

Pearson BTEC Level 3 National Extended Certificate in Animal Management



Specification

First teaching from September 2016

First certification from 2017

Issue 7

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Edexcel, BTEC and LCCI qualifications

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This specification is Issue 7. We will inform centres of any changes to this issue. The latest issue can be found on our website.

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Welcome

With a track record built over 30 years of learner success, BTEC Nationals are widely recognised by industry and higher education as the signature vocational qualification at Level 3. They provide progression to the workplace either directly or via study at a higher level. Proof comes from YouGov research, which shows that 62% of large companies have recruited employees with BTEC qualifications. What's more, well over 100,000 BTEC students apply to UK universities every year and their BTEC Nationals are accepted by over 150 UK universities and higher education institutes for relevant degree programmes either on their own or in combination with A Levels.

Why are BTECs so successful?

BTECs embody a fundamentally learner-centred approach to the curriculum, with a flexible, unit-based structure and knowledge applied in project-based assessments. They focus on the holistic development of the practical, interpersonal and thinking skills required to be able to succeed in employment and higher education.

When creating the BTEC Nationals in this suite, we worked with many employers, higher education providers, colleges and schools to ensure that their needs are met. Employers are looking for recruits with a thorough grounding in the latest industry requirements and work-ready skills such as teamwork. Higher education needs students who have experience of research, extended writing and meeting deadlines.

We have addressed these requirements with:

- a range of BTEC sizes, each with a clear purpose, so there is something to suit each learner's choice of study programme and progression plans
- refreshed content that is closely aligned with employers' and higher education needs for a skilled future workforce
- assessments and projects chosen to help learners progress to the next stage. This means some are set by you to meet local needs, while others are set and marked by Pearson so that there is a core of skills and understanding that is common to all learners. For example, a written test can be used to check that learners are confident in using technical knowledge to carry out a certain job.

We are providing a wealth of support, both resources and people, to ensure that learners and their teachers have the best possible experience during their course. See *Section 10* for details of the support we offer.

A word to learners

Today's BTEC Nationals are demanding, as you would expect of the most respected applied learning qualification in the UK. You will have to choose and complete a range of units, be organised, take some assessments that we will set and mark, and keep a portfolio of your assignments. But you can feel proud to achieve a BTEC because, whatever your plans in life – whether you decide to study further, go on to work or an apprenticeship, or set up your own business – your BTEC National will be your passport to success in the next stage of your life.

Good luck, and we hope you enjoy your course.

Collaborative development

Students completing their BTEC Nationals in Animal Management will be aiming to go on to employment, often via the stepping stone of higher education. It was, therefore, essential that we developed these qualifications in close collaboration with experts from professional bodies, businesses and universities, and with the providers who will be delivering the qualifications. To ensure that the content meets providers' needs and provides high-quality preparation for progression, we engaged experts. We are very grateful to all the university and further education lecturers, teachers, employers, professional body representatives and other individuals who have generously shared their time and expertise to help us develop these new qualifications.

Employers and professional bodies that have worked with us include:

British Veterinary Nursing Association

British Wildlife Centre

Heythrop Zoological Gardens Ltd

Mini Meadows

Norfolk Dog Training

The Llama Park.

In addition, universities, professional bodies and businesses have provided letters of support confirming that these qualifications meet their entry requirements. These letters can be viewed on our website.

Summary of Pearson BTEC Level 3 National Extended Certificate in Animal Management specification Issue 7 changes

Summary of changes made between the previous issue and this current issue	Page number
The last paragraph of the Qualification and unit content section has been amended to allow centres delivering the qualification above to alter the content to reflect the context of the country where it is being delivered.	Page 6
The External assessment section table has been amended for <i>Unit 3: Animal Welfare and Ethics</i> from 'The supervised assessment is 2 hours in a one week period timetabled by Pearson.' to 'The formal supervision takes place in a 2-hour session timetabled by Pearson.'	Page 12
In <i>Unit 3: Animal Welfare and Ethics</i> , reference to boarding and riding establishment and breeding and sale of dogs has been removed as a result of a change in animal licensing legislation.	Page 22

Summary of Pearson BTEC Level 3 National Extended Certificate in Animal Management specification Issue 6 changes

Summary of changes made between Issue 5 and Issue 6	Page number
The wording in Section 7 <i>Teacher/centre malpractice</i> has been updated to clarify suspension of certification in certain circumstances.	Page 82
The wording under Section 9 <i>Understanding the qualification grade</i> has been updated to clarify current practice in ensuring maintenance and consistency of qualification standards.	Page 86

If you need further information on these changes or what they mean, contact us via our website at: qualifications.pearson.com/en/support/contact-us.html.

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Introduction to BTEC National qualifications for the animal management sector

This specification contains the information you need to deliver the Pearson BTEC Level 3 National Extended Certificate in Animal Management. The specification signposts you to additional handbooks and policies. It includes all the units for this qualification.

This qualification is part of the suite of Animal Management qualifications offered by Pearson. In the suite there are qualifications that focus on different progression routes, allowing learners to choose the one best suited to their aspirations.

All qualifications in the suite share some common units and assessments, allowing learners some flexibility in moving between qualifications where they wish to select a more specific progression route. The qualification titles are given below.

Within this suite are BTEC National qualifications for post-16 learners wishing to specialise in a specific industry, occupation or occupational group. The qualifications give learners specialist knowledge and technical skills, enabling entry to an Apprenticeship or other employment, or progression to related higher education courses. Learners taking these qualifications must have a significant level of employer involvement in their programmes.

In the animal management sector these qualifications are:

Pearson BTEC Level 3 National Extended Diploma in Animal Management (1080 GLH) 603/3043/0

Pearson BTEC Level 3 National Diploma in Animal Management (720 GLH) 601/7523/0

Pearson BTEC Level 3 National Foundation Diploma in Animal Management (540 GLH) 601/7525/4

Pearson BTEC Level 3 National Extended Certificate in Animal Management (360 GLH) 601/7524/2.

This specification signposts all the other essential documents and support that you need as a centre in order to deliver, assess and administer the qualification, including the staff development required. A summary of all essential documents is given in *Section 7*. Information on how we can support you with this qualification is given in *Section 10*.

The information in this specification is correct at the time of publication.

Total Qualification Time

For all regulated qualifications, Pearson specifies a total number of hours that it is estimated learners will require to complete and show achievement for the qualification: this is the Total Qualification Time (TQT). Within TQT, Pearson identifies the number of Guided Learning Hours (GLH) that we estimate a centre delivering the qualification might provide. Guided learning means activities, such as lessons, tutorials, online instruction, supervised study and giving feedback on performance, that directly involve teachers and assessors in teaching, supervising and invigilating learners. Guided learning includes the time required for learners to complete external assessment under examination or supervised conditions.

In addition to guided learning, other required learning directed by teachers or assessors will include private study, preparation for assessment and undertaking assessment when not under supervision, such as preparatory reading, revision and independent research.

BTEC Nationals have been designed around the number of hours of guided learning expected. Each unit in the qualification has a GLH value of 60, 90 or 120. There is then a total GLH value for the qualification.

Each qualification has a TQT value. This may vary within sectors and across the suite depending on the nature of the units in each qualification and the expected time for other required learning.

The following table shows all the qualifications in this sector and their GLH and TQT values.

Qualifications, sizes and purposes at a glance

Title	Size and structure	Summary purpose
Pearson BTEC Level 3 National Extended Certificate in Animal Management	360 GLH (475 TQT) Equivalent in size to one A Level. Five units all of which are mandatory and one is external. Mandatory content (100%). External assessment (33%).	This qualification offers an engaging programme to support learners who want to pursue a career in an animal-related industry. It is intended as a Tech Level qualification. This size of qualification allows learners to study related and complementary qualifications alongside it, without duplication of content. It prepares learners for an Apprenticeship in animal management. When taken alongside further Level 3 qualifications, it supports access to a range of higher education courses in the animal management sector
Pearson BTEC Level 3 National Foundation Diploma in Animal Management	540 GLH (1065 TQT) Equivalent in size to one and half A Levels. Seven units of which six are mandatory and two are external. Mandatory content (89%). External assessment (44%).	This qualification is designed as a one-year, full-time course, or as part of a two-year, full-time study programme for learners who wish to take it alongside another area of contrasting study. It is intended as a Tech Level qualification and supports access to careers in the animal management sector. This qualification is primarily for learners who are intending to gain employment directly, or progress to an Apprenticeship or a higher level animal management qualification.
Pearson BTEC Level 3 National Diploma in Animal Management	720 GLH (1295 TQT) Equivalent in size to two A Levels. 10 units of which seven are mandatory and two are external. Mandatory content (75%). External assessment (33%).	This qualification is designed to be the substantive part of a 16–19 study programme for learners who want a strong core of sector study. It is intended as a Tech Level qualification and supports access to careers in the animal management sector. The qualification is a one-year, full-time course that is a comprehensive introduction to the sector, and is primarily for learners who are intending to gain employment directly, or progress to an Apprenticeship or a higher level animal management qualification.
Pearson BTEC Level 3 National Extended Diploma in Animal Management	1080 GLH (1770 TQT) Equivalent in size to three A Levels. 15 units of which eight are mandatory and three are external. Mandatory content (61%). External assessment (33%).	This qualification is a two-year, full-time course that specialises in the animal management sector. It is designed for learners who wish to focus their studies on this sector, with a firm intention of progressing to employment in one of the wide variety of roles available. The qualification is for post-16 learners and is intended as a Tech Level qualification.

Structures of the qualifications at a glance

This table shows all the units and the qualifications to which they contribute. The full structure for this Pearson BTEC Level 3 National in Animal Management is shown in *Section 2*. **You must refer to the full structure to select units and plan your programme.**

Key

	Unit assessed externally	M	Mandatory units	O	Optional units
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Unit (number and title)	Unit size (GLH)	Extended Certificate (360 GLH)	Foundation Diploma (540 GLH)	Diploma (720 GLH)	Extended Diploma (1080 GLH)
1 Animal Breeding and Genetics	120				M
2 Animal Biology	120		M	M	M
3 Animal Welfare and Ethics	120	M	M	M	M
4 Practical Animal Husbandry	60	M	M	M	M
5 Animal Behaviour	60	M	M	M	M
6 Animal Health and Diseases	60	M	M	M	M
7 Work Experience in the Animal Sector	60	M	M	M	M
8 Investigative Research Project	60			M	M
9 Practical Skills in Animal Science	60				O
10 Animal Metabolism	60				O
11 Advanced Animal Nutrition	60				O
12 Business Management in the Animal Sector	60		O	O	O
13 Animal Management in a Retail Environment	60		O	O	O
14 Animals in Boarding Establishments	60		O	O	O
15 Developing an Enterprise in the Animal Sector	60		O	O	O
16 Animal Grooming	60		O	O	O
17 Principles of Animal Nursing	60		O	O	O
18 Aquatic Animal Health and Husbandry	60		O	O	O
19 Farm Livestock Husbandry	60		O	O	O

continued overleaf

Unit (number and title)	Unit size (GLH)	Extended Certificate (360 GLH)	Foundation Diploma (540 GLH)	Diploma (720 GLH)	Extended Diploma (1080 GLH)
20 Human and Animal Interaction	60		0	0	0
21 Exotic Animal Husbandry	60		0	0	0
22 Practical Estate Planning, Construction and Maintenance	60		0	0	0
23 Zoological Animal Health & Husbandry	60		0	0	0
24 Wildlife Ecology and Conservation Management	60		0	0	0

Qualification and unit content

Pearson has developed the content of the new BTEC Nationals in collaboration with employers and representatives from higher education and relevant professional bodies. In this way, we have ensured that content is up to date and that it includes the knowledge, understanding, skills and attributes required in the sector.

Each qualification in the suite has its own purpose. The mandatory content provides a balance of breadth and depth ensuring that all learners have a strong basis for developing technical skills required in the sector. Learners are then offered the opportunity to develop a range of technical skills and attributes expected by employers with some opportunity to select between optional units where a degree of choice for individual learners to study content relevant to their own progression choices is appropriate. It is expected that learners will apply their learning in relevant employment and sector contexts during delivery and have opportunities to engage meaningfully with employers. The proportion of mandatory content ensures that all learners are following a coherent programme of study and acquiring the knowledge, understanding and skills that will be recognised and valued. Learners are expected to show achievement across mandatory units as detailed in *Section 2*.

BTEC Nationals have always required applied learning that brings together knowledge and understanding (the cognitive domain) with practical and technical skills (the psychomotor domain). This is achieved through learners performing vocational tasks that encourage the development of appropriate vocational behaviours (the affective domain) and transferable skills. Transferable skills are those such as communication, teamwork, planning and completing tasks to high standards, which are valued in both the workplace and in higher education.

Our approach provides rigour and balance, and promotes the ability to apply learning immediately in new contexts. Further details can be found in *Section 2*.

Centres should ensure that delivery of content is kept up to date. Some of the units within the specification may contain references to legislation, policies, regulations and organisations, which may not be applicable in the country you deliver this qualification in (if teaching outside of England), or which may have gone out-of-date during the lifespan of the specification. In these instances, it is possible to substitute such references with ones that are current and applicable in the country you deliver subject to confirmation by your Standards Verifier.

Assessment

Assessment is specifically designed to fit the purpose and objective of the qualification. It includes a range of assessment types and styles suited to vocational qualifications in the sector. There are three main forms of assessment that you need to be aware of: external, internal and synoptic.

Externally-assessed units

Each external assessment for a BTEC National is linked to a specific unit. All of the units developed for external assessment are of 90 or 120 GLH to allow learners to demonstrate breadth and depth of achievement. Each assessment is taken under specified conditions, then marked by Pearson and a grade awarded. Learners are permitted to resit external assessments during their programme. You should refer to our website for current policy information on permitted retakes.

The styles of external assessment used for qualifications in the Animal Management suite are:

- examinations – all learners take the same assessment at the same time, normally with a written outcome
- set tasks – learners take the assessment during a defined window and demonstrate understanding through completion of a vocational task.

Some external assessments include a period of preparation using set information. External assessments are available twice a year. For detailed information on the external assessments please see the table in *Section 2*. For further information on preparing for external assessment see *Section 5*.

Internally-assessed units

Most units in the sector are internally assessed and subject to external standards verification. This means that you set and assess the assignments that provide the final summative assessment of each unit, using the examples and support that Pearson provides. Before you assess you will need to become an approved centre, if you are not one already. You will need to prepare to assess using the guidance in *Section 6*.

