and candidates should not be allowed to communicate with each other in any way.

Specific additional information and requirements

Forestry Practice: planning stage

(total 40 marks)

The candidate should highlight his/her knowledge and skills as linked to the briefs available:

- ◆ a preferred brief should be selected based on personal knowledge and skills and the support resources available (5 marks)
- ◆ consider the relevant and possible sources of information required by the selected brief (10 marks)
- ◆ identify suitable means of accessing the necessary information (10 marks)
- ◆ plan the key steps and balance with time and other constraints (15 marks)

Forestry Practice: developing stage

(total 120 marks)

Brief 1

- ◆ selection of suitable hand-tools and removal of vegetation (20 marks)
- ◆ planting of trees (20 marks)
- ◆ tree identification (20 marks)
- ◆ weeding (20 marks)
- ◆ description of other actions/operations (30 marks)

Brief 2

- ◆ development of a tree collection (70 marks)
- ◆ planting of trees (20 marks)
- ◆ description of other actions/procedures (30 marks)

Brief 3

- ◆ tree identification (20 marks)
- ◆ weeding (30 marks)
- ◆ description of other actions/operations (70 marks)

Evidence requirements are listed on the following page.

Forestry Practice: evaluating stage

(total 40 marks)

The candidate should:

- ◆ review the work carried out and relate this to the original action plan identify any necessary amendments or changes (10 marks)
- ◆ justify any amendments (5 marks)
- ◆ provide a full audit of the skills and the information sources used comment on the quality of the practical work carried out and the descriptions developed (20 marks)
- ◆ comment on and demonstrate an awareness of effective time management. (5 marks)

Specific evidence requirements and assessment arrangements for the Practical Assignment for Forestry Practice at Intermediate 2

This Practical Assignment is subject to type 1 visiting assessment.

| Planning | |
|--|---|
| Evidence: | Plan of action. 500 words <i>or</i> equivalent (40 marks) |
| Conditions of National Course assessment | Supervised |
| Who assesses it? | Centre and SQA — plan for sample of candidates to be sent to SQA for marking* |

| Developing | |
|--|---|
| Evidence: | For hands-on activity: <ul style="list-style-type: none"> – Direct observation with checklist – Video recording with checklist – Portfolio of completed tree collection For processes underpinning the activity: <ul style="list-style-type: none"> – Diary – Logbook – Testimony – Direct questioning (120 marks in total for this stage) |
| Conditions of National Course assessment | Supervised |
| Who assesses it? | Subject to type 1 visiting assessment* |

| Evaluating | |
|---------------------------|---|
| Evidence | Evaluation report — including summary. 500 words <i>or</i> equivalent (40 marks) |
| Conditions of assessment: | Centre-invigilated |
| Who assesses it? | Centre and SQA — reports for sample of candidates to be sent to SQA for marking* |

It is important that candidates know that they will be penalised for submitting evidence that significantly exceeds the stated word count.

* Centres should refer to *Project-based National Courses: procedural guide for centres* for full procedural details of type 1 visiting assessment

7. Marking and grading for Practical Assignments with visiting assessment

The assessment evidence for this Practical Assignment is subject to visiting assessment by SQA. Centres are strongly advised to read *Project-based National Courses: procedural guide for centres* for further information about the processes and procedures for visiting assessment.

Visiting assessors will be trained by SQA to apply national standards. As candidate evidence becomes available exemplars will be issued to centres as guidance.

Centres must mark all three stages of the Practical Assignment for each individual candidate and decide on the mark, band and grade they think should be given to that candidate. SQA will provide detailed marking instructions for centres. The SQA visiting assessor will mark all three stages for a sample of candidates.

As the Practical Assignment will be marked by centres, centres do not need to provide estimates for Practical Assignments with visiting assessment. Nor should there normally be any need for appeals as the SQA visiting assessor and the centre should have negotiated and resolved any differences of opinion during the visiting assessment process.

The internal assessor uses the same processes for deciding on marks, grades and bands as any SQA visiting assessor. The final assessment decision must be based on accurate assessment of all the available candidate evidence. No candidate will be certificated for these Practical Assignments until the assessment decision is in line with national standards.

