

0174-38 Level 3 Advanced Technical Extended Diploma in Forestry and Arboriculture (1080)

2019

Qualification Report

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Introduction

This document has been prepared by the Chief Examiner and Principal Moderator; it is designed to be used as a feedback tool for centres in order to enhance teaching and preparation for assessment. It is advised that this document is referred to when planning delivery and when preparing candidates for City & Guilds Technical assessments.

This report provides general commentary on candidate performance in both the synoptic assignment and theory exam. It highlights common themes in relation to the technical aspects explored within the assessment, giving areas of strengths and weakness demonstrated by the cohort of candidates who sat assessments in the 2019 academic year. It will explain aspects which caused difficulty and potentially why the difficulties arose.

The document provides commentary on the following assessments:

Year 1

- Pathway 1 (Forestry) and Pathway 2 (Arboriculture)
 - o 0174-012/512 Level 3 Forestry and Arboriculture Theory exam (1)
 - March 2019 (Spring)
 - June 2019 (Summer)
 - 0174-011 Level 3 Forestry and Arboriculture Synoptic Assignment (1)

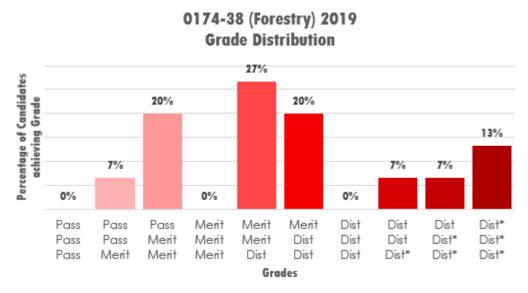
Year 2

- Pathway 1 (Forestry) and Pathway 2 (Arboriculture)
 - o 0174-014/514 Level 3 Forestry and Arboriculture Theory exam (2)
 - March 2019 (Spring)
 - June 2019 (Summer)
 - o 0174-013 Level 3 Forestry and Arboriculture Synoptic assignment (2)

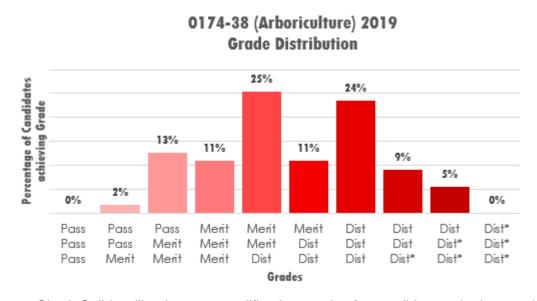
Qualification Grade Distribution

The grade distribution for this qualification is shown below:

Pathway 1 - Level 3 Advanced Technical Extended Diploma in Forestry and Arboriculture (Forestry) (1080)



Pathway 2 - Level 3 Advanced Technical Extended Diploma in Forestry and Arboriculture (Arboriculture) (1080)



Please note City & Guilds will only report qualification grades for candidates who have achieved all of the required assessment components, including Employer Involvement, optional units and any other centre assessed components as indicated within the Qualification Handbook. The grade distribution shown above could include performance from previous years.

Theory Exams - Year 1

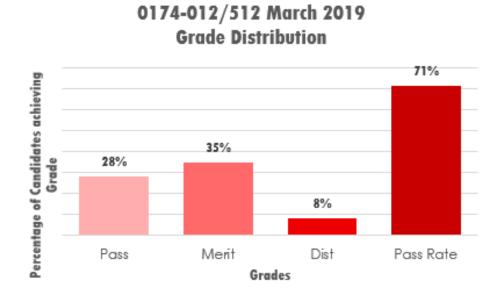
0174-35 Level 3 Advanced Technical Certificate in Forestry and Arboriculture

Grade Boundaries

Assessment: 0174-012/512 Series: March 2019 (Spring)

Below identifies the final grade boundaries for this assessment, as agreed by the awarding panel:

Total marks available	60
Pass mark	29
Merit mark	36
Distinction mark	44

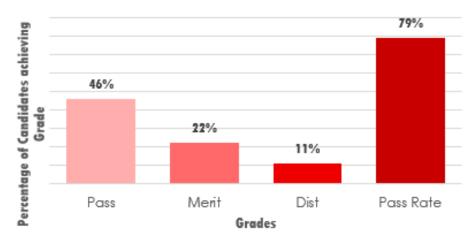


Assessment: 0174-012/512 Series: June 2019 (Summer)

Below identifies the final grade boundaries for this assessment, as agreed by the awarding panel:

Total marks available	60
Pass mark	26
Merit mark	34
Distinction mark	42





Chief Examiner Commentary

0174-512 Level 3 Forestry and Arboriculture - Theory exam

Series 1 - March 2019

Most candidates performed well in the exam and showed a good range of knowledge across the units being assessed. Questions were answered with a varying degree of accuracy and depth, but this is to be expected. Most candidates scored well where questions were more practical in nature but there was a lack of knowledge regarding the plant life cycles.