In line with the requirements and guidance for internal assessment, you select the most appropriate assessment styles according to the learning set out in the unit. This ensures that learners are assessed using a variety of styles to help them develop a broad range of transferable skills. Learners could be given opportunities to:

- demonstrate practical and technical skills using appropriate equipment and processes
- complete realistic tasks to meet specific briefs or particular purposes
- write up the findings of their own research
- use case studies to explore complex or unfamiliar situations
- carry out projects for which they have choice over the direction and outcomes.

You will make grading decisions based on the requirements and supporting guidance given in the units. Learners may not make repeated submissions of assignment evidence. For further information see *Section 6*.

Synoptic assessment

Synoptic assessment requires learners to demonstrate that they can identify and use effectively, in an integrated way, an appropriate selection of skills, techniques, concepts, theories and knowledge from across the whole sector as relevant to a key task. BTEC learning has always encouraged learners to apply their learning in realistic contexts using scenarios and realistic activities that will permit learners to draw on and apply their learning. For these qualifications we have formally identified units that contain a synoptic assessment task. Synoptic assessment must take place after the teaching and learning of other mandatory units in order for learners to be able to draw from the full range of content. The synoptic assessment gives learners an opportunity to independently select and apply learning from across their programmes in the completion of a vocational task. Synoptic tasks may be in internally- or externally-assessed units. The particular unit(s) that contain(s) the synoptic tasks for this qualification is/are shown in the structure in *Section 2*.

Language of assessment

Assessment of the internal and external units for these qualifications will be available in English. All learner work must be in English. A learner taking the qualifications may be assessed in British or Irish Sign Language where it is permitted for the purpose of reasonable adjustment. For information on reasonable adjustments see *Section 7*.

Grading for units and qualifications

Achievement in the qualification requires a demonstration of depth of study in each unit, assured acquisition of a range of practical skills required for employment or progression to higher education, and successful development of transferable skills. Learners achieving a qualification will have achieved across mandatory units, including external and synoptic assessment.

Units are assessed using a grading scale of Distinction (D), Merit (M), Pass (P), Near Pass (N) and Unclassified (U). The grade of Near Pass is used for externally-assessed units only. All mandatory and optional units contribute proportionately to the overall qualification grade, for example a unit of 120 GLH will contribute double that of a 60 GLH unit.

Qualifications in the suite are graded using a scale of P to D*, **or** PP to D*D*, **or** PPP to D*D*D*. Please see *Section 9* for more details. The relationship between qualification grading scales and unit grades will be subject to regular review as part of Pearson's standards monitoring processes on the basis of learner performance and in consultation with key users of the qualification.

UCAS Tariff points

The BTEC Nationals attract UCAS points. Please go to the UCAS website for full details of the points allocated.

1 Qualification purpose

Pearson BTEC Level 3 National Extended Certificate in Animal Management

In this section you will find information on the purpose of this qualification and how its design meets that purpose through the qualification objective and structure. We publish a full 'Statement of Purpose' for each qualification on our website. These statements are designed to guide you and potential learners to make the most appropriate choice about the size of qualification suitable at recruitment.

Who is this qualification for?

The Pearson BTEC National Extended Certificate in Animal Management offers an engaging qualification to support learners who want to pursue a career in an animal-related industry. It is intended as a Tech Level qualification and is equivalent in size to one A Level. The qualification is designed to meet the Technical Baccalaureate (Tech Bacc) measure when studied alongside Level 3 mathematics and the Extended Project Qualification (EPQ). This size of qualification allows learners to study related and complementary qualifications alongside it, without duplication of content. It prepares learners for an Apprenticeship in animal management. When taken alongside further Level 3 qualifications, it also supports access to a range of higher education courses in the animal management sector. It is intended as a Tech Level, and as such is designed to meet the Tech Bacc measure when studied alongside Level 3 mathematics and the Extended Project Qualification (EPQ).

What does this qualification cover?

The content of this qualification has been developed in consultation with employers and professional bodies to ensure that the objective of the qualification is appropriate for learners interested in working in the sector. Higher education representatives have also been involved to ensure it supports progression to higher study.

All the content of the qualification is mandatory, learners will study the following units:

- Unit 3: Animal Welfare and Ethics
- Unit 4: Practical Animal Husbandry
- Unit 5: Animal Behaviour
- Unit 6: Animal Health and Diseases
- Unit 7: Work Experience in the Animal Sector.

Learners taking this qualification will be required to engage with sector employers as part of their course, including 75 hours of work experience with an employer in the sector. This gives learners the opportunity to develop practical skills in preparation for employment.

Learners will have the opportunity to work with farm livestock, companion animals, exotic animals, zoo animals and British wildlife to prepare them for sector-specialist areas.

What could this qualification lead to?

This qualification is primarily designed to support progression to employment. Learners completing this qualification could access entry-level roles in areas such as:

- kennel or cattery assistant
- animal care assistant in animal businesses, charities or wildlife trusts
- retail assistant in pet or animal-related retail establishments
- assistant to an animal trainer, e.g. trainer of assistance dogs for the disabled
- animal technician in animal centres.

If this qualification is taken alongside additional Level 3 qualifications, such as a BTEC Business or Retail qualification or A Levels, learners would be prepared for a wide range of jobs, including administrative, retail and registrar roles. If this qualification is taken alongside a complementary specialist qualification, for example dog grooming, it will support entry to dog grooming assistant and trainee roles.

This qualification is generally taken alongside other Level 3 qualifications as part of a two-year programme of learning, which means that learners are also able to choose to progress to a range of specialist degree programmes. The qualification carries UCAS points and is recognised by higher education providers as contributing to meeting admission requirements for many relevant courses.

Taken alongside A Levels in Biology and Chemistry, or a BTEC Diploma in the relevant field of study, such as Applied Science, it could lead to a:

- BSc (Hons) in Animal Management and Welfare
- BSc (Hons) in Applied Animal Studies
- BSc (Hons) in Zoology
- BSc (Hons) in Animal Science
- BSc (Hons) Animal Science and Health.

Taken alongside a BTEC Diploma in Creative Media Production, it could lead to a BA (Hons) in Film and Television Production for learners who have an interest in making wildlife films.

Learners should always check the entry requirements for degree programmes with specific higher education providers.

How does the qualification provide employability and technical skills?

In the BTEC National units there are opportunities during the teaching and learning phase to give learners practice in developing employability skills. Where employability skills are referred to in this specification, we are generally referring to skills in the following three main categories:

- **cognitive and problem-solving skills:** using critical thinking, approaching non-routine problems applying expert and creative solutions, using systems and technology
- **interpersonal skills:** communicating, working collaboratively, negotiating and influencing, self-presentation
- **intrapersonal skills:** self-management, adaptability and resilience, self-monitoring and development.

There are also specific requirements in some units for assessment of these skills where relevant, for example, where learners are required to undertake real or simulated activities.

Many of the mandatory and specified optional units encourage learners to develop the specific practical skills that employers are looking for.

How does the qualification provide transferable knowledge and skills for higher education?

All BTEC Nationals provide transferable knowledge and skills that prepare learners for progression to university or other higher study either immediately or for career progression. The transferable skills that universities value include:

- the ability to learn independently
- the ability to research actively and methodically
- being able to give presentations and being active group members.

BTEC learners can also benefit from opportunities for deep learning where they are able to make connections among units and select areas of interest for detailed study. BTEC Nationals provide a vocational context in which learners can become prepared for life-long learning through:

- reading technical texts
- effective writing
- analytical skills
- creative development
- preparation for assessment methods used in degrees.

2 Structure

Qualification structure

Pearson BTEC Level 3 National Extended Certificate in Animal Management

Mandatory units

There are five mandatory units, four internal and one external. Learners must complete and achieve at Near Pass grade or above the mandatory external unit. Learners must complete and achieve a Pass or above in the mandatory internal unit in group A.

Learners must complete all mandatory internal units in group B. Learners must achieve at pass grade or above in at least two units in group B.

Optional units

There are no optional units.

Pearson BTEC Level 3 National Extended Certificate in Animal Management				
Unit number	Unit title	GLH	Type	How assessed
Mandatory units group A – learners complete and achieve all units				
3	Animal Welfare and Ethics	120	Mandatory and Synoptic	External
4	Practical Animal Husbandry	60	Mandatory	Internal
Mandatory units group B – learners complete all units				
5	Animal Behaviour	60	Mandatory	Internal
6	Animal Health and Diseases	60	Mandatory	Internal
7	Work Experience in the Animal Sector	60	Mandatory	Internal

External assessment

This is a summary of the type and availability of external assessment, which is of units making up 33% of the total qualification GLH. See *Section 5* and the units and sample assessment materials for more information.

Unit	Type	Availability
Unit 3: Animal Welfare and Ethics	<ul style="list-style-type: none">• A task set and marked by Pearson and completed under supervised conditions.• Prior to the supervised assessment, learners will be provided with a scenario to research in approximately 3 hours in a two week period timetabled by Pearson.• The formal supervision takes place in a 2-hour session timetabled by Pearson.• Written submission.• 60 marks.	Dec/Jan and May/June First assessment May/June 2017

Synoptic assessment

The mandatory synoptic assessment requires learners to apply learning from across the qualification to the completion of a defined vocational task. Within the assessment for *Unit 3: Animal Welfare and Ethics*, learners complete welfare appraisals and subsequent recommendations relating to given animal situations, drawing on underpinning values, principles, and legislative requirements applied throughout working practices in the sector. Learners complete the task using knowledge and understanding from their studies of the sector and apply both transferable and specialist knowledge and skills.

In delivering the unit you need to encourage learners to draw on their broader learning so they will be prepared for the assessment.

Employer involvement in assessment and delivery

You need to ensure that learners on this qualification have a significant level of employer involvement in programme delivery or assessment. See *Section 4* for more information.

3 Units

Understanding your units

The units in this specification set out our expectations of assessment in a way that helps you to prepare your learners for assessment. The units help you to undertake assessment and quality assurance effectively.

Each unit in the specification is set out in a similar way. There are two types of unit format:

- internal units
- external units.

This section explains how the units work. It is important that all teachers, assessors, internal verifiers and other staff responsible for the programme review this section.

Internal units

Section	Explanation
Unit number	The number is in a sequence in the sector. Numbers may not be sequential for an individual qualification.
Unit title	This is the formal title that we always use and it appears on certificates.
Level	All units are at Level 3 on the national framework.
Unit type	This shows if the unit is internal or external only. See structure information in <i>Section 2</i> for full details.
GLH	Units may have a GLH value of 120, 90 or 60. This indicates the numbers of hours of teaching, directed activity and assessment expected. It also shows the weighting of the unit in the final qualification grade.
Unit in brief	A brief formal statement on the content of the unit that is helpful in understanding its role in the qualification. You can use this in summary documents, brochures etc.
Unit introduction	This is designed with learners in mind. It indicates why the unit is important, how learning is structured, and how learning might be applied when progressing to employment or higher education.
Learning aims	These help to define the scope, style and depth of learning of the unit. You can see where learners should be learning standard requirements ('understand') or where they should be actively researching ('investigate'). You can find out more about the verbs we use in learning aims in <i>Appendix 2</i> .
Summary of unit	This new section helps teachers to see at a glance the main content areas against the learning aims and the structure of the assessment. The content areas and structure of assessment are required. The forms of evidence given are suitable to fulfil the requirements.
Content	This section sets out the required teaching content of the unit. Content is compulsory except when shown as 'e.g.'. Learners should be asked to complete summative assessment only after the teaching content for the unit or learning aim(s) has been covered.

Section	Explanation
Assessment criteria	<p>Each learning aim has Pass and Merit criteria. Each assignment has at least one Distinction criterion.</p> <p>A full glossary of terms used is given in <i>Appendix 2</i>. All assessors need to understand our expectations of the terms used.</p> <p>Distinction criteria represent outstanding performance in the unit. Some criteria require learners to draw together learning from across the learning aims.</p>
Essential information for assignments	<p>This shows the maximum number of assignments that may be used for the unit to allow for effective summative assessment, and how the assessment criteria should be used to assess performance.</p>
Further information for teachers and assessors	<p>The section gives you information to support the implementation of assessment. It is important that this is used carefully alongside the assessment criteria.</p>
Resource requirements	<p>Any specific resources that you need to be able to teach and assess are listed in this section. For information on support resources see <i>Section 10</i>.</p>
Essential information for assessment decisions	<p>This information gives guidance for each learning aim or assignment of the expectations for Pass, Merit and Distinction standard. This section contains examples and essential clarification.</p>
Links to other units	<p>This section shows you the main relationship among units. This section can help you to structure your programme and make best use of materials and resources.</p>
Employer involvement	<p>This section gives you information on the units that can be used to give learners involvement with employers. It will help you to identify the kind of involvement that is likely to be successful.</p>

External units

Section	Explanation
Unit number	The number is in a sequence in the sector. Numbers may not be sequential for an individual qualification.
Unit title	This is the formal title that we always use and it appears on certificates.
Level	All units are at Level 3 on the national framework.
Unit type	This shows if the unit is internal or external only. See structure information in <i>Section 2</i> for full details.
GLH	Units may have a GLH value of 120, 90 or 60. This indicates the numbers of hours of teaching, directed activity and assessment expected. It also shows the weighting of the unit in the final qualification grade.
Unit in brief	A brief formal statement on the content of the unit.
Unit introduction	This is designed with learners in mind. It indicates why the unit is important, how learning is structured, and how learning might be applied when progressing to employment or higher education.
Summary of assessment	This sets out the type of external assessment used and the way in which it is used to assess achievement.
Assessment outcomes	These show the hierarchy of knowledge, understanding, skills and behaviours that are assessed. Includes information on how this hierarchy relates to command terms in sample assessment materials (SAMs).
Essential content	For external units all the content is obligatory, the depth of content is indicated in the assessment outcomes and sample assessment materials (SAMs). The content will be sampled through the external assessment over time, using the variety of questions or tasks shown.
Grade descriptors	We use grading descriptors when making judgements on grade boundaries. You can use them to understand what we expect to see from learners at particular grades.
Key terms typically used in assessment	These definitions will help you analyse requirements and prepare learners for assessment.
Resources	Any specific resources that you need to be able to teach and assess are listed in this section. For information on support resources see <i>Section 10</i> .
Links to other units	This section shows the main relationship among units. This section can help you to structure your programme and make best use of materials and resources.
Employer involvement	This section gives you information on the units that can be used to give learners involvement with employers. It will help you to identify the kind of involvement that is likely to be successful.