The total mark for the Practical Assignment is 200 (this makes it easier to discriminate effectively between performances of candidates across the three stages of the assessment). These marks will be allocated as follows in *Table A*.

Table A

| Practical Assignment Stage | Assessment Evidence | Mark Allocation |
|-----------------------------------|--|------------------------|
| Planning | Plan of action | 40 |
| Developing | Evidence arising from the hands-on practical activity and from documenting the underpinning processes involved | 120 |
| Evaluating | Evaluation report | 40 |

SQA will provide detailed marking instructions in addition to the information given earlier in this specification. SQA will also provide a form (Attendance Register, Form Ex 6) for submission of marks.

The internal assessors must:

- ◆ Mark each stage of the project using the marking instructions provided by the SQA.
- ◆ Maintain a detailed record of the marks given for each of the three stages (for internal moderation purposes and for SQA visiting assessor).
- ◆ Add the marks for each stage for the candidate to give a total mark out of 200.
- ◆ Divide that total mark by 2 to give a percentage.

- ◆ Convert the overall % mark for each candidate into a grade and band using *Table B*.

Table B

| % Mark range | Grade | Band |
|---------------------|------------------|-------------|
| 85–100 | A (upper) | 1 |
| 70–84 | A (lower) | 2 |
| 65–69 | B (upper) | 3 |
| 60–64 | B (lower) | 4 |
| 55–59 | C (upper) | 5 |
| 50–54 | C (lower) | 6 |
| 45–49 | Fail (near miss) | 7 |
| 40–44 | Fail | 8 |
| Less than 40 | Fail | 9 |

- ◆ Check the grade given to candidate against the grade descriptions given in *Table C*, using the grade descriptions as a touchstone. The final grade should reflect the grade descriptions.
- ◆ Provide marks, bands and grades for each candidate.

Although it is possible for a candidate to be given a band 7, 8 or 9 which would be classified as ‘fail’, this would not appear on the certificate. If a band 7 is given the centre should ensure that it gives feedback to the candidate for remediation purposes.

Grade Descriptions for a Practical Assignment at Intermediate 2

Table C

| A | B | C |
|---|---|---|
| Content and scope appropriate for Intermediate 2 | | |
| Looking at the evidence as a whole: | Looking at the evidence as a whole: | Looking at the evidence as a whole: |
| <p>A Practical Assignment at Grade A:</p> <ul style="list-style-type: none"> • produces high quality, clearly inter-related, documented and process or product-related evidence for the three essential phases of planning, developing and evaluating • is an exercise to which candidates have brought an accurate, innovative and enthusiastic interpretation of the practical assignment brief • is tightly structured, relevant to the content of the Units and displays a high level of subject/occupational expertise • applies integrated and consolidated knowledge, understanding and skills effectively and consistently from the Course Units to situations and/or design specifications with varying degrees of complexity | <p>A Practical Assignment at Grade B:</p> <ul style="list-style-type: none"> • produces good quality, inter-related, documented and process or product-related evidence for the three essential phases of planning, developing and evaluating • is an exercise to which candidates have brought an accurate and fairly innovative and enthusiastic interpretation of the practical assignment brief • is well structured, relevant to the content of the Units and displays a good level of subject/occupational expertise • applies integrated and consolidated knowledge, understanding and skills fairly effectively and consistently from the Course Units to situations and/or design specifications with varying degrees of complexity | <p>A Practical Assignment at Grade C:</p> <ul style="list-style-type: none"> • produces adequate, fairly well inter-related, documented and process or product-related evidence, for the three essential phases of planning, developing and evaluating • an exercise to which candidates have brought an acceptable interpretation of the practical assignment brief • is reasonably well structured, relevant to the content of the Units and displays an adequate level of subject/occupational expertise • applies integrated and consolidated knowledge, understanding and skills from the Course Units with some lack of continuity and consistency |

Internal moderation

The internal moderator should:

- ◆ Oversee the internal moderation process to ensure consistency of judgement or *reliability of assessment*. This process will vary according to the nature of the evidence and the number of assessors and sites. It is likely to involve agreement trials and/or Marker standardisation. The internal moderator should normally be a specialist in the subject. (It may be helpful in the first few years of these Project-based National Courses to do a cross-subject moderation of samples of like parts such as the plans of action and evaluation reports. Such additional cross-subject internal moderation is however not mandatory.)
- ◆ Ensure that all candidates have been fairly treated. For example, some candidates may have produced more fully integrated projects than others but have similar overall marks/bands; this may lead to a reconsideration of marking of the individual components for some candidates.
- ◆ Oversee the finalisation of marks, bands and grades and submission of candidate evidence for sample candidates.