In general, recall was good with several candidates showing higher level understanding and displayed good use of descriptions and explanations. However, fewer responses showed an appreciation of linkages. For example, how given abiotic disorders affect trees. Many responses stated the obvious rather than explaining the effects.

There was evidence of understanding the fundamentals of ill health in trees. However, applying this information to a bigger picture seemed beyond many candidates. This was also true of decay detection equipment where some candidates had no knowledge of the equipment in the question this made many responses to question 9 rather weak.

Overall, candidates showed strength in the following areas:

- Factor to consider when felling trees.
- Issues that can occur with a guide bar.
- Abiotic disorders

The areas of weakness were:

- Definitions and examples of annual and ephemeral plants.
- Decay detection equipment and the outputs they produce.

There were mixed responses to questions about the plant passport system, soil improvement and factors influencing rates of photosynthesis.

Several candidates showed that they were not fully familiar with the written examination technique. Candidates must read the questions carefully and keep the responses relevant to the question. An example of this was the misreading of post start checks which lead to several wrong answers to a relatively simple question.

The lack of understanding of the difference between state, describe, explain and verbs used in the extended response question requiring the candidates to employ higher cognitive skills, in this case 'discuss' and 'justify', is a common theme across all scripts.

Extended response question

The extended response question was, for the most part, well answered. Candidates showed a good range of knowledge and linked ideas together in a coherent way. Where this was not the case the rest of the paper was also weak.

Those candidates that scored highest referred to legislation, discussed the practicalities of managing OPM and justified their recommendations with well-considered points. Those who did not score as highly, made good recommendations but did not make links to the wider context.

Series 2 – June 2019

The exam paper had an appropriate balance of questions that tested knowledge and understanding from across the units.

Most candidates attempted all questions. There was a wide variety in the range of answers, knowledge-based questions were answered best especially where the question was testing AO1 or of a practical nature e.g. chainsaw faults/ sharpening or predisposition to ill health.

As with previous years, there was a lack of understanding around plant biology; in this case plant life cycles were examined but few candidates offered answers that displayed much knowledge of the topic.

Some marks were dropped when candidates misinterpreted the question and gave inappropriate answers as a result. For example, when asked about clutch spring, some candidates went on to discuss the clutch in a car. More marks could have been awarded if candidates expanded their answers through explanation when asked to do so.

Overall, candidates showed strength in:

- Seed dispersal
- Chainsaw faults
- Felling aids
- Impacts of frost

Candidates appear to require further support in:

- Pests and diseases
- Management options for fungi on trees
- Plant life cycles
- Answering extended response questions

Candidates must read the questions carefully, particularly the command verbs and the allocated marks. This will give them an indication of the level of demand and focus their attention on the correct information to present.

Extended response question

Many candidates did not provide the depth of detail required of the AO4 question. Only a few candidates achieved marks in the high band, the remaining in the lower bands had insufficient considerations of the wider context (legal, environmental or practical issues). Some elements were generally well understood (sanitation of tools and clothing) but the discussion of the broader context was too brief to award higher marks.

Many candidates concentrated on the practical consideration of dealing with honey fungus rather than the wider context which resulted in few achieving the higher band.

The extended response question gives the opportunity to show an understanding of the qualification and to apply this knowledge and understanding in a situation. The better answers did this to a certain extent, but some responses were simply a list of statements rather than a structured, well considered discussion.

Centres need to focus on how to approach these questions for future candidates to answer them well. Thorough preparation for this type of question is essential if higher marks are to be awarded in future.