Index of units

This section contains all the units developed for this qualification. Please refer to *pages 4–5* to check which units are available in all qualifications in the animal management sector.

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Unit 3: Animal Welfare and Ethics

Level: **3**

Unit type: **External**

Guided learning hours: **120**

Unit in brief

Learners study the ethics, regulations, legislation and practices associated with animal welfare in animal-related industries.

Unit introduction

When working with animals in any sector, ethical issues are raised about the use of animals for human purposes. These issues can inform the way society perceives animals and this can lead to passionate debate by a wide range of organisations and individuals. The understanding and application of ethical decision making allows people to work effectively within the relevant legislation, while at the same time understanding how personal views can affect interactions between the general public and those whose livelihoods rely on the use of animals. Providing and maintaining high levels of welfare are key to the wellbeing of animals and the productivity of working animals.

In this unit, you will develop an appreciation of the concepts and constructs relating to issues of animal welfare and ethics in the animal industry. You will learn about the laws and regulations that govern the animal industry, which aim to ensure the safety and welfare of animals and the people who come into contact with them. You will learn how to perform an appraisal of a situation, focusing on welfare and regulation, and create a prioritised action plan for any areas of improvement identified. To complete the assessment task within this unit, you will need to draw on your learning from across your programme.

The knowledge and skills gained in this unit are fundamental to any role in the animal sector where you are working directly with animals, for example zoos, farms or pet shops, or those concerned specifically with animal welfare, for example animal charities or welfare organisations. The unit will provide you with a sound basis for further study in the animal sector.

Summary of assessment

This unit is assessed through a task set and marked by Pearson, consisting of a Part A and a Part B.

For Part A, learners will be given information relating to a specific animal industry context in order to carry out preparatory monitored research. Learners are expected to spend three hours on this research.

For Part B, learners will complete the set task using their preparatory research. The task will contain a number of activities enabling learners to demonstrate their knowledge and understanding of animal welfare and ethics.

Learners will take Part B under supervised conditions in a single three-hour session timetabled by Pearson.

The total number of marks for the task is 60.

The assessment availability is December/January and May/June each year.

Sample assessment materials will be available to help centres prepare for assessment.

Assessment outcomes

AO1 Demonstrate knowledge and understanding of animal welfare concepts, ethical approaches, animal welfare legislation and welfare requirements

AO2 Apply knowledge and understanding of animal welfare concepts, ethical approaches, compliance with animal welfare legislation and meeting welfare requirements in context

AO3 Analyse and evaluate information and data relating to the welfare of selected animals, making informed judgements about welfare and ethical issues and recommendations to address these issues

AO4 Be able to conduct a welfare appraisal in context and make recommendations for improvements with appropriate justification

Essential content

The essential content is set out under content areas. Learners must cover all specified content before the assessment.

A Ethical issues in animal welfare

A1 Ethical approaches

The ethical frameworks which inform the actions of individuals, organisations and government towards animal use and welfare, and how these can be explored in order to assist ethical thinking and decision making.

- Ethics as standards of human behaviour in different situations – how they are separate from or informed by:
 - accepted social practices
 - personal feelings
 - religion
 - legislation
 - science.
- The purpose of ethical frameworks when considering animal welfare, to include the definition of animal welfare.
- Definitions of the following ethical theories and their relation to the use of animals:
 - consequentialist, to include utilitarian, contractarian and a respect for nature
 - deontological, to include animal rights and relational importance
 - environmental, to include human-centred, sentience-centred and environment-centred.
- Exploration of frameworks for ethical decision making where animals are involved, including:
 - identification of the ethical issues and stakeholders in a given situation, reviewing evidence, evaluating options in light of ethical theories and coming to considered conclusions where appropriate
 - construction of ethical matrices to assist in decision making.
- Consumer ethics:
 - the effect of anthropomorphism and speciesism in personal reactions to animal welfare
 - the differences between activism and extremism, including the objectives and impacts of animal-based charities and organisations.

A2 Ethical issues and legislation in the animal industry

- Learners should be familiar with the ethical considerations and impacts of legislation across sectors of the animal industry, including:
 - keeping animals in collections, including zoos
 - animals as pets
 - animals as entertainment, including circuses, racing
 - regulated and unregulated breeding and sale of animals for pets and showing
 - animals in experimentation – drug trials, genetic manipulation, cosmetic trialling
 - farming of animals for food, fur or other products; fate of unwanted animals; religious and cultural attitudes
 - methods of killing, to include captive bolt, stunning, sticking, controlled atmosphere; religious and cultural attitudes
 - research into pain perception to inform animal welfare
 - veterinary intervention (or lack thereof) in illness and trauma
 - wildlife and conservation
 - welfare of animals in science and education.

- Underpinning concepts and terminology found in animal welfare legislation, related to the treatment of both wild and captive animals:
 - definitions of animal welfare
 - distinctions between EU regulations, directives, decisions and recommendations
 - the 'Five Freedoms' as a framework for assessing animal welfare, as related to the five ideal states of welfare grounded in the Brambell Report 1965; farm animal welfare codes of practice: the differences between these and legislation
 - the impact of sentience and self-awareness in the development of animal welfare legislation
 - the purposes of and differences between euthanasia, culling and killing in relation to the use of animals in wild, domestic and commercial settings
 - the role of government departments in developing animal welfare legislation
 - the role of local authorities in implementing animal welfare legislation
 - the need for policies and procedures in organisations
 - definition and understanding of terms in legislation:
 - prevention of harm
 - duty of care
 - an act of his, or failure of his to act.
- Legislative areas relating to animal welfare, to include inspection and monitoring, powers of enforcement and penalties for contravening current legislation:
 - use of animals for performance or exhibition
 - sale of animals as pets
 - control of dogs and dangerous dogs
 - dangerous wild animals
 - national and international trade in flora or fauna
 - transportation of animals
 - farmed animals
 - killing of animals
 - wildlife and conservation.

B Welfare appraisals for assessing the health and wellbeing of animals

B1 Acceptable conditions for animal health and welfare

Awareness of current recommendations to promote and maintain the welfare of different species of animals in different situations. One animal from each of the animal groups should be examined in detail for each of the following.

- The need for a suitable environment:
 - size of accommodation; stocking density
 - type and location of accommodation, including proximity to other animals (away from natural predators)
 - access to water and methods of delivery, including open sources and contained delivery systems; species preferences
 - materials used in accommodation, including ease of cleaning
 - temperature, to include indoor and outdoor housing, in relation to both endothermic and exothermic animals
 - humidity, with particular relevance to amphibians and reptiles
 - substrate, including species preferences, available types, pros and cons of each.

- The need for a suitable diet:
 - major nutrients that make up an animal's diet (carbohydrates, proteins, lipids, vitamins and minerals, and water) and their functions in the body
 - specific requirements of a species, to include calcium in reptiles, taurine in cats, vitamin C in guinea pigs
 - dietary sources of major nutrients (carbohydrates, proteins, lipids, water, vitamins and minerals)
 - comparison of different feed types from the perspective of the animal (palatability, nutritional value) and the human (cost, storage), including concentrate/forage ration formulation in farm livestock
 - importance of supplying a balanced diet to captive or domestic animals and identification of common nutritional problems (obesity, diarrhoea, diabetes, deficiencies and toxicities) and their prevention and treatment
 - specific requirements for ruminant animals (ample grazing time, pasture quality) and hindgut fermenters (caecotroph consumption)
 - dietary requirements during different life stages and work level (neonates, juveniles, adult, working and senior animals)
 - importance of food as environmental enrichment.
- The need to be able to exhibit normal behaviour patterns:
 - normal behaviours expected (grazing, digging, basking, grooming, hiding)
 - feeding, including foraging, prey capture, selective grazing, rooting
 - predator avoidance, for example alarm calls in meerkats
 - sleep/wake cycles, to include nocturnal, diurnal and crepuscular species
 - grooming/allogrooming, including intraspecific, interspecific and by humans
 - defence behaviours, including hiding
 - courtship and mating where appropriate, including ferrets, sheep and captive breeding schemes.
- The need to be housed with, or apart, from other animals:
 - categories of animals according to their type of sociality:
 - solitary (tigers, tarantulas, some hamsters)
 - eusocial (hymenoptera, naked mole rats)
 - presocial (canine, avian and primate examples)
 - common social groupings (aggregation, survival, mating, colonial, unisexual, clonal).
- The need to be protected from pain, suffering, injury and disease:
 - exercise requirements in relation to life stage and health status
 - preventative care and treatments appropriate, for example species from each of the animal groups, including parasite control, regular veterinary check-ups, vaccinations.
- Use of environmental enrichment to improve animal welfare with examples, including feeding captive big cats, toys for pet dogs, methods for captive parrot species that allow them to fully utilise their beak and claws.

B2 Animal welfare appraisals

The requirement for carrying out appraisals of animal welfare in different settings; welfare indicators and the use of measurement techniques/methods in assessment of animal welfare against personal and organisational objectives.

- Regularity, frequency and purposes of welfare appraisals appropriate to different settings, to include those applicable to:
 - pets
 - stock on farms and in abattoirs
 - zoos and wild animals
 - laboratory animals
 - service/assistance animals.

- Measuring techniques used to assess welfare:
 - traffic light system where each need is graded red/amber/green
 - animal needs indexes as a quantitative measure of the five welfare needs, including the contribution of these to assurance schemes in the food industry
 - the difference between input (resource) and output (animal) measures
 - assessment by health, physiology (cortisol analysis), behaviour, genetic selection and measuring pain and stress in animals
 - use of ethograms to create an activity budget
 - indicators of animal welfare, to include:
 - visual observation of stress behaviours (including example behaviours in example animals from each animal group)
 - body condition scoring
 - indicators of health (visual health checks, including eyes, body, behaviour, temperature and other indicators appropriate to species).
- The role of the inspector in the welfare appraisal process:
 - approach to appraisal based on role of the inspector and the purpose of appraisal
 - potential alterations to appraisal structure based on situation and objectives
 - subjectivity and objectivity in completing welfare appraisals and assessing levels of animal welfare
 - production of reports and prioritised action plans (with timescales as appropriate) from welfare appraisals, linked to industry standards.

Grade descriptors

To achieve a grade, learners are expected to demonstrate these attributes across the essential content of the unit. The principle of best fit will apply in awarding grades.

Level 3 Pass

Learners will demonstrate knowledge and understanding of welfare and ethical issues through an appraisal of a setting in context, supported by wider independent research. They will propose and justify feasible solutions to identified problems, showing an understanding of legislative requirements where contraventions are present across the five welfare needs. Learners will show that they can prioritise identified issues, supported by an awareness of legislative and regulatory impacts if action is not taken. They will demonstrate an understanding of ethical theories and apply these in context.

Level 3 Distinction

Learners will demonstrate a thorough knowledge and understanding of welfare and ethical issues through an appraisal of a setting in context, supported throughout by the use of independent research. They will fully justify recommended solutions to identified problems based on thorough analysis of the scenario information. Learners show a comprehensive understanding of legislative requirements in the context of the five welfare needs, including detailed coverage of contraventions and related penalties. Learners can justify the priority given to identified issues, and demonstrate a thorough understanding of the legislative and regulatory impacts if action is not taken. They will demonstrate a detailed understanding of ethical theories and apply these in context.

Key terms typically used in assessment

The following table shows the key terms that will be used consistently by Pearson in our assessments to ensure learners are rewarded for demonstrating the necessary skills.

Please note: the list below will not necessarily be used in every paper/session and is provided for guidance only.

Command or term	Definition
Appraisal	A formal, professional procedure by which the welfare of animals can be assessed.
Ethical issues	Issues concerning moral or professional judgements made in relation to animals.
Scenario	A given situation replicating one that might reasonably be found in the sector.
Welfare issues	Issues concerning the health and wellbeing of animals.

Links to other units

This assessment for this unit should draw on knowledge, understanding and skills developed from:

- Unit 1: Animal Breeding and Genetics
- Unit 2: Animal Biology
- Unit 4: Practical Animal Husbandry
- Unit 5: Animal Behaviour
- Unit 6: Animal Health and Diseases
- Unit 7: Work Experience in the Animal Sector
- Unit 8: Investigative Research Project
- Unit 9: Practical Skills in Animal Science
- Unit 10: Animal Metabolism
- Unit 11: Advanced Animal Nutrition.

Employer involvement

This unit would benefit from employer involvement in the form of:

- guest speakers
- technical workshops involving staff from local animal businesses
- opportunities for observation of organisational/business application during work experience
- support from local animal business staff as mentors.

Unit 4: Practical Animal Husbandry

Level: **3**

Unit type: **Internal**

Guided learning hours: **60**

Unit in brief

Learners explore the skills needed to manage high standards of health and welfare for a variety of animals by meeting their essential needs.

Unit introduction

Understanding the fundamental needs of an animal is essential to being able to care for them to a high standard, whether you are an animal keeper at a zoo, working in a veterinary environment or working in agriculture. High-quality care includes appropriate handling and restraining techniques, completion of regular health checks, and meeting animal accommodation and dietary needs.

In this broadly practical unit you will explore different handling techniques for a variety of species, learning which techniques are appropriate in different situations. You will explore accommodation design and maintenance, and learn how to assess and maintain the accommodation and surrounding environment for different animals that supports their optimum health and welfare. You will be able to implement feeding, exercise and grooming regimes as appropriate to different animals, and perform routine visual health checks that are necessary to maintain the health and welfare of the animals you manage.

This unit will prepare you for a range of employment or apprenticeship opportunities in the animal sector, including the roles of animal technician, pet shop assistant, or veterinary care assistant. The unit will also assist you in progressing to further studies of animal welfare, management or science in higher education.

Learning aims

In this unit you will:

- A** Explore safe animal handling techniques for different animals and situations
- B** Explore the preparation and maintenance of accommodation and environments to meet the needs of different animals
- C** Undertake animal husbandry practices to support the health and welfare of animals.