(See *Guide to Assessment and Quality Assurance for Colleges of Further Education* or *Guide to Assessment and Quality Assurance for Secondary Schools*, SQA October 2001 for further information relating to internal moderation. A guide to good practice for internal moderation is also under development.)

Submitting candidate evidence to SQA

Specific information on this part of the process is available to centres in *Project-based National Courses: procedural guide for centres*. Where materials have to be sent to SQA for marking you will be provided with any necessary packaging materials.

The following must be sent to SQA for this Practical Assignment for a sample of candidates:

- ◆ plan of action
- ◆ evaluation report

Note: In addition, centres will be expected to submit all notes used by the sample of candidates during write-up sessions.

8. Ensuring evidence is authentic

The following methods should be used to ensure that the evidence produced by a given candidate is all their own work. These methods are for use outwith any situation where the candidate's work will be produced under supervised or invigilated conditions already stipulated by the SQA (eg the plan of action and the evaluation).

Development stage

The practical work should be carried out in a supervised environment wherever possible; all submissions should be subject to a declaration that it is the candidate's own work. Where work is carried out away from the assessment centre, witness statements should be supplied to confirm the originality of the source.

9. Investigating tools

Candidates are expected to make use of the following information sources during the Practical Assignment:

Information sources

- ◆ teaching/lecturing support and guidance
- ◆ past practical experience
- ◆ videos
- ◆ past site visits
- ◆ past performances
- ◆ demonstrations
- ◆ Forestry Commission publications
- ◆ lecture handouts
- ◆ internet
- ◆ possible distance learning material

Accessing information

- ◆ specialist and general libraries
- ◆ industry resources
- ◆ meetings and visits

References supplied by candidates

Please note that it is legitimate for candidates to quote from information sources such as articles (in print or stored electronically) or books. Such quotations must be placed within quotation marks followed by the reference, including the chapter and or section and page number. Texts referred to should be included in the bibliography.

The following format for references should be used:

Books

Author's surname, followed by forename or initials, title of book (in italics or underlined), place of publication, name of publisher, year of publication.

For example:

Barton, T, *Fieldwork for Geographers*, London: Edward Arnold, 1985

Articles

Author's surname, followed by forename or initials, title of the article (in inverted commas), title of the periodical (underlined or in italics), volume number, part number, year of publication, page number(s).

For example:

Sugden, DE, 'Perspectives on the Glaciation of Scotland', *SAGT Journal No. 17*, 1988, pp 4-10.

Maps and Diagrams

Sources should be given on each map and diagram and should be stated in the same format as for books and articles, as appropriate.

For example:

Microsoft Encarta 1997

Internet

If a website has been used then the address (URL) must be disclosed.

For example:

www.sqa.org.uk

It is important to note that unacknowledged copying will be penalised, usually by cancellation of the candidate entry.

10. Materials and resources

Candidates are expected to use the following materials and resources as appropriate.

The following resources should be available:

- ◆ Suitable work sites
- ◆ Suitable tree planting stock
- ◆ Suitable range of hand-tools
- ◆ Access to tree identification keys
- ◆ Workshop and maintenance tools

11. Core Skills

It is possible that successful attainment of this Course would lead to the automatic certification of particular Core Skills or Core Skill components. A final statement will be provided at a later date by the Scottish Qualifications Authority once full validation procedures are complete.

It should be noted that this project, in common with other Project-based Courses, follows the planning/developing/evaluating cycle. As a result of this it is likely that successful completion of the project will lead to automatic certification of the Problem Solving Core Skill at Intermediate 2. The final Core Skills statement, as above, will confirm this.