Theory Exams - Year 2

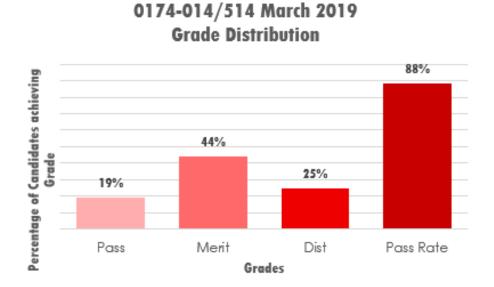
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Grade Boundaries

Assessment: 0174-514/014 Series: March 2019 (Spring)

Below identifies the final grade boundaries for this assessment, as agreed by the awarding panel;

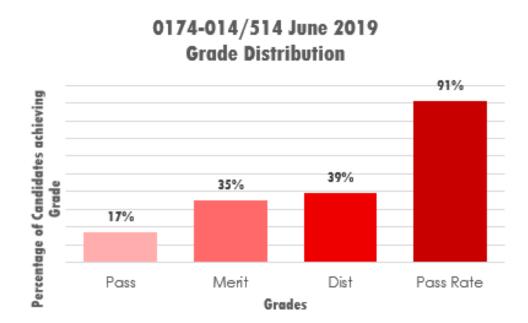
Total marks available	60
Pass mark	24
Merit mark	31
Distinction mark	39



Assessment: 0174-514/014 Series: June 2019 (Summer)

Below identifies the final grade boundaries for this assessment, as agreed by the awarding panel;

Total marks available	60
Pass mark	24
Merit mark	33
Distinction mark	43



Chief Examiner Commentary

0174-514 Level 3 Forestry and Arboriculture - Theory exam

Series 1 - March 2019

The question paper had an appropriate balance of questions with varied levels of demand and it accurately sampled the knowledge and understanding from across the qualification.

Most candidates attempted all questions. The range of answers varied considerably, i.e. there was a varying degree of accuracy and depth, with knowledge-based questions generally answered the best.

Candidates frequently lost marks when not expanding their answers through discussion or explanation when asked to do so.

Overall, candidates showed strength in:

- Ancient woodland indicator species'
- Tree supporting techniques
- Appropriate tool use
- Influences on tree growth

Candidates appear to require further support in:

- Species identification
- Aftercare
- Nursery stock
- Woodland terminology
- Silvicultural practices
- The axiom of uniform stress

It is advisable that candidates should read the questions carefully, particularly the command verbs and the allocated marks, as this will give them an indication of the level of demand. For example, Q7 required candidates to explain a coppice with standards, the majority only explained the process of coppicing in general and therefore lost 1 mark. Candidates at this level are expected to be able to apply their knowledge and understanding within a specific context.

Extended response question

Many candidates did not provide the depth of detail required of the AO4 question. Very few candidates achieved marks in the high band, generally because there was not sufficient discussion around the topic. Some elements were generally well understood and had the candidates considered the topic in the wider context, higher marks would have been awarded. The extended response question gives candidates the opportunity to demonstrate their grasp of the qualification and to apply this knowledge and understanding in a particular context. The broader answers did this to some extent, although even some of them were reminiscent of a list of facts rather than a structured, thoughtful consideration with sufficient reasoned discussion or linking to the scenario. However, a wider range of factors was considered, some of which included: public access, health and safety, different management requirements, and pests and diseases.

Series 2 – June 2019

The question paper had an appropriate balance of questions with varied levels of demand and it accurately sampled the knowledge and understanding from across the qualification.

Most candidates attempted all questions. The range of answers varied considerably, i.e. there was a varying degree of accuracy and depth, with the knowledge-based questions generally answered the best.

Candidates frequently lost marks when not expanding their answers through discussion or explanation when asked to do so.

Overall, candidates showed strength in:

- Appropriate tool use
- Influences on tree growth
- Pruning techniques

Candidates appear to require further support in:

- Species identification
- Aftercare
- Tree supporting techniques
- Woodland terminology
- Ancient woodland indicator species'
- Nursery stock

The vast majority of candidates struggled with the identification questions where they either didn't have the recall to answer at all or gave an incorrect name. Only two candidates could state the common name for Tsuga heterophylla.

It is advisable that candidates should read the questions carefully, particularly the command verbs and the allocated marks, as this will give them an indication of the level of demand. For example, Q9b required candidates to explain three benefits of using target pruning. The majority of candidates only stated a key point such as "leaves small surface area" with no reasoning and therefore lost marks from the available 6.

Candidates at this level are expected to be able to apply their knowledge and understanding within a specific context.

Extended response question

Many candidates did not provide the depth of detail required of the AO4 question. Very few candidates achieved marks in the high band, generally because there was not sufficient discussion around the topic. Some elements were occasionally well understood and had the candidates considered the topic in the wider context and used technical terminology, higher marks would have been awarded. The extended response question gives candidates the opportunity to demonstrate their grasp of the qualification and to apply this knowledge and understanding in a particular context. The broader answers did this to some extent, although even some of them were reminiscent of a list of facts rather than a structured, thoughtful consideration with sufficient reasoned discussion or linking to the scenario. However, a wider range of factors was considered, some of which included: species characteristics, health and safety to public, different management requirements, and pests and diseases. The majority of candidate's did not show a full understanding of a wood pasture.