Summary of unit

Learning aim	Key content areas	Recommended assessment approach
A Explore safe animal handling techniques for different animals and situations	A1 Working safely with animals A2 Handling, moving and restraining animals	A portfolio of evidence demonstrating individual husbandry of animals from at least three of the following animal groups: mammal, avian, herptile, invertebrate.
B Explore the preparation and maintenance of accommodation and environments to meet the needs of different animals	B1 Types of accommodation and construction materials B2 Assessment of accommodation and environment B3 Maintenance of animal accommodation	A report based on the activities carried out and best practice in different animal settings supported by witness statements.
C Undertake animal husbandry practices to support the health and welfare of animals	C1 Feeding and watering animals C2 Grooming and bathing needs C3 Providing opportunities for exercise C4 Health checks	

Content

Learning aim A: Explore safe animal handling techniques for different animals and situations

A1 Working safely with animals

- Risks and hazards of working with animals, including:
 - definition of risk (likelihood of harm occurring) and hazard (potential to cause harm)
 - importance of risk assessments and how to carry them out
 - high-risk groups, e.g. increased risks to pregnant women and people with low immunity
 - variety of hazards including bites/scratches, allergens, zoonoses, stings, poison, physical injury
- Safe working practices:
 - defining hazards in a real or simulated situation
 - defining risks as to the severity of any hazard, normally calculated as a risk rating of likelihood multiplied by severity
 - putting control measures in place to reduce risk
 - use of personal protective equipment (PPE), including gauntlets, gloves, masks, steel toe capped shoes
 - five steps of a risk assessment (Health and Safety Executive)
 - identify the hazards
 - decide who might be harmed and how
 - evaluate the risks and decide on precautions
 - record significant findings
 - review the assessment and update if necessary
 - practical completion of risk assessments.

A2 Handling, moving and restraining animals

- Reasons for handling, moving and restraining animals:
 - grooming, shearing, transport to vets, health checking, administering medication, breeding, capture, sexing, (force) feeding, training, cleaning accommodation, change of accommodation.
- Considerations as to whether handling animals is appropriate:
 - health issues, aggression, stress.
- Methods and equipment used for handling, moving and restraining animals:
 - methods of approach – calmly, confidently, correct level for animal
 - methods of handling or restraint as appropriate – herding dogs, pig board, mobile/permanent handling systems, lead ropes, halters, nets, crates, boxes, collar and lead, snake hooks, crush cages, catchpole, pillowcase/towel/cat bag, muzzle, scruff, claw, full-body support, tipping, manual herding, using specially designed fixtures e.g. lockout doors.

Learning aim B: Explore the preparation and maintenance of accommodation and environments to meet the needs of different animals

B1 Types of accommodation and construction materials

- Factors influencing accommodation design to meet animal welfare needs, and practical implications.
- Types of accommodation and materials used for specified animal species to meet animal welfare needs, including:
 - vivarium, aquarium and terrarium design/construction for housing reptiles, fish and amphibians
 - outdoor accommodation, e.g. kennel, barn, coops
 - hutch, cage and aviary design/construction for housing small mammals and birds
 - materials used in different types of accommodation, e.g. bricks, wood, mesh, glass, plastic, polypropylene, wire netting, animal-safe paints, locks and latches
 - consideration of suitable construction materials used for different animals.

B2 Assessment of accommodation and environment

- Assessing suitability of accommodation to meet animal welfare and human safety needs, to include temporary animal accommodation when cleaning or maintaining main habitat:
 - dimensions of available space, e.g. height consideration for arboreal animals
 - structural integrity
 - access to sufficient suitable food, water and shelter
 - temperature and humidity
 - stocking density
 - enrichment
 - cleanliness
 - health and safety of animals and humans.
- Establishing an animal in a new or changed environment, e.g. after cleaning or repair, including frequent early checks to ensure the animal is settled and not exhibiting signs of stress or discomfort.

B3 Maintenance of animal accommodation

- Selection of environmental materials to meet welfare needs:
 - materials used for substrate/bedding, including wood shavings, hay, straw, gravel, peat, peat-free compost, non-printed paper
 - suitability and safety of materials used in animal accommodation for specific species, e.g. no dust for rats (respiratory issues), no straw (unless chopped) for guinea pigs (urine burns).
- Practical maintenance of animal accommodation:
 - preparation to include cleaning, hazard spotting, repair and maintenance where needed, reporting of problems
 - spot cleaning and full cleaning, including frequency for different animals
 - animal-safe products, e.g. disinfectants, antibacterial cleaners, saline solution
 - working as part of an accommodation maintenance team in different roles, including team leader, team member, independent worker
 - features of team roles, including levels of responsibility, typical duties, e.g. recording and monitoring of accommodation maintenance.

Learning aim C: Undertake animal husbandry practices to support the health and welfare of animals

C1 Feeding and watering animals

- Planning:
 - dietary needs, to include selection of different food for different types of animals, amount of food, timing and frequency, life-stage feeding for young, old, sick, pregnant, nursing and working animals
 - ways of presenting food, including the equipment needed – bowls, bottles, drinkers, hay rack, buckets, feeders; material of different feeding equipment (plastic, stainless steel, ceramic); alternative ways to present food to introduce enrichment including feeding/treat balls, tubes, sacks; group and individual feeding.
- Implementation, recording and monitoring feeding and watering plans:
 - implementation and following of feeding and watering plans
 - record keeping and monitoring amount of food and water consumed, type of food eaten (selective feeders), frequency of feeding and watering
 - practical feeding and watering of animals from different groups.
- Review and adapt animal diet based on weight, body condition, life stage and health status.

C2 Grooming and bathing needs

- Maintaining the extremities and outer surfaces of animals, including the practical methods and equipment used.
- Reasons for bathing and grooming as appropriate to species.
- Provision of:
 - natural bathing opportunities, e.g. dust/sand baths, water baths, humidity chambers
 - coat care, e.g. brushing, shearing, preparing for show
 - foot and hoof care, e.g. hoof picking, hoof trimming, nail trimming
 - other routine care tasks, e.g. chelonian bathing, reptile/amphibian misting, beak/nail/claw trimming.

C3 Providing opportunities for exercise

Planning and enabling exercise to meet individual animal needs:

- type and quantity of exercise required
- handling equipment, e.g. leads, muzzles
- exercise equipment and environment, e.g. hamster wheels, swings and perches, trees and shrubs
- frequency, amount and type of exercise as appropriate to animal requirements, e.g. dog walking in dog-friendly areas, access to run or paddock.

C4 Health checks

Daily or routine checks carried out:

- signs of injury/disease, behaviour and appetite, state of coat and/or skin, brightness of eyes, colour, amount and consistency of urine and faeces.

Assessment criteria

Pass	Merit	Distinction
Learning aim A: Explore safe animal handling techniques for different animals and situations		
<p>A.P1 Explain risk assessment decisions for the handling of animals in routine situations.</p> <p>A.P2 Perform correct handling of animals with even temperaments in routine situations.</p>	<p>A.M1 Demonstrate handling of animals with varying temperaments in different situations, analysing relevant risks.</p>	<p>A.D1 Justify approaches used when handling animals with varying temperaments in different situations.</p>
Learning aim B: Explore the preparation and maintenance of accommodation and environments to meet the needs of different animals		
<p>B.P3 Explain the accommodation needs of different animals.</p> <p>B.P4 Prepare and maintain accommodation correctly to meet the welfare needs of animals</p>	<p>B.M2 Analyse the suitability of accommodation and its maintenance to meet the needs of different animals.</p>	<p>BC.D2 Justify accommodation and husbandry decisions to support the welfare needs of animals in different situations.</p> <p>BC.D3 Justify handling and husbandry decisions in different situations to maintain high standards of welfare for different animals with varying needs and temperaments.</p>
Learning aim C: Undertake animal husbandry practices to support the health and welfare of animals		
<p>C.P5 Explain own choices made when performing routine husbandry tasks.</p> <p>C.P6 Perform correct routine husbandry tasks to support animal health and welfare.</p>	<p>C.M3 Demonstrate and assess impact of own husbandry of animals in different situations to maintain animal welfare.</p>	

Essential information for assignments

The recommended structure of assessment is shown in the unit summary along with suitable forms of evidence. *Section 6* gives information on setting assignments and there is further information on our website.

There is a maximum number of two summative assignments for this unit. The relationship of the learning aims and criteria is:

Learning aim: A (A.P1, A.P2, A.M1, A.D1)

Learning aims: B and C (B.P3, B.P4, C.P5, C.P6, B.M2, C.M3, BC.D2, BC.D3)

Further information for teachers and assessors

Resource requirements

For this unit, learners must have access to:

- a variety of animals from at least three of the following groups: mammal, avian, herptile, invertebrate
- handling equipment, to include at least lead, collar, halter, catch poles, crush cages, nets, towel, pillowcase, muzzle
- animal accommodation, different types of substrate/bedding, brooms, dustpan and brush
- feeding/watering equipment appropriate to animals present, food appropriate to animals present, water access.

Essential information for assessment decisions

Learning aim A

For distinction standard, learners must show reasoned evidence of well-considered decision-making processes used in selecting handling techniques, resulting in proficient handling. They must demonstrate the capacity to adapt techniques to the needs of the specific animal, such as taking account of stress, temperament or situation, while maintaining high standards of animal welfare and human safety.

For merit standard, learners must show evidence of efforts to minimise effectively calculated risks present in handling animals of different temperaments, through preparation and anticipation. Learners will handle animals in unusual situations to which the animal will not be entirely accustomed, such as during relocation or transporting, taking account of the welfare of the animal throughout.

For pass standard, learners must identify potential risks when handling animals and act to mitigate these risks appropriately. They can perform the safe handling of placid or even-tempered animals that are accustomed to frequent handling in familiar situations, such as during regular grooming. Learners select and use appropriate handling and personal protective equipment (PPE).

Learning aims B and C

For distinction standard, learners must give evidence of reasoned decision-making processes for the husbandry of animals. Consideration must be given to the advantages or disadvantages of materials, husbandry regimes and approaches, suggesting improvements or changes that may be necessary to support the health and welfare of animals with varying needs. Learners must show clear reasoning for decisions and approaches adopted in maintaining the health and safety of themselves and others when working with animals. Learners must be able to give reasons, with examples of different animals and situations, for their decisions on handling, accommodation and husbandry in relation to the high standard required. Learners can work autonomously, or as part of a husbandry team, solving problems in a time-efficient and resource-efficient manner. However, their individual distinction-level contribution must be clearly evidenced.

For merit standard, learners must give evidence to show reasoned consideration of animal welfare needs when assessing and maintaining accommodation. They must perform husbandry activities, i.e. feeding, watering, exercising and bathing of animals, with confidence and in a timely manner. They will give accounts of the effectiveness of their approaches in terms of the standards of animal welfare needs and human safety required. Learners must show evidence of recording and acting on the outcome of performed visual health checks, with consideration to the relationship between their findings and their husbandry practices. Learners must be able to work autonomously as part of a husbandry team.

For pass standard, learners must give evidence to show that they recognise the environmental needs of animals and can maintain animal accommodation over time, taking these needs into account. They can work safely, adopting reasoned approaches that consider the health and welfare of the animal before, during, and after accommodation maintenance. Learners must show that they can plan and implement feeding and watering regimes that meet the routine needs of animals, taking into account needs such as life stage and level of activity. Learners must give reasoned accounts for the regimes used. They can groom and bathe animals using appropriate equipment with minimum stress to the animal; learners must give evidence of their reasons for selecting methods and approaches. Learners must plan and enable exercise strategies for animals, taking account of their specific needs, and the safety of both animal and humans. Learners must give evidence to show that they have carried out routine visual health checks regularly and safely, documenting reasoned findings and actions. Learners must keep accurate records of their husbandry tasks, giving a reasoned account of their methods, approaches and actions. Learners must show clear awareness of their roles and responsibility as part of an animal husbandry team.

Links to other units

This unit links to:

- Unit 3: Animal Welfare and Ethics
- Unit 5: Animal Behaviour
- Unit 6: Animal Health and Diseases.

Employer involvement

This unit would benefit from employer involvement in the form of:

- guest speakers
- technical workshops involving staff from local animal businesses
- contribution of ideas to unit assignment/project materials
- opportunities for observation during work experience
- support from local animal business staff as mentors.

Unit 5: Animal Behaviour

Level: **3**

Unit type: **Internal**

Guided learning hours: **60**

Unit in brief

Learners explore normal and abnormal behaviours in a range of animals and how these behaviours develop. Learners observe, record and interpret animal behaviour.

Unit introduction

To work with animals, you need to understand what behaviours are normal as well as abnormal. You will be able to care for animals properly and maintain effective working practices by identifying the factors involved in an animal's behaviour.

In this unit, you will study the theories on how animals learn a range of different behaviour patterns and the ways in which animals communicate. You will develop skills to interpret animal behaviour and understand factors which influence animal behaviours. You will observe and monitor behaviour as an effective measure of an animal's welfare.

Animal behaviour is a very popular field in the animal care sector and this unit can lead to higher education or to employment as a pet behaviour counsellor, conservationist or animal trainer in a zoo, aquarium or charity.

Learning aims

In this unit you will:

- A** Explore the ways in which animals learn normal and abnormal behaviours, and how these behaviours can be managed
- B** Examine behaviour patterns and their influencing factors in animals
- C** Undertake animal behaviour monitoring as a measure of animal welfare.

Summary of unit

Learning aim	Key content areas	Recommended assessment approach
A Explore the ways in which animals learn normal and abnormal behaviours, and how these behaviours can be managed	A1 Learning theory A2 Development of abnormal behaviours A3 Managing abnormal behaviours	A report that investigates examples of normal and abnormal behaviours in a selected animal species.
B Examine behaviour patterns and their influencing factors in animals	B1 Animal lifestyles B2 Animal communication B3 Factors influencing behaviour	Evidence of performing sampling to monitor animal behaviour, and then using the data to create a poster examining behaviour patterns in the species observed.
C Undertake animal behaviour monitoring as a measure of animal welfare	C1 Interpreting animal behaviour C2 Observing animal behaviour	

Content

Learning aim A: Explore the ways in which animals learn normal and abnormal behaviours, and how these behaviours can be managed

A1 Learning theory

- Non-associative learning.
- Habituation, e.g. prairie dogs habituating to humans and no longer alarming.
- Sensitisation, e.g. traffic phobia in dogs.
- Classical conditioning.
- Operant conditioning.
- Positive and negative reinforcement.
- Positive and negative punishment.
- Social learning.
- Insight learning.
- Imprinting.
- Flooding.
- Schedules of reinforcement, including continuous, fixed duration, fixed ratio, variable duration, variable ratio and differential, with examples of when they are best used.
- Counterconditioning and desensitisation.

A2 Development of abnormal behaviours

Types, causes and characteristics of abnormal behaviour:

- motivation, e.g. obtaining reward or relief
- stereotypical behaviours, including social, locomotor and oral abnormalities across animals in different environments, e.g. bar biting in farmed sows, pacing and circling in captive big cats, over-grooming mice in laboratories, weaving and cribbing in stabled horses, feather pecking in hens
- displacement behaviours, e.g. over-grooming, vocalisation
- hyperactivity/inactivity/learned helplessness.

A3 Managing abnormal behaviours

Factors and methods relating to the management of abnormal behaviours:

- rule out any medical factors
- medical or pharmacological interventions
- environmental management and enrichment
- behavioural modifications
- suitable referral agencies, e.g. the Animal Behaviour and Training Council (ABTC).

Learning aim B: Examine behaviour patterns and their influencing factors in animals

B1 Animal lifestyles

- Differences in behaviour seen between animals in the wild and in captive and domestic environments.
- Behavioural differences between same species in different environments.
- Factors affecting lifestyle.
- Method of feeding, including predator versus prey, herbivore, carnivore, omnivore, insectivore.
- Sleep/wake cycle, including diurnal, nocturnal, crepuscular.
- Social behaviour, including solitary, social (subsocial, parasocial and eusocial).

B2 Animal communication

- Definition, functions and types of communication (emotional displays, mating displays, parent/offspring).
- Inter- and intraspecific signals (frog mating calls also attract bats).
- Causes of conflict and signals used to reduce them.
- Filial and sexual bonding.
- Species-specific senses, e.g. vocalisation, scenting, importance of pheromones.

B3 Factors influencing behaviour

- Evolution of species-specific behaviours from animals covering a range of animal groups.
- Internal factors:
 - physical
 - physiological
 - psychological.
- External factors:
 - environment, including space, light, temperature
 - conspecifics
 - predators
 - humans.

Learning aim C: Undertake animal behaviour monitoring as a measure of animal welfare

C1 Interpreting animal behaviour

- Visual cues:
 - ear position, e.g. up, forward, flat
 - tail position, e.g. high, low, between legs
 - body posture, e.g. leaning forward, loose stance
 - movement, e.g. fast, slow
 - piloerection, e.g. raised hackles.
- Vocalisation, e.g. howling, whimpering, barking.
- Differences due to life stage, e.g. adult dog, puppy, senior dog.
- Health, e.g. signs of ill health.
- Species/breed differences, e.g. Labrador, German Shepherd, Terrier.
- Temperament, e.g. aggressive, nervous, excited.
- Relaxed, fearful, anxious, aggressive, signs of stress.

C2 Observing animal behaviour

- Construction of ethogram and interpretation of data from observation of species across a range of animal groups (e.g. farm livestock, companion animals, exotics) either directly or via media technology.
- Types of sampling methods and strategies, including continuous, instantaneous, ad libitum, focal, scanning, one-zero.
- Representing results of behaviour observations that include analysis of results, graphical representations, e.g. bar chart or pie chart, time budgets.
- Ways of reporting results, e.g. a scientific report.
- Implications of results for an animal's welfare based on the prevalence of abnormal behaviours.

Assessment criteria

Pass	Merit	Distinction
Learning aim A: Explore the ways in which animals learn normal and abnormal behaviours, and how these behaviours can be managed		A.D1 Evaluate how animals acquire both normal and abnormal behaviours and how knowledge of learning theory can be used to develop management strategies to modify behaviours.
A.P1 Explain how animals acquire normal behaviours with reference to learning theory. A.P2 Explain how animals may acquire abnormal behaviours with reference to learning theory and management.	A.M1 Analyse the acquisition of abnormal behaviours with reference to learning theory and management.	
Learning aim B: Examine behaviour patterns and their influencing factors in animals		BC.D2 Evaluate how influencing factors affect the behaviour patterns of selected animals. BC.D3 Justify own interpretations of an animal's behaviour as a measure of its welfare.
B.P3 Explain the methods selected animals use to communicate and the reasons for communication. B.P4 Explain how internal and external factors influence the behaviours of selected animals.	B.M2 Analyse the link between lifestyle, environment and behaviour patterns of selected animals.	
Learning aim C: Undertake animal behaviour monitoring as a measure of animal welfare		
C.P5 Perform animal behaviour monitoring using appropriate sampling techniques in relation to a selected animal. C.P6 Explain the results of observed animal behaviour monitoring in relation to the welfare of a selected animal.	C.M3 Analyse observed behaviours of the selected animal being monitored and its welfare using appropriate analysis methods.	

Essential information for assignments

The recommended structure of assessment is shown in the unit summary along with suitable forms of evidence. *Section 6* gives information on setting assignments and there is further information on our website.

There is a maximum number of two summative assignments for this unit. The relationship of the learning aims and criteria is:

Learning aim: A (A.P1, A.P2, A.M1, A.D1)

Learning aims: B and C (B.P3, B.P4, C.P5, C.P6, B.M2, C.M3, BC.D2, BC.D3)

Further information for teachers and assessors

Resource requirements

The special resources required for this unit are access to a variety of animals from at least three of the following groups: mammal, avian, herptile, invertebrate.

Essential information for assessment decisions

Learning aim A

Learners need to investigate examples of normal and abnormal behaviours in a selected animal species. Animals that are likely to exhibit abnormal behaviours could be used for research (such as captive zoo animals exhibiting stereotypies). This could be achieved by visits to animal collections or viewing video footage, for example of stabled horses.

For distinction standard, learners will discuss how the selected animal developed its range of normal behaviours as well as at least two abnormal behaviours commonly seen in the species. The information will include accurate reference to learning theory throughout. The management strategies suggested to modify behaviours will be appropriate and in accordance with the Least Intrusive, Minimally Aversive (LIMA) principle, with reference to associative learning and schedules of reinforcement. Learners will consider the necessity of ruling out medical factors and the importance of environmental management and enrichment.

For merit standard, learners will discuss the role learning theory has in the acquisition of abnormal behaviours in the species, acknowledging inappropriate reinforcement as a feature. The work will show a clear understanding of the principles of managing abnormal behaviour and learning theory without confusion.

For pass standard, learners will recall knowledge to demonstrate their understanding of learning theory in relation to how animals learn normal behaviours and abnormal behaviours in certain situations. Learners will cover both associative and non-associative learning and give appropriate examples of how abnormal behaviours are acquired and managed.

Learning aims B and C

For distinction standard, learners will provide a comprehensive exploration of the implications of how the influencing factors affect the behaviour of selected animals. The information presented will clearly support the provided interpretation of the monitoring and sampling results obtained for a specific animal as a measure of its welfare.

For merit standard, learners will provide evidence of reasoned consideration of the link between lifestyle, environment and behaviour. Learners will discuss the effect of several lifestyle factors on observed behaviour patterns. The links provided will be appropriate and logical. In addition, the analysis of observed behaviour will be completed accurately and the method selected (bar chart, etc.) will be appropriate.

For pass standard, learners will construct an ethogram appropriate to their chosen species, including descriptions of all communication methods. The sampling technique used will be appropriate and undertaken safely and accurately. The likely influencing factors of behaviour will have been explained, covering both internal and external factors appropriate to the animal species. Sampling and monitoring results will also be explained.

Links to other units

This unit links to *Unit 20: Human and Animal Interaction*.

Employer involvement

Centres may involve employers in the delivery of this unit if there are local opportunities.

This unit would benefit from employer involvement in the form of:

- guest speakers
- technical workshops involving staff from local animal businesses
- contribution of ideas to unit assignment/project materials
- opportunities for observation during work experience
- support from local animal business staff as mentors.

Unit 6: Animal Health and Diseases

Level: **3**

Unit type: **Internal**

Guided learning hours: **60**

Unit in brief

Learners study common indicators of animal health, diseases and disorders as well as treatments and prevention methods in order to detect and protect animals from illness.

Unit introduction

Animals can become ill, and unlike humans they can't explain what might be wrong. The people involved in their management need to be able to reduce the risk of animal illness and recognise the signs that indicate a disease or disorder may be present.

In this unit, you will explore common indicators of health, diseases and disorders in animals. You will develop an understanding of the causes, signs and treatments of illness and disease, along with some of the skills needed to prevent animals from developing illnesses and to recognise when an animal is ill. You will investigate factors that affect animal health and learn about how pathogens and parasites can cause infection, grow and reproduce. This will help you to understand infection identification and control, and the different treatment options available. You will explore practical ways to assess the health status of an animal. You will learn assessment techniques and how to apply basic treatments and implement preventative measures, as well as how to monitor and record them to industry standards. This will help you to promote and maintain the health statuses of the animals you manage.

The skills you will learn in this unit are key to employment in the animal sector, including in zoos, farms, and pet-related industries, or for progression to a higher education course such as in animal science or veterinary nursing.

Learning aims

In this unit you will:

- A** Understand the growth and reproduction of pathogens, parasites and how organisms defend against disease
- B** Undertake health assessments to promote and maintain animal health and welfare and to treat and prevent common diseases and disorders
- C** Demonstrate preventative health strategies by assessing, recording and monitoring health in animals.

Summary of unit

Learning aim	Key content areas	Recommended assessment approach
A Understand the growth and reproduction of pathogens, parasites and how organisms defend against disease	A1 Structure and reproduction of bacteria, viruses, fungi and parasites A2 Routes of transmission A3 Effects caused by pathogens and parasites A4 Defence against disease	A report exploring the structure, growth, reproduction and transmission of pathogens and parasites of different animals.
B Undertake health assessments to promote and maintain animal health and welfare and to treat and prevent common diseases and disorders	B1 Assessing general health in animals B2 Common diseases in animals and their clinical signs, treatments and prevention B3 Common disorders in domestic animals	A portfolio of evidence, including: <ul style="list-style-type: none"> • practical activities completed to assess animals' health, with a signed witness statement and/or observation record • report on findings, diseases and disorders.
C Demonstrate preventative health strategies by assessing, recording and monitoring health in animals	C1 Preventative health strategies C2 Theory and administration of basic animal treatments C3 Preventative health assessment, recording and monitoring	A portfolio of evidence, including: <ul style="list-style-type: none"> • practical activities of implementing preventative health strategies with a signed witness statement and/or observation record • written preventative care plans and monitoring documents.

Content

Learning aim A: Understand the growth and reproduction of pathogens, parasites and how organisms defend against disease

A1 Structure and reproduction of bacteria, viruses, fungi and parasites

- Structure and description of:
 - bacteria – cellular structure, including cell wall, membrane, DNA structures, flagella, morphology of bacteria, Gram-positive and Gram-negative
 - viruses – genome, capsid, morphology, capsomeres, nucleocapsid and envelopes, including prions, virions and bacteriophages
 - fungi – cellular structure of yeast and moulds
 - parasites – genes, proteins and cells function in different parasites, including helminths, protozoa and ectoparasites.
- Reproduction of:
 - bacteria – asexual and sexual reproduction
 - viruses – RNA- and DNA-based viruses and use of vectors
 - fungi – asexual and sexual
 - parasites – life cycles, vectors and host interactions, including helminths, protozoa and ectoparasites.
- Growth of bacteria, viruses and fungi:
 - environmental factors affecting growth, including temperature, pH, water and oxygen, and the practical meaning of this in an animal's surroundings
 - growth, including growth curves in batch cultures
 - awareness of the meaning of total cell counts, viable cell counts, cell mass.

A2 Routes of transmission

Modes of transmission for different pathogens (such as bacteria, viruses, fungi, parasites), to include:

- touch
- bodily fluids (blood, semen, mucus, saliva)
- air
- food
- water
- insects
- fomites (non-living objects, such as bedding, towels, toys and barbed wire).

A3 Effects caused by pathogens and parasites

Aetiology and pathogenesis of the following, to include direct damage to cells, effect of toxin production and physiological response of host as appropriate:

- bacterial disease, to include *Salmonella* spp, *Bordetella* spp, *Escherichia coli* spp and *Mycobacterium bovis*
- viral disease, to include canine parvovirus, feline influenza and the rabies virus
- fungal disease, to include *Microsporium canis*, and *Aspergillus* spp
- parasites, to include *Taenia saginata*, *Fasciola hepatica* and *Siphonaptera* spp.

A4 Defence against disease

The role of the immune system in disease and the prevention of disease in different animals.

- Non-specific (innate) immune response:
 - natural barriers to infection, including mechanical barriers, physical epithelium, and chemical and biological defence
 - inflammation, e.g. heat, swelling and pain
 - phagocytosis
 - role of blood in defence against disease, including blood clotting (thrombus), cascade reactions, enzyme interaction, fibrinogen, fibrin.
- Specific (adaptive) immunity:
 - humoral immunity, antibody-mediated immunity
 - cell-mediated immunity
 - leucocyte structures and functions; neutrophils, lymphocytes, monocytes, eosinophils, basophils and agranulocytes
 - adaptive immune system including specific responses and interactions of different types of B cells and T cells.
- Different types of immunity:
 - natural/artificial and active/passive.
- Allergies/hypersensitivity, to include the roles of allergens, mast cells and histamines in the immune response.
- Vaccination – interaction with the immune system, mode of action in the body and effectiveness over time, to include:
 - live attenuated
 - inactivated vaccines
 - toxoid vaccines
 - subunit vaccines
 - conjugate vaccines.

Learning aim B: Undertake health assessments to promote and maintain animal health and welfare and to treat and prevent common diseases and disorders

B1 Assessing general health in animals

Establishing the health of animals through the performance of a health assessment.

- Indicators of health status in different animal groups, to include:
 - behaviour, posture and movement
 - coat condition
 - weight
 - calculation of body conditioning score
 - presence of lumps/bumps
 - normal parameters of temperature, pulse, respiration
 - clear and shiny eyes; open, shiny and clean ears; mouth; dry/wet, open, clean nose; intact teeth of appropriate colour, all teeth present
 - pink, moist mucous membranes
 - faeces/urine output, e.g. volume, colour, texture.
- Basic assessment techniques, to include:
 - faecal floatation and analysis of herbivores
 - condition scoring
 - weighing and measuring
 - postural changes
 - environmental assessment.

B2 Common diseases in animals and their clinical signs, treatments and prevention

Variety of common diseases and their clinical signs, treatments and prevention.

- Bacterial infections, e.g. *Salmonella* spp, *Bordetella* spp, *Escherichia coli* spp and *Mycobacterium bovis*.
- Viruses, e.g. parvovirus, feline influenza and the rabies virus.
- Fungal infections, e.g. *Microsporium canis* and *Aspergillus* spp.
- Prions, e.g. scrapie and bovine spongiform encephalopathy.
- Parasites, e.g. endoparasites: protozoa and helminths, ectoparasites: fleas, ticks, lice.
- Zoonotic and notifiable diseases, to include rabies, scrapie, foot and mouth, brucellosis.

B3 Common disorders in domestic animals

- Nutritional disorders:
 - obesity
 - food toxicity, e.g. chocolate and onion in dogs and cats
 - acidosis
 - dehydration.
- Endocrine disorders and their clinical signs, treatment and prevention:
 - hyperadrenocorticism and hypoadrenocorticism in dogs
 - hyperthyroidism in cats.
- Metabolic disorders:
 - diabetes in dogs and cats
 - metabolic bone disease in reptiles and mammals
 - hypocalcaemia and hypomagnesaemia in cattle
 - ketosis in animals.

Learning aim C: Demonstrate preventative health strategies by assessing, recording and monitoring health in animals**C1 Preventative health strategies**

Management techniques used to prevent or manage disease.

- Antimicrobial agents:
 - soap, including correct hand washing techniques
 - external use of antiseptics on living organisms, bactericidal versus bacteriostatic, to include alcohols, chlorhexidine and iodine
 - use of disinfectants on non-living objects, to include alcohols and oxidising agents, with correct dilution rates
 - effectiveness of antimicrobial agents: growth of pathogens on agar plates prior to and after use of antimicrobial agents.
- Sterilisation of equipment, including different methods and equipment, e.g. heat, chemical, high pressure.
- Production, monitoring and recording of species and individual health and hygiene plans:
 - management of environmental factors to prevent pathogen growth and disease transmission, to include best practice hygiene and isolation procedures
 - management practices, including rotational grazing, paddock management and management of chemicals and waste
 - vaccination schedules.

C2 Theory and administration of basic animal treatments

- Types of treatment:
 - antibiotics
 - nutrition management
 - anthelmintics for parasitic infections (topical and internal)
 - vaccines
 - reasons for routes of administration for treatments.
- Mode of action and administration of prophylactic treatments:
 - vaccination, e.g. subcutaneous, intradermal and intranasal
 - parasite treatment, to include oral drenching, paste, tablets; topical – spot on, spraying; injection
 - vector control, e.g. flea treatment in the control of myxomatosis, tick treatment in the control of Lyme disease
 - non-medical prophylactic measures, including nutrition, bathing and grooming, weight control, dental care, foot/h hoof care.
- Routes of administration for medication in animals:
 - gastrointestinal, including oral (per os) – through the mouth, gavage – into the stomach via a tube or gavage needle, rectal (per rectum) – into the rectum via the anus
 - parenteral, including subcutaneous (SC) – under the skin, intramuscular (IM) – into a muscle, intradermal (ID) – into or between layers of skin
 - topical applications.

C3 Preventative health assessment, recording and monitoring

- Importance of record keeping, e.g. prevention of overdose/underdose, allergic reactions.
- Purpose and importance of record keeping and monitoring.
- Data recording with reasons, including time, date, name of treatment, strength of treatment, amount of treatment, batch number if applicable, frequency of treatment, withdrawal period if applicable. Administering person keeps health records for animal prior to and after treatment and comments on change.
- Type of records to keep, including paper-based and electronic recording systems, e.g. intake health check, treatment and monitoring forms.
- Practical monitoring and recording, to include observation and physical examination/health checks.

Assessment criteria

Pass	Merit	Distinction
Learning aim A: Understand the growth and reproduction of pathogens, parasites and how organisms defend against disease.		
<p>A.P1 Explain the structure, growth and types of reproduction seen in pathogens and parasites in animals.</p> <p>A.P2 Explain the routes of transmission and effects on animal health of bacteria, viruses, fungi and parasites.</p>	<p>A.M1 Analyse how the immune system of an animal species responds to the pathogenesis and transmission of organisms.</p>	<p>A.D1 Evaluate the effectiveness of the immune system of an animal in responding to the growth and reproduction of organisms.</p>
Learning aim B: Undertake health assessments to promote and maintain animal health and welfare and to treat and prevent common diseases and disorders		
<p>B.P3 Perform techniques to assess the health statuses of animals.</p> <p>B.P4 Explain causative agents, clinical signs and the treatment and prevention of common diseases and disorders.</p>	<p>B.M2 Carry out health assessments on animals, adapting for different situations, analysing the clinical signs, treatment and prevention of common diseases.</p>	<p>B.D2 Justify the use of health assessments and treatment and prevention methods in promoting the health of animals.</p>
Learning aim C: Demonstrate preventative health strategies by assessing, recording and monitoring health in animals		
<p>C.P5 Carry out routine recording and monitoring of treatments or prevention in animals correctly and safely.</p> <p>C.P6 Explain the records that need to be kept and the importance of recording and monitoring animal health on an ongoing basis.</p>	<p>C.M3 Carry out health care strategies in complex situations for the treatment and prevention of animal sickness, with comprehensive recording and analysis of ongoing monitoring regimes.</p>	<p>C.D3 Evaluate effectiveness of own and existing preventative care plans, treatment and monitoring, making recommendations for improvement.</p>

Essential information for assignments

The recommended structure of assessment is shown in the unit summary along with suitable forms of evidence. *Section 6* gives information on setting assignments and there is further information on our website.

There is a maximum number of three summative assignments for this unit. The relationship of the learning aims and criteria is:

Learning aim: A (A.P1, A.P2, A.M1, A.D1)

Learning aim: B (B.P3, B.P4, B.M2, B.D2)

Learning aim: C (C.P5, C.P6, C.M3, C.D3)

Further information for teachers and assessors

Resource requirements

For this unit learners must have access to:

- antimicrobial agents
- disinfectants and antiseptics
- a laboratory with microbiological equipment
- IT and library access
- different animals from the category list.

Essential information for assessment decisions

Learning aim A

For distinction standard, learners will articulate arguments concisely and professionally to evaluate the growth and reproduction of the two chosen species and the responses of the immune system. Learners will show depth of understanding to explain the detailed structure and function of bacteria, fungi, viruses and parasites. Learners will evaluate the effect of the environment on the growth and reproduction of all the organisms mentioned. Learners will use detailed analysis and research to explain the immune response in detail (including the involvement and interaction of different cell types) to show a thorough understanding of the role of the immune system in animal disease. Learners will include an evaluation of how the animal immune system can affect the symptoms of a disease, both positively and negatively. Learners will explicitly describe the difference between the causes and symptoms of disease.

For merit standard, learners will reach reasoned, analytical judgements considering how the immune system in animals responds to the threat of infection. Learners will select and apply knowledge relating to the pathogenesis of two specified examples of each type of disease/parasite (bacterial, viral, fungal and parasite), to include route of transmission, where they reproduce and how they cause disease. Learners will explain the relationship between the immune system's structure and functions and how it responds to infection by bacteria, fungi, viruses and parasites.

For pass standard, learners will recall knowledge and understanding to explain the transmission route and effects of two species of bacterial, viral, fungal and parasitic organisms, clearly identifying all structures and functions. Learners will explain the different types of reproduction of each pathogen and parasite as listed in the unit content. Learners will explain the effects that are caused by bacteria, viruses and fungi in an animal's body, which are instrumental in causing disease. Learners will describe the different parts of the immune system, including innate physical and chemical barriers and cells, and adaptive B and T cells. They will include the different types of immunity (natural active, artificial active, natural passive, artificial passive) that might follow in different situations.

Learning aim B

For distinction standard, learners will show how they have made the most appropriate selection of health assessments and treatment and prevention methods, making valid judgements about the risks and limitations of each method. They will carry out three detailed health assessments for different animals, assessing for all health indicators in the unit content. Learners will use detailed analysis and research to evaluate the impact of two common diseases and two disorders, including their causative agents and immune response, clinical signs, treatment options and methods of preventative management. They will consider the impact of clinical signs on the animal's health and welfare and explain in detail how the different treatments and preventions work in circumstances of increasing complexity, such as in a herd, flock or group situation.

For merit standard, learners will select and carry out appropriate methods to complete three health assessments for different animals. Learners will demonstrate the assessment techniques listed in the unit content as appropriate, modifying techniques to suit the context. Learners will carefully consider clinical signs, treatments and prevention methods for two diseases and two disorders, analysing those likely to be the most beneficial and reaching a valid conclusion. Learners will reach reasoned, analytical judgements on the impact of clinical signs on the animal's health and welfare and explain in detail how the different treatments and preventions work.

For the pass standard, learners will select and carry out appropriate animal assessment methods in well-defined situations. They will work appropriately to carry out the assessment fully, correctly and safely. They will recall knowledge to explain all health indicators listed in the content as appropriate, and explain clinical signs of disease, different treatment options and the prevention measures available for two diseases and disorders.

Learning aim C

For distinction standard, learners will draw together knowledge from across the learning aims to evaluate the effectiveness of their own preventative care plans and use of treatment and monitoring methods. They will demonstrate proficient use of methods in more advanced situations and make valid judgements about any risks or limitations in relation to the desired outcomes. Learners will use detailed analysis and research to justify the importance of preventative health plans to animals' good health. Learners will interpret the constituent parts of the preventative care plan and explain how they can be implemented effectively, reaching valid recommendations for improvement.

For merit standard, learners will select appropriate strategies for the treatment and prevention of animal sickness. They will provide appropriate solutions as a result of practical exploration. They will apply knowledge and understanding of the relationship between preventative health plans and animal welfare, and relate preventative health care methods to good health management. They will explain how each constituent part of the health plan will be implemented. Learners will select and employ treatments, delivery, and recording and monitoring methods, using treatments appropriate to their purpose, limitations and resource constraints.

For pass standard, learners will recall knowledge to describe preventative health strategies, including all the strategies in the unit content. Learners will show understanding of how important preventative health plans are to the promotion of good welfare by linking preventative health care methods to good health management. Learners will be able to outline the constituent parts of the plan and how they should be implemented. Learners will work appropriately to perform the application of basic treatments correctly and safely. They will select and use appropriate recording and monitoring methods.

Links to other units

This unit links to:

- Unit 2: Animal Biology
- Unit 9: Practical Skills in Science.

Employer involvement

Centres may involve employers in the delivery of this unit if there are local opportunities. This unit would benefit from employer involvement in the form of:

- guest speakers
- technical workshops involving staff from local animal businesses
- contribution of ideas to unit assignment/project materials
- opportunities for observation during work experience
- support from local animal business staff as mentors.

Unit 7: Work Experience in the Animal Sector

Level: **3**

Unit type: **Internal**

Guided learning hours: **60**

Unit in brief

Learners study roles available in the animal sector and the progression routes required to attain them, and develop communication and employability skills through study and work experience.

Unit introduction

Where do you picture yourself in five years' time? Do you know the wealth of working opportunities open to you in the animal sector? Discovering these opportunities, and understanding the skills and qualifications needed to follow your chosen path will help you to answer these questions and plan your future career.

In this unit, you will investigate employment opportunities in the animal sector, and learn about the skills and qualifications required to progress in these routes. You will examine how good communication and employability skills can improve your prospects in gaining and keeping employment, and learn how and where to access information on employment vacancies and further courses of study. You will learn how to develop your Curriculum Vitae (CV) and contextualise it to specific vacancies, and how to develop good communication, interview and customer service skills. You will apply for and take on available work experience roles in the sector, and reflect on your own progress.

The skills acquired in this unit are essential for your progression to employment in the animal sector, either immediately following the qualification (for example, pet shop assistant or veterinary care assistant), or following further study in an apprenticeship (for example, zookeeper or dog groomer) or on a higher education course (for example, animal science, or animal behaviour and welfare).

Learning aims

In this unit you will:

- A** Investigate employment opportunities in the animal sector to target future progression
- B** Develop communication and interview skills to improve employment prospects
- C** Complete work-related experience in the animal sector to contribute to personal and professional development.

Summary of unit

Learning aim	Key content areas	Recommended assessment approach
A Investigate employment opportunities in the animal sector to target future progression	A1 Progression opportunities A2 Requirements for progression A3 Relevant legislation for work placement opportunities	A portfolio of work-related learning research, completed application documents and mock interview outcomes, for example observation or video.
B Develop communication and interview skills to improve employment prospects	B1 Applying for work-related activities B2 Interview skills	
C Complete work-related experience in the animal sector to contribute to personal and professional development	C1 Practical work-related experience C2 Customer relations C3 Reflecting on workplace practice	A report reflecting on work experience informed by employer and other feedback.

Content

Learning aim A: Investigate employment opportunities in the animal sector to target future progression

A1 Progression opportunities

Analysis of progression opportunities to determine desirability, suitability and feasibility.

- Higher education – UCAS, entry requirements, student loans.
- Apprenticeships – requirements, timescales, pay scales, balance between academic and practical work, assessment, higher apprenticeships.
- Employment sectors:
 - public sector, e.g. education, government, local government (Department for Environment, Food and Rural Affairs)
 - private sector, e.g. farming, food companies, pet shops
 - voluntary sector or charities, e.g. Royal Society for the Prevention of Cruelty to Animals (RSPCA), animal shelters and sanctuaries.
- Employment sectors, to include an appropriate broad representation of current industries, e.g. wildlife management, veterinary practices, commercial enterprises.
- Self-employment, e.g. dog-walker, animal groomer, sheep shearer.

A2 Requirements for progression

Knowledge of formal and informal requirements for progression.

- Entry criteria, including qualifications, skills and knowledge.
- Self-management, including study skills, presentation and attitude, time management and planning.
- Exit criteria for specific progression routes.
- Soft skills, including communication, problem solving, individual, team and leadership skills, personal management.

A3 Relevant legislation for work placement opportunities

- Employment: safeguarding at work placements, contracts of employment and working hours (in relation to age) including zero-hours contracts/fixed-term/hourly paid/permanent (full/part) contracts, work time regulations, Pay As You Earn (PAYE), statutory leave, maternity/paternity leave, employment status.
- Different legal statuses of businesses: single owner (self-employed)/partnership/limited company/self-employed subcontractor.
- Awareness of the impact of current legislation supporting conduct in the workplace for employers and employees (full-time, part-time, casual, interns and work placements), such as:
 - Health and Safety at Work etc Act 1974
 - Equality Act 2010
 - Data Protection Act 1998
 - Control of Substances Hazardous to Health (COSHH) Regulations 2002
 - Reporting of Injuries, Diseases and Dangerous Occurrences Regulations (RIDDOR) 1995
 - Animal Welfare Act 2006.

Learning aim B: Develop communication and interview skills to improve employment prospects

B1 Applying for work-related activities

- Selection of work including different sources of vacancies, such as websites, trade publications and sector-wide bodies, e.g. Lantra.
- Importance of reading job description, personal specification including relevance of essential or desirable criteria, to include qualifications, skills and experience.
- Completion of CV and contextualisation of CV or job application to specified vacancy.
- Letters of application, supporting statements and completing application forms: standing out from the crowd, addressing relevance to employers and how they might shortlist candidates.
- Correct use of language, grammar, spelling and punctuation.

B2 Interview skills

Creating an impression through effective communication.

- Preparation and presentation skills, including:
 - planning and practice for the interview
 - interview styles, e.g. competency- or behaviour-based, knowledge focused
 - personal appearance and hygiene
 - interpersonal skills and attitude
 - body language.
- Listening and talking skills, including:
 - interview conventions
 - use of language – what is/what is not appropriate
 - building rapport
 - developing a dialogue
 - effective listening and questioning
 - non-verbal communication, e.g. eye contact.

Learning aim C: Complete work-related experience in the animal sector to contribute to personal and professional development

C1 Practical work-related experience

- Operating within workplace practices, including:
 - knowledge of the purpose of the business and/or environment
 - knowledge of reporting procedures with regards to behaviour and expectations, e.g. lateness, sickness, emergency
 - health and safety protocols, e.g. fire safety, emergency procedures
 - procedures to maintain confidentiality.
- Completion of role to add value in the workplace:
 - understanding the extent and limitation of own roles and responsibilities
 - carrying out tasks according to roles and responsibilities
 - following instructions
 - communicating with others
 - self-management
 - working safely
 - reliability, regular attendance and commitment
 - punctuality
 - use of initiative
 - cooperation with colleagues and end users, e.g. customers, clients, other organisations.
- Obtaining feedback, including:
 - timesheets signed by an appointed person at work-related employment, confirming appropriate attendance and punctuality
 - employer or teacher observation/witness statements
 - employer feedback sheets, provided at intervals.

C2 Customer relations

Internal and external customers in an organisation, and applying the principles of customer service on:

- the customer, to include the paying customer, service user or colleague
 - first impressions, speed and accuracy of service, meeting customer needs and expectations, offering information and advice, dealing with problems
- the organisation
 - customer satisfaction leading to customer loyalty, repeat business, productive relationships
 - customer service that enhances an organisation's image
 - benefits to the organisation of good customer relations, including sales and/or usage by attracting new customers, improving productivity, profits
- the employee
 - job satisfaction from customer service, job security, self-esteem, promotion/progression in the organisation (or elsewhere), increased income, the employee as a customer in the organisation and the opportunity for feedback
- consequences of customer service for the customer, the staff and the organisation.

C3 Reflecting on workplace practice

Reflecting on personal performance, making use of:

- formative feedback from employer(s), colleagues, teacher, stakeholders
- performance self-assessment
- review of areas for development using SWOT (strengths, weaknesses, opportunities, threats) analysis and SMART (specific, measurable, achievable, relevant, timebound) target setting, knowledge of SWOT and SMART in learning development.

Assessment criteria

Pass	Merit	Distinction
Learning aim A: Investigate employment opportunities in the animal sector to target future progression		AB.D1 Evaluate own preparation for and performance in work experience interview, including review of all future opportunities.
A.P1 Explain the value of own research and preparation for work experience, and related opportunities and progression routes. A.P2 Explain accurately the relevant legislation relating to a work placement.	A.M1 Analyse the value of own research and preparation for work experience, related opportunities, and progression routes.	
Learning aim B: Develop communication and interview skills to improve employment prospects		AB.D2 Evaluate how effective own preparation for, and participation in, work experience can significantly enhance future employment prospects
B.P3 Explain the preparation and research required for a work experience interview. B.P4 Demonstrate communication and interpersonal skills as an interviewee for selected work experience.	B.M2 Perform proficiently as an interviewee for selected work experience using appropriate communication and interpersonal skills.	
Learning aim C: Complete work-related experience in the animal sector to contribute to personal and professional development		C.D3 Evaluate the effectiveness of the work experience carried out in improving occupational and personal skills to make best use of opportunities for future employment.
C.P5 Explain how the work experience has improved occupational and personal skills for future opportunities. C.P6 Review how own performance during work experience contributed to the employing organisation.	C.M3 Assess the value of the occupational and personal skills developed during work experience to future opportunities. C.M4 Analyse the impact on the employing organisation of own performance during work experience.	

Essential information for assignments

The recommended structure of assessment is shown in the unit summary along with suitable forms of evidence. *Section 6* gives information on setting assignments and there is further information on our website.

There is a maximum number of two summative assignments for this unit. The relationship of the learning aims and criteria is:

Learning aims: A and B (A.P1, A.P2, B.P3, B.P4, A.M1, B.M2, AB.D1, AB.D2)

Learning aim: C (C.P5, C.P6, C.M3, C.M4, C.D3)

Further information for teachers and assessors

Resource requirements

For this unit, learners must have access to a work experience role, e.g. work placement, part-time work, volunteering etc. For the number of hours of experience required, see 'What does this qualification cover?' in *Section 1: Qualification purpose*.

Essential information for assessment decisions

Learning aims A and B

For distinction standard, learners must produce a written report evaluating the quality of their own preparation when seeking work-related experience, following investigation and research, completion of application documents contextualised for specific roles, and completion of a mock interview.

The report must include conclusions about the quality of each step of the preparation, linking this to the teacher's evaluation of the mock interview and the chance of securing employment. Learners must write a conclusion that includes clear understanding of best practice in this area.

For merit standard, learners must produce a written analysis of the quality of their own preparation when seeking work-related experience, following investigation and research, completion of application documents contextualised for specific roles and completion of a good mock interview. The analysis must include a detailed examination of each step of the preparation, linking this to the chance of securing employment. Learners must include an analysis of the teacher's evaluation of the mock interview. Learners should write their conclusions.

For pass standard, learners must consider the value of their own preparation when seeking work-related experience, following investigation and research, completion of application documents contextualised to specific roles and completion of a mock interview. Learners must include links to the teacher's evaluation of the mock interview. Learners could include a SWOT analysis.

Learning aim C

For distinction standard, learners must supply reasoning to their reflective reports to ascertain the effectiveness of the work experience they have completed and its capacity to improve their opportunities for employment. Their reasoning must consider the relationship between the occupational and personal skills developed during the work experience and how these may help them in securing future employment. The relationship between learners' own performance during work experience or work-related activity, and its impact on the employing organisation, must also be covered. Learners must also consider how well they prepared themselves for the work-related activities so that they were able to gain the most advantage from the experience(s). Links need to be shown to employer/teacher observation/witness feedback sheets.

For merit standard, learners must present in their reflective reports a relationship between the occupational and personal skills developed during the work experience, and a discussion as to how these skills will help secure future employment. Learners must consider the relationship between their own performance during the work experience and its impact on the employing organisation. Links need to be shown to employer/teacher observation/witness feedback sheets.

For pass standard, learners must present in their reflective reports a consideration of how they developed different occupational and personal skills during their work placement. Learners must make a formal assessment of their own performance during work experience based on feedback, including a SWOT analysis, and link this to their contribution to the employing organisation.

Links to other units

This unit links with all other units in the specification.

Employer involvement

Learners must have access to a work experience placement in an animal sector setting. Learners must be provided with a work experience log for them to record the skills they develop on their placement and plan for their future development.

4 Planning your programme

How do I choose the right BTEC National qualification for my learners?

BTEC Nationals come in a range of sizes, each with a specific purpose. You will need to assess learners very carefully to ensure that they start on the right size of qualification to fit into their 16–19 study programme, and that they take the right pathways or optional units that allow them to progress to the next stage.

Some learners may want to take a number of complementary qualifications or keep their progression options open. These learners may be suited to taking a BTEC National Certificate or Extended Certificate. Learners who then decide to continue with a fuller vocational programme can transfer to a BTEC National Diploma or Extended Diploma, for example for their second year.

Some learners are sure of the sector they want to work in and are aiming for progression into that sector via higher education. These learners should be directed to the two-year BTEC National Extended Diploma as the most suitable qualification.

As a centre, you may want to teach learners who are taking different qualifications together. You may also wish to transfer learners between programmes to meet changes in their progression needs. You should check the qualification structures and unit combinations carefully as there is no exact match among the different sizes. You may find that learners need to complete more than the minimum number of units when transferring.

When learners are recruited, you need to give them accurate information on the title and focus of the qualification for which they are studying.

Is there a learner entry requirement?

As a centre it is your responsibility to ensure that learners who are recruited have a reasonable expectation of success on the programme. There are no formal entry requirements but we expect learners to have qualifications at or equivalent to Level 2.

Learners are most likely to succeed if they have:

- five GCSEs at good grades and/or
- BTEC qualification(s) at Level 2
- achievement in English and mathematics through GCSE or Functional Skills.

Learners may demonstrate ability to succeed in various ways. For example, learners may have relevant work experience or specific aptitude shown through diagnostic tests or non-educational experience.

What is involved in becoming an approved centre?

All centres must be approved before they can offer these qualifications – so that they are ready to assess learners and so that we can provide the support that is needed. Further information is given in *Section 8*.

What level of sector knowledge is needed to teach these qualifications?

We do not set any requirements for teachers but expect that centres will assess the overall skills and knowledge of the teaching team to ensure that they are relevant and up to date. This will give learners a rich programme to prepare them for employment in the sector. As part of the requirements of the programme are to involve employers in delivery this should support centres in ensuring that they are following up to date practices when delivering the programme.

What resources are required to deliver these qualifications?

As part of your centre approval you will need to show that the necessary material resources and work spaces are available to deliver BTEC Nationals. For some units, specific resources are required. This is indicated in the units.

How can myBTEC help with planning for these qualifications?

myBTEC is an online toolkit that supports the delivery, assessment and quality assurance of BTECs in centres. It supports teachers with activities, such as choosing a valid combination of units, creating assignment briefs and creating assessment plans. For further information see *Section 10*.

Which modes of delivery can be used for these qualifications?

You are free to deliver BTEC Nationals using any form of delivery that meets the needs of your learners. We recommend making use of a wide variety of modes, including direct instruction in classrooms or work environments, investigative and practical work, group and peer work, private study and e-learning.

What are the requirements for meaningful employer involvement?

Requirements

This BTEC National Extended Certificate in Animal Management has been designed as a Tech Level qualification. As an approved centre you are required to ensure that during their study, every learner has access to meaningful activity involving employers. Involvement should be with employers from the animal management sector and should form a significant part of the delivery or assessment of the qualification. Each centre's approach to employer involvement will be monitored in two ways. It will be monitored at centre level in the first term each year as part of the annual quality management review process that addresses centre strategy for delivery, assessment and quality assurance, when we will ask you to show evidence of how employer involvement is provided for all learners. You will need to show evidence in order to gain reporting clearance for certification. It will be monitored also at programme level as part of the standards verification process to confirm that plans for employer involvement meet the requirements of the specification. These approaches are designed to ensure additional activities can be scheduled where necessary so learners are not disadvantaged (see *Section 8: Quality assurance*).

We know that the vast majority of programmes already have established links with employers. In order to give you maximum flexibility in creating and strengthening employer involvement, we have not specified a particular level of input from employers. However, meaningful employer involvement, as defined below, should contribute significantly to the following: *Unit 7: Work Experience in the Animal Sector*.

There are suggestions in other units about how employers could become involved in delivery and/or assessment.

Employer involvement in this unit is subject to verification as part of the standards verification process (see *Section 8*).

Definition

Activities that are eligible to be counted as meaningful engagement are:

- structured work experience or work placements that develop skills and knowledge relevant to the qualification
- projects or assessments set with input from industry practitioners
- master classes or guest lectures from industry practitioners
- 'expert witness' reports from practitioners that contribute to the assessment of a learner's work.

There may be other ways in which learners can benefit from contact with employers or prepare for employment, such as listening to careers talks or working in simulated environments. While they provide benefits to learners they do not count as meaningful engagement.

Support

It is important that you give learners opportunities that are high quality and directly relevant to their study. We will support you in this through guidance materials and by giving you examples of best practice.

What support is available?

We provide a wealth of support materials, including curriculum plans, delivery guides, authorised assignment briefs, additional papers for external assessments and examples of marked learner work.

You will be allocated a Standards Verifier early on in the planning stage to support you with planning your assessments. There will be extensive training programmes as well as support from our Subject Advisor team.

For further details see *Section 10*.

How will my learners become more employable through these qualifications?

All BTEC Nationals are mapped to relevant occupational standards (see *Appendix 1*).

In the mandatory content and the selected optional units that focus on technical preparation learners will be acquiring the key knowledge and skills that employers need. Also employability skills, such as team working and entrepreneurialism, and completing realistic tasks have been built into the design of the learning aims and content. This gives you the opportunity to use relevant contexts, scenarios and materials to enable learners to develop a portfolio of evidence that demonstrates the breadth of their skills and knowledge in a way that equips them for employment.

5 Assessment structure and external assessment

Introduction

BTEC Nationals are assessed using a combination of *internal assessments*, which are set and marked by teachers, and *external assessments* which are set and marked by Pearson:

- mandatory units have a combination of internal and external assessments
- all optional units are internally assessed.

We have taken great care to ensure that the assessment method chosen is appropriate to the content of the unit and in line with requirements from employers and higher education.

In developing an overall plan for delivery and assessment for the programme, you will need to consider the order in which you deliver units, whether delivery is over short or long periods and when assessment can take place. Some units are defined as synoptic units (see *Section 2*). Normally, a synoptic assessment is one that a learner would take later in a programme and in which they will be expected to apply learning from a range of units. Synoptic units may be internally or externally assessed. Where a unit is externally assessed you should refer to the sample assessment materials (SAMs) to identify where there is an expectation that learners draw on their wider learning. For internally-assessed units, you must plan the assignments so that learners can demonstrate learning from across their programme. A unit may be synoptic in one qualification and not another because of the relationship it has to the rest of the qualification.

We have addressed the need to ensure that the time allocated to final assessment of internal and external units is reasonable so that there is sufficient time for teaching and learning, formative assessment and development of transferable skills.

In administering internal and external assessment, the centre needs to be aware of the specific procedures and policies that apply, for example to registration, entries and results. An overview with signposting to relevant documents is given in *Section 7*.

Internal assessment

Our approach to internal assessment for these qualifications will be broadly familiar to experienced centres. It offers flexibility in how and when you assess learners, provided that you meet assessment and quality assurance requirements. You will need to take account of the requirements of the unit format, which we explain in *Section 3*, and the requirements for delivering assessment given in *Section 6*.

External assessment

A summary of the external assessment for this qualification is given in *Section 2*. You should check this information carefully, together with the unit specification and the sample assessment materials, so that you can timetable learning and assessment periods appropriately.

Learners must be prepared for external assessment by the time they undertake it. In preparing learners for assessment you will want to take account of required learning time, the relationship with other external assessments and opportunities for retaking. You should ensure that learners are not entered for unreasonable amounts of external assessment in one session. Learners may resit an external assessment to obtain a higher grade of near pass or above. If a learner has more than one attempt, then the best result will be used for qualification grading, up to the permitted maximum. It is unlikely that learners will need to or benefit from taking all assessments twice so you are advised to plan appropriately. Some assessments are synoptic and learners are likely to perform best if these assessments are taken towards the end of the programme.

Key features of external assessment in animal management

In animal management, after consultation with stakeholders, we have developed the following.

Unit 3: Animal Welfare and Ethics, learners complete a written assessment demonstrating key skills in the assessment of animal welfare, along with their understanding of the complex ethical questions facing those working in animal management. The unit is externally assessed and it provides underpinning knowledge that informs all aspects of the qualification.

Units

The externally-assessed units have a specific format which we explain in *Section 3*. The content of units will be sampled across external assessments over time, through appropriate papers and tasks. The ways in which learners are assessed are shown through the assessment outcomes and grading descriptors. External assessments are marked and awarded using the grade descriptors. The grades available are Distinction (D), Merit (M), Pass (P) and Near Pass (N). The Near Pass (N) grade gives learners credit below a Pass, where they have demonstrated evidence of positive performance which is worth more than an unclassified result but not yet at the Pass standard.

Sample assessment materials

Each externally-assessed unit has a set of sample assessment materials (SAMs) that accompanies this specification. The SAMs are there to give you an example of what the external assessment will look like in terms of the feel and level of demand of the assessment. In the case of units containing synoptic assessment, the SAMs will also show where learners are expected to select and apply from across the programme.

The SAMs show the range of possible question types that may appear in the actual assessments and give you a good indication of how the assessments will be structured. While SAMs can be used for practice with learners, as with any assessment the content covered and specific details of the questions asked will change in each assessment.

A copy of each of these assessments can be downloaded from our website. An additional sample of each of the Pearson-set units will be available before the first sitting of the assessment to allow your learners further opportunities for practice.

6 Internal assessment

This section gives an overview of the key features of internal assessment and how you, as an approved centre, can offer it effectively. The full requirements and operational information are given in the *Pearson Quality Assurance Handbook*. All members of the assessment team need to refer to this document.

For BTEC Nationals it is important that you can meet the expectations of stakeholders and the needs of learners by providing a programme that is practical and applied. Centres can tailor programmes to meet local needs and use links with local employers and the wider vocational sector.

When internal assessment is operated effectively it is challenging, engaging, practical and up to date. It must also be fair to all learners and meet national standards.

Principles of internal assessment

Assessment through assignments

For internally-assessed units, the format of assessment is an assignment taken after the content of the unit, or part of the unit if several assignments are used, has been delivered. An assignment may take a variety of forms, including practical and written types. An assignment is a distinct activity completed independently by learners that is separate from teaching, practice, exploration and other activities that learners complete with direction from, and formative assessment by, teachers.

An assignment is issued to learners as an assignment brief with a defined start date, a completion date and clear requirements for the evidence that they need to provide. There may be specific observed practical components during the assignment period. Assignments can be divided into tasks and may require several forms of evidence. A valid assignment will enable a clear and formal assessment outcome based on the assessment criteria.

Assessment decisions through applying unit-based criteria

Assessment decisions for BTEC Nationals are based on the specific criteria given in each unit and set at each grade level. To ensure that standards are consistent in the qualification and across the suite as a whole, the criteria for each unit have been defined according to a framework. The way in which individual units are written provides a balance of assessment of understanding, practical skills and vocational attributes appropriate to the purpose of qualifications.

The assessment criteria for a unit are hierarchical and holistic. For example, if an M criterion requires the learner to show 'analysis' and the related P criterion requires the learner to 'explain', then to satisfy the M criterion a learner will need to cover both 'explain' and 'analyse'. The unit assessment grid shows the relationships among the criteria so that assessors can apply all the criteria to the learner's evidence at the same time. In *Appendix 2* we have set out a definition of terms that assessors need to understand.

Assessors must show how they have reached their decisions using the criteria in the assessment records. When a learner has completed all the assessment for a unit then the assessment team will give a grade for the unit. This is given simply according to the highest level for which the learner is judged to have met all the criteria. Therefore:

- to achieve a Distinction, a learner must have satisfied all the Distinction criteria (and therefore the Pass and Merit criteria); these define outstanding performance across the unit as a whole
- to achieve a Merit, a learner must have satisfied all the Merit criteria (and therefore the Pass criteria) through high performance in each learning aim
- to achieve a Pass, a learner must have satisfied all the Pass criteria for the learning aims, showing coverage of the unit content and therefore attainment at Level 3 of the national framework.

The award of a Pass is a defined level of performance and cannot be given solely on the basis of a learner completing assignments. Learners who do not satisfy the Pass criteria should be reported as Unclassified.

The assessment team

It is important that there is an effective team for internal assessment. There are three key roles involved in implementing assessment processes in your centre, each with different interrelated responsibilities, the roles are listed below. Full information is given in the *Pearson Quality Assurance Handbook*.

- The Lead Internal Verifier (the Lead IV) has overall responsibility for the programme, its assessment and internal verification to meet our requirements, record keeping and liaison with the Standards Verifier. The Lead IV registers with Pearson annually. The Lead IV acts as an assessor, supports the rest of the assessment team, makes sure that they have the information they need about our assessment requirements and organises training, making use of our guidance and support materials.
- Internal Verifiers (IVs) oversee all assessment activity in consultation with the Lead IV. They check that assignments and assessment decisions are valid and that they meet our requirements. IVs will be standardised by working with the Lead IV. Normally, IVs are also assessors but they do not verify their own assessments.
- Assessors set or use assignments to assess learners to national standards. Before taking any assessment decisions, assessors participate in standardisation activities led by the Lead IV. They work with the Lead IV and IVs to ensure that the assessment is planned and carried out in line with our requirements.

Effective organisation

Internal assessment needs to be well organised so that the progress of learners can be tracked and so that we can monitor that assessment is being carried out in line with national standards. We support you through, for example, providing training materials and sample documentation. Our online myBTEC service can help support you in planning and record keeping. Further information on using myBTEC can be found in *Section 10* and on our website.

It is particularly important that you manage the overall assignment programme and deadlines to make sure that learners are able to complete assignments on time.

Learner preparation

To ensure that you provide effective assessment for your learners, you need to make sure that they understand their responsibilities for assessment and the centre's arrangements.

From induction onwards, you will want to ensure that learners are motivated to work consistently and independently to achieve the requirements of the qualifications. Learners need to understand how assignments are used, the importance of meeting assignment deadlines, and that all the work submitted for assessment must be their own.

You will need to give learners a guide that explains how assignments are used for assessment, how assignments relate to the teaching programme, and how learners should use and reference source materials, including what would constitute plagiarism. The guide should also set out your approach to operating assessment, such as how learners must submit work and request extensions.

Setting effective assignments

Setting the number and structure of assignments

In setting your assignments, you need to work with the structure of assignments shown in the *Essential information for assignments* section of a unit. This shows the structure of the learning aims and criteria that you must follow and the recommended number of assignments that you should use. For some units we provide authorised assignment briefs, for all the units we give you suggestions on how to create suitable assignments. You can find these materials along with this specification on our website. In designing your own assignment briefs you should bear in mind the following points.

- The number of assignments for a unit must not exceed the number shown in *Essential information for assignments*. However, you may choose to combine assignments, for example to create a single assignment for the whole unit.
- You may also choose to combine all or parts of different units into single assignments, provided that all units and all their associated learning aims are fully addressed in the programme overall. If you choose to take this approach, you need to make sure that learners are fully prepared so that they can provide all the required evidence for assessment and that you are able to track achievement in the records.
- A learning aim must always be assessed as a whole and must not be split into two or more tasks.
- The assignment must be targeted to the learning aims but the learning aims and their associated criteria are not tasks in themselves. Criteria are expressed in terms of the outcome shown in the evidence.
- For units containing synoptic assessment, the planned assignments must allow learners to select and apply their learning using appropriate self-management of tasks.
- You do not have to follow the order of the learning aims of a unit in setting assignments but later learning aims often require learners to apply the content of earlier learning aims and they may require learners to draw their learning together.
- Assignments must be structured to allow learners to demonstrate the full range of achievement at all grade levels. Learners need to be treated fairly by being given the opportunity to achieve a higher grade if they have the ability.
- As assignments provide a final assessment, they will draw on the specified range of teaching content for the learning aims. The specified content is compulsory. The evidence for assessment need not cover every aspect of the teaching content as learners will normally be given particular examples, case studies or contexts in their assignments. For example, if a learner is carrying out one practical performance, or an investigation of one organisation, then they will address all the relevant range of content that applies in that instance.

Providing an assignment brief

A good assignment brief is one that, through providing challenging and realistic tasks, motivates learners to provide appropriate evidence of what they have learned.

An assignment brief should have:

- a vocational scenario, this could be a simple situation or a full, detailed set of vocational requirements that motivates the learner to apply their learning through the assignment
- clear instructions to the learner about what they are required to do, normally set out through a series of tasks
- an audience or purpose for which the evidence is being provided
- an explanation of how the assignment relates to the unit(s) being assessed.

Forms of evidence

BTEC Nationals have always allowed for a variety of forms of evidence to be used, provided that they are suited to the type of learning aim being assessed. For many units, the practical demonstration of skills is necessary and for others, learners will need to carry out their own research and analysis. The units give you information on what would be suitable forms of evidence to provide learners with the opportunity to apply a range of employability or transferable skills. Centres may choose to use different suitable forms for evidence to those proposed. Overall, learners should be assessed using varied forms of evidence.

Full definitions of types of assessment are given in *Appendix 2*. These are some of the main types of assessment:

- written reports
- projects
- time-constrained practical assessments with observation records and supporting evidence
- recordings of performance
- sketchbooks, working logbooks, reflective journals
- presentations with assessor questioning.

The form(s) of evidence selected must:

- allow the learner to provide all the evidence required for the learning aim(s) and the associated assessment criteria at all grade levels
- allow the learner to produce evidence that is their own independent work
- allow a verifier to independently reassess the learner to check the assessor's decisions.

For example, when you are using performance evidence, you need to think about how supporting evidence can be captured through recordings, photographs or task sheets.

Centres need to take particular care that learners are enabled to produce independent work.

For example, if learners are asked to use real examples, then best practice would be to encourage them to use their own or to give the group a number of examples that can be used in varied combinations.

Making valid assessment decisions

Authenticity of learner work

Once an assessment has begun, learners must not be given feedback on progress towards fulfilling the targeted criteria.

An assessor must assess only learner work that is authentic, i.e. learners' own independent work. Learners must authenticate the evidence that they provide for assessment through signing a declaration stating that it is their own work.

Assessors must ensure that evidence is authentic to a learner through setting valid assignments and supervising them during the assessment period. Assessors must take care not to provide direct input, instructions or specific feedback that may compromise authenticity.

Assessors must complete a declaration that:

- the evidence submitted for this assignment is the learner's own
- the learner has clearly referenced any sources used in the work
- they understand that false declaration is a form of malpractice.

Centres can use Pearson templates or their own templates to document authentication.

During assessment, an assessor may suspect that some or all of the evidence from a learner is not authentic. The assessor must then take appropriate action using the centre's policies for malpractice. Further information is given in *Section 7*.

Making assessment decisions using criteria

Assessors make judgements using the criteria. The evidence from a learner can be judged using all the relevant criteria at the same time. The assessor needs to make a judgement against each criterion that evidence is present and sufficiently comprehensive. For example, the inclusion of a concluding section may be insufficient to satisfy a criterion requiring 'evaluation'.

Assessors should use the following information and support in reaching assessment decisions:

- the *Essential information for assessment decisions* section in each unit gives examples and definitions related to terms used in the criteria
- the explanation of key terms in *Appendix 2*
- examples of assessed work provided by Pearson
- your Lead IV and assessment team's collective experience, supported by the standardisation materials we provide.

Pass and Merit criteria relate to individual learning aims. The Distinction criteria as a whole relate to outstanding performance across the unit. Therefore, criteria may relate to more than one learning aim (for example A.D1) or to several learning aims (for example DE.D3). Distinction criteria make sure that learners have shown that they can perform consistently at an outstanding level across the unit and/or that they are able to draw learning together across learning aims.

Dealing with late completion of assignments

Learners must have a clear understanding of the centre policy on completing assignments by the deadlines that you give them. Learners may be given authorised extensions for legitimate reasons, such as illness at the time of submission, in line with your centre policies.

For assessment to be fair, it is important that learners are all assessed in the same way and that some learners are not advantaged by having additional time or the opportunity to learn from others. Therefore, learners who do not complete assignments by your planned deadline or the authorised extension deadline may not have the opportunity to subsequently resubmit.

If you accept a late completion by a learner, then the assignment should be assessed normally when it is submitted using the relevant assessment criteria.

Issuing assessment decisions and feedback

Once the assessment team has completed the assessment process for an assignment, the outcome is a formal assessment decision. This is recorded formally and reported to learners.

The information given to the learner:

- must show the formal decision and how it has been reached, indicating how or where criteria have been met
- may show why attainment against criteria has not been demonstrated
- must not provide feedback on how to improve evidence
- must be validated by an IV before it is given to the learner.

Resubmission of improved evidence

An assignment provides the final assessment for the relevant learning aims and is normally a final assessment decision, except where the Lead IV approves one opportunity to resubmit improved evidence based on the completed assignment brief.

The Lead IV has the responsibility to make sure that resubmission is