



Higher National Unit specification

General information for centres

Unit title: Forestry: Forest Planning and Management

Unit code: F3YS 35

Unit purpose: This Unit is designed to give the candidate understanding and knowledge as to how a forest is structured, planned and managed and how a forest enterprise is managed and administered. The Unit evaluates how government policies and forest plans are put into action for the management of the forest. The Unit is relevant to candidates requiring an understanding of planning and management of a forest Unit at the forest manager level.

On completion of the Unit the candidate should be able to:

- 1 Explain the factors that underpin forest management.
- 2 Evaluate the way in which a given forest is structured, planned and managed.
- 3 Analyse the administrative effectiveness of a specific forest organisation.

Credit points and level: 2 HN credits at SCQF level 8: (16 SCQF credit points at SCQF level 8*)

**SCQF credit points are used to allocate credit to qualifications in the Scottish Credit and Qualifications Framework (SCQF). Each qualification in the Framework is allocated a number of SCQF credit points at an SCQF level. There are 12 SCQF levels, ranging from Access 1 to Doctorates.*

Recommended prior knowledge and skills: Access to this Unit is at the discretion of the centre. Prior knowledge of F3YC 34 *Establishment of Woodland*, F3YD 34 *Forest Harvesting*, F3YF 34 *Forest Measurement and Thinning Control* and F3YM 34 *Forestry Operations: Work Programming* would be helpful to the candidate.

Core Skills: There are opportunities to develop the written component of the Core Skill of *Communication and Information Technology* at SCQF level 5, although there is no automatic certification of Core Skills or the Core Skills components.

Context for delivery: If this Unit is delivered as part of a Group Award, it is recommended that it should be taught and assessed within the subject area of the Group Award to which it contributes.

General information for centres (cont)

Assessment: The assessment for the first two Outcomes in this Unit will take the form of a holistic project report on the forest planning and management of a given or agreed forest and an analysis of how the policies and aims of that forest are implemented.

Outcome 3 will be assessed by a report analysing the effectiveness of the structure, procedures and processes adopted to administer a forest organisation.

These reports could be produced separately or produced as one assessment.

Evidence for these assessments will be generated during an industrial placement period or other location agreed with the tutor.

Higher National Unit specification: statement of standards

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The sections of the Unit stating the Outcomes, Knowledge and/or Skills, and Evidence Requirements are mandatory.

Where evidence for Outcomes is assessed on a sample basis, the whole of the content listed in the Knowledge and/or Skills section must be taught and available for assessment. Candidates should not know in advance the items on which they will be assessed and different items should be sampled on each assessment occasion.

Outcome 1

Explain the factors that underpin forest management

Knowledge and/or Skills

- ◆ Uses of forestry locally and nationally
- ◆ History of a forest area
- ◆ Current national forest strategy
- ◆ Local and national forestry policy and objectives
- ◆ Hierarchy of planning responsibilities

Evidence Requirements

The Evidence Requirements for this Unit are given after Outcome 2.

Assessment Guidelines

The Assessment Guidelines for this Unit are given after Outcome 2.

Outcome 2

Evaluate the way in which a given forest is structured, planned and managed

Knowledge and/or Skills

- ◆ Growing stock
- ◆ Management objectives and strategies
- ◆ Forest management and sustainability
- ◆ Efficiency

Higher National Unit specification: statement of standards (cont)

Unit title: Forestry: Forest Planning and Management

Evidence Requirements

The evidence of achievement for Outcomes 1 and 2 will be based on a report produced during an industrial placement in a forest or other location agreed with the tutor. The candidate must describe the forest and analyse the management of the forest area in relation to the current national forestry strategy, correct forest practice and the local objectives set for the area in question.

Following tutor guidance given prior to the placement period, the evidence should be generated during the placement period by research and experience in the forest office and field observation.

Candidates will need evidence to demonstrate their Knowledge and/or Skills by showing that they can:

- ◆ provide general details about the forest in question — name, location, area, ownership, site factors (Outcome 1).
- ◆ explain the forest strategies and objectives of management. This must include national and local, as appropriate (Outcome 1 and 2).
- ◆ explain factors affecting management. This must include relevant factors from the following: past history, conservation, amenity, landscaping, recreation, pests and diseases.
- ◆ evaluate the growing stock. This must include consideration of species chosen, area occupied by each species, growth rates, age class distribution, layout, volumes, percentages and how this relates to local and national policies, strategies and objectives, as appropriate (Outcome 2).
- ◆ evaluate implementation of policies within the forest. This should be far reaching and must include consideration of the following and selection of the ones that are relevant (Outcome 1 and 2):
 - sustainability and approach to sustained yield
 - present and future production and restock programmes
 - expansion or otherwise of the growing stock
 - future vision for the forest
 - future age class distribution
 - silvicultural systems adopted
 - conservation, amenity and recreation
 - present and future markets for the produce
 - planning hierarchy
- ◆ outline the forest management personnel hierarchy in relation to forestry planning responsibilities (Outcome 1).
- ◆ evaluate the efficiency of the forest management operations. This must include consideration of the planning process, team working and use of resources (Outcome 2).
- ◆ compare the forest management to at least one other forest and use this comparison to make recommendations for changes and development under the following headings (Outcome 2):
 - management policy and objectives
 - implementation of strategies to achieve the above
 - age class structure and growing stock
 - structure and design of the forest
 - production and markets
 - silvicultural practices
 - management systems and staff organisations
 - government policies; taxation and grant systems

Higher National Unit specification: statement of standards (cont)

Unit title: Forestry: Forest Planning and Management

The information presented in the report must be the individual candidate's own interpretation and analysis of the information gathered.

Assessment Guidelines

It is recommended that Outcomes 1 and 2 be assessed holistically by the production of a report.

A word limit of 1,500 words is suggested. Graphs, tables, maps should be placed in the appendices, but summarised in the text.

This assessment could be combined with the report for Outcome 3, which focuses on the **administrative** effectiveness of a forest organisation.

Outcome 3

Analyse the administrative effectiveness of a specific forest organisation

Knowledge and/or Skills

- ◆ Administrative structure
- ◆ Internal and external factors affecting forest organisations
- ◆ Organisation's procedures, processes and reporting systems
- ◆ Resource control methods

Evidence Requirements

Candidates will need to provide evidence to demonstrate their Knowledge and/or Skills by showing that they can:

- ◆ explain the organisation and staff structure used to administer the specific forest organisation. Candidates must produce an organisation chart and explain the accountability and responsibility of staff levels.
- ◆ analyse the effects internal and external factors have on the organisation. This must include promotion prospects and internal policies and the economic environment the organisation works within. Candidates must show an understanding of how external factors inform internal policies.
- ◆ analyse the effect the decision-making and management information systems adopted have on the organisation's reporting systems. Candidates must explain how decisions are made within the organisation and how national policies impact on organisational decision making.
- ◆ analyse the effect the control methods have on the organisation's human, financial and physical resources and at what level within the organisation decisions are made. Also recommend and justify changes that could be implemented to improve administrative effectiveness.

Higher National Unit specification: statement of standards (cont)

Unit title: Forestry: Forest Planning and Management

Candidates must gather evidence during the placement period by research in the forest office and observation through management work experience. Tutor guidance must be given prior to the placement period.

Information must be provided in the form of a report and the report must be the individual candidate's own interpretation and analysis of the information gathered from their placement period.

Assessment Guidelines

Evidence for Outcome 3 must be produced in the form of a report and it is recommended that the report is approximately 1,500 words or equivalent.

The report for this Outcome could be combined with the report for Outcomes 1 and 2, which focuses on the **forest** management.

Administrative Information

Unit code: F3YS 35

Unit title: Forestry: Forest Planning and Management

Superclass category: SG

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Version	Description of change	Date

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Higher National Unit specification: support notes

Unit title: Forestry: Forest Planning and Management

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 80 hours.

Guidance on the content and context for this Unit

This Unit is designed as a mandatory part of the HND Forestry.

The content of this Unit should provide the candidate with an understanding of the planning and management principles in operation in a given forest, its management and its administration.

The following support notes cover the mandatory requirements of the Unit and recommended aspects that could be covered in teaching and learning.

Outcome 1

- ◆ description of the forest — name, location, area, ownership, site factors
- ◆ forest produce - major, minor
- ◆ forest uses – history, production, conservation, amenity, recreation, protection, landscaping
- ◆ staff organisation, structure and hierarchy — management and workforce

Outcome 2

- ◆ growing stock — species present, quantities, yield class, age class, design, volumes
- ◆ principle of sustained yield
- ◆ objectives of management — national, local
- ◆ management strategies — long, medium and short-term planning
- ◆ implementation of policies and objectives within the forest
- ◆ finances — budgets
- ◆ evaluation and recommendations for future management strategies

Outcome 3

- ◆ organisational and staff structures
- ◆ decision making process at operational, tactical and strategic levels
- ◆ internal factors (leadership, motivation, career structure) and external factors (government policy, competition, technology) impacting on the management of the organisation
- ◆ control and authorisation procedures used
- ◆ administrative process and procedures

Higher National Unit specification: support notes (cont)

Unit title: Forestry: Forest Planning and Management

Guidance on the delivery and assessment of this Unit

Outcome 1 and 2

The candidates should be prepared for the assessment prior to going out on their placement period. This could be done but lecture input supplemented with tutorials to display and discuss exemplars of completed projects.