Synoptic Assignments – Year 1

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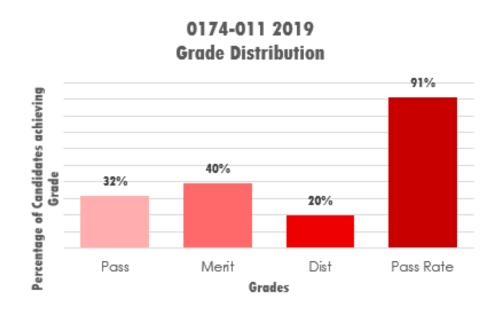
Grade Boundaries

Below identifies the final grade boundaries for this assessment, as agreed by the awarding panel:

Assessment: 0174-011

Series: 2019

Total marks available	60
Pass mark	26
Merit mark	34
Distinction mark	43



Principal Moderator Commentary

Comments on centre administration

Moderators noted that administration for most centres was good with occasional pieces of evidence missing and instances of declarations not being correctly completed when uploaded to the portal. Missing evidence however was quickly rectified by centres.

Overall performance of candidates compared to expectations

Candidates provided evidence that was fit for purpose and contained the expected range of ability that suggests they are operating at the appropriate level for some of the tasks if not all.

The synoptic assignment contained a good range of practical tasks allowing candidates to demonstrate a range of skills required in the work-place.

Provision of evidence for moderation

Photographic evidence was not used in all centres and in those that did, was not annotated effectively and added little enrichment to evidence. All of these could be improved by using captions or short narrative statements for each photo to say what is going on and how it relates to assessment or learning outcomes. Without a caption a photo is just an illustration.

Practical observation forms were used by tutors with varying degrees of success. Some observers are still not providing an adequate narrative to support judgements on practical performance. Some observers stated what the candidates did but did not qualify the performance by saying how or why the performance was good or very good.

There was a range of different risk assessment templates used which limited the candidates' ability to demonstrate a higher level of evidence. Some centres did not include emergency procedures within the template and some risk assessments were over complicated.

General overview of assessor alignment

Moderation showed that most centres and markers are in alignment with national standards, with the exception of AO3 which was, in some cases, noted as disproportionally marked either down or up within the CRF.

Performance of against Assessment Outcomes (AOs)

AO1 Recall of knowledge related to the qualification LOs

Candidates produced very good evidence to enable judgements to be made against this outcome. A range of written recall knowledge was available through task 1 (report on site conditions and pathology) and task 4 (Soil investigations) as this was candidate-created and enable the demonstration of knowledge within a written framework of studies and reports. while verbal recall was demonstrated through comments made on the POF. Task 3 (felling and stump removal) allowed observers to comment on candidates' recall during a technical practical exercise.

AO2 Understanding of concepts theories and processes relating to the LOs

The majority of marks available for this AO2 were from task 1 and task 4 and provided a good platform for the demonstration of understanding. Higher level candidates were able to make connections between recall and understanding ad provided justifications.

Most candidates were credited with good understanding for task 3 during their practical demonstration of felling skills and dealing with arisings.

AO3 Application of practical/technical skills

This was mostly marked correctly and comments on the CRF mostly aligned with information in the practical observation forms. There were some instances where AO3 was disproportionally marked lower than comments within AO3 on the POF would suggest.

Task 3 required candidates to demonstrate practical skills for felling, stump removal and brush removal. Many provided photographs although a significant proportion did not and relied on the tutor notes and observer comments on the Practical observation form. Where photos were included in the evidence there was very little in the way of meaningful captions or descriptions of what was going on and how that linked to assessed outcomes or learning outcomes.

The majority of candidates were not fluid and practiced indicating they were not experienced in the practical activities they were undertaking. While this is to be expected, it is a recommendation that more time is allocated to practical skills where possible.

AO4 Bringing it all together- coherence of the whole subject

Overall there was good application of bringing theories into practice and stronger candidates demonstrated through task 1 and task 4 a higher-level ability to do so.

Task 1 (site investigations) provided the best opportunity for bringing the whole subject together as all aspects have an impact on tree health and management. Some candidates did not provide any control measures and or remedial actions and some did not describe how the tree would be affected.

For task 4 (soil investigations) there were many instances of candidates misinterpreting the question. Candidates did not produce a report in some cases on the affects of growth and development based on the investigations they undertook. Instead, detailed information was provided on a range of soil characteristics and the methodologies used to collect this information. This did not demonstrate an understanding of how these characteristics affect growth and development.

AO5 Attending to detail/perfecting

Markers noted that higher-level learners were able to continually check and correct during practical activities. This AO was generally marked correctly by centres. Conscientious candidates were able to gain additional marks through this.

Synoptic Assignments – Year 2

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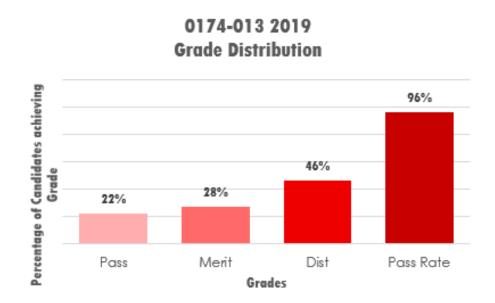
Grade Boundaries

Below identifies the final grade boundaries for this assessment, as agreed by the awarding panel:

Assessment: 0174-013

Series: 2019

Total marks available	60
Pass mark	24
Merit mark	32
Distinction mark	41



Principal Moderator Commentary

Comments on centre administration

Moderators reported that centre administration was generally good however some centre documents had to be requested as they were either missing or partially scanned. The majority of centre documents and candidate evidence was uploaded to the portal in a timely manner. Some candidate Practical observation forms were difficult to read by Moderators.

Overall performance of candidates compared to expectations

Candidate performance overall was good. Evidence from each candidate mostly met expectations across an expected range of ability. The quality of work for the woodland proposal was generally of a high standard and the practical evidence showed consolidation of skills learned in year 1.

Provision of evidence for moderation

Some POFs contained language, which did not align to banding language making moderation of these forms difficult. Language used within some CRF forms did not align with the banding language used with in the POF forms.

Photographic evidence was used within candidates work however some were not annotated effectively and added little enrichment to evidence. This could be improved by using captions or short narrative statements for each photo to say what is going on and how it relates to assessment or learning outcomes. Without a caption a photo is just an illustration.

General overview of assessor alignment

Assessor/moderator alignment was good in most cases with the exception of AO3 which was, in some cases, noted as disproportionally down-marked within the CRF

Performance against Assessment Outcomes (AOs)

AO1 Recall of knowledge related to the qualification LOs

A range of written recall knowledge was available through task 1 (Woodland Proposal), while verbal recall was demonstrated through comments made on the POF within the practical assessments for tasks 2 and 3. This allowed candidates to demonstrate knowledge and recall by selecting appropriate tools and equipment and by choosing suitable methods and practises for planting and boundary maintenance.

AO2 Understanding of concepts theories and processes relating to the LOs

Opportunities to evidence security of concepts, theories and processes was embedded in task 1 where candidates explored links between theoretical knowledge and understanding to causal links, reasons why choices were made and the consideration of alternatives. Those candidates operating at the lower of the bands within the marking grid made a few straight forward links and gave simple explanations whereas those at the upper end of the marking band showed greater understanding, consolidation and application of holistic knowledge.

AO3 Application of practical/technical skills

This AO was mostly marked correctly and comments on the CRF mostly aligned with information in the Practical observation forms. There were some instances where AO3 was disproportionally marked lower than comments within AO3 on the POF would suggest.

The majority of candidates were not fluid and practiced indicating they were not experienced in the practical activities they were undertaking. While this is to be expected, it is a recommendation that more time is allocated to practical skills where possible.

Photographs (where supplied) **must** be accompanied by adequate annotation, captions or direct links within the tutor notes to explain what the photograph is showing and how that provides evidence for assessed outcomes. Without narrative or captions it is difficult for moderators to assess the value of the photos against prescribed assessment outcomes. Going forward centres need to address this issue if they intend submitting photographs as evidence of performance against outcomes.

AO4 Bringing it all together- coherence of the whole subject

Task 1 (Woodland Proposal) provided the best opportunities for AO4 as it gave the candidates a wide range of site considerations, features, community needs, establishment challenges, feasibility and practical implications to explore and evidence.

AO5 Attending to detail/perfecting

Markers noted that higher-level learners were able to continually check and correct during practical activities. This AO was generally marked correctly by centres. In tasks 2 (Woodland maintenance) and 3 (plating and aftercare) attention to detail was generally evidenced by tutor narrative on POFs referring to the quality of finish and adjustments made to working techniques in response to changing conditions or unforeseen problems.

Candidates provided valuable evidence for this outcome in their community woodland proposals (task 1) and through tutor notes on POFs.