This is a learning exercise for the candidates, mentored by working forest managers, and the information they glean from their research will put them in good stead to make more use of their future studies on return to college.

The evidence of achievement for Outcomes 1 and 2 will take the form of a holistic project report. It is suggested that this project is designed to give the candidate the opportunity during the industrial placement period to take an in-depth look at a forest they know well and, with the assistance of experienced forest managers, produce a detailed report on the forest; how it is managed; and how the management team adhere to the objectives set by the forest owner and the policies and objectives laid down by government.

It is suggested that this assessment should be made available to the candidate before they commence their placement period and that the employer has sight and knowledge of the requirements of this assessment so that its production can be programmed into the candidates work programme on placement.

Likely scenarios for this report could be:

- (a) a report on a suitable forest Unit that comes under the management of the student during the placement period.
- (b) a report on a suitable forest Unit that the candidate is familiar with but that they may not have day to day involvement with on placement.
- (c) a report on a suitable forest Unit that meets the needs of the assessment but that is not part of a placement period. In this case the tutor will have to agree with the candidate that the area is suitable. This situation may arise where a placement is not in an area that offers such an opportunity or where the candidate has such prior experience that the placement year is waived by the course team.

Outcome 3

The evidence of achievement for Outcomes 3 will take the form of a report that analyses the administration of a given forest. The report produced could contain a combination of text, diagrammatic and graphical material. Satisfactory achievement of the Outcome is based on the stated Evidence Requirements being met.

Higher National Unit specification: support notes (cont)

Unit title: Forestry: Forest Planning and Management

Opportunities for developing Core Skills

There are opportunities to develop the Written Communication component of the Core Skill of *Communication* and *Information Technology* at SCQF level 5. Information technology skills could be developed by candidates carrying out research and producing work using *Information Technology*. Opportunities to develop the component of Written Communication could be developed through reading and producing work for formative and summative assessment.

Open learning

All Outcomes are appropriate for open and distance learning approaches, and it would be good practice to provide candidate packs and tutor input and support at all stages. Centre devised supervision agreements should detail any conditions to ensure authenticity of evidence.

Candidates with disabilities and/or additional support needs

The additional support needs of individual candidates should be taken into account when planning learning experiences, selecting assessment instruments, or considering alternative Outcomes for Units. Further advice can be found in the SQA document *Guidance on Assessment Arrangements for Candidates with Disabilities and/or Additional Support Needs* (www.sqa.org.uk).

General information for candidates

Unit title: Forestry: Forest Planning and Management

This Unit through active participation as a forest team member during your industrial placement period is designed to provide you with a knowledge and understanding of the underlying principles for the efficient working of a forest management Unit. The Unit will also develop your evaluation skills in matching what you observe with the stated forest objectives and policies.

The Outcomes that you will acquire on completion of the Unit are as follows:

Outcome 1 will give you a knowledge and understanding of how forests are organised and managed, of how the forest grows in terms of its supply potential for industry or for the other less commercial purpose of recreation and conservation.

Outcome 2 will give you an opportunity to evaluate how a forest is being managed and whether you feel that the best use is being made of this valuable resource in relation to current policies for the forestry industry.

Outcome 3 will give you an understanding of the administrative function of an organisation and the impact internal and external factors have on the organisation's effectiveness.

This Unit is a mandatory component of HND Forestry.

Overall, the knowledge and skills acquired in this Unit will help you understand and evaluate the factors that influence forest management by assessing an actual working forest environment that you are involved closely with.

For candidates in employment in the forest industry this Unit provides an opportunity to extend your existing knowledge and skills and lays a sound grounding for further study in forest planning and management.

You may have opportunities to develop the following Core Skills in this Unit:

- ◆ if you carry out research and produce work using IT then *Information Technology* skills could be developed at SCQF level 5
- ◆ if you read and produce work for formative and summative assessment then there could be opportunities to develop *Communication* skills at SCQF level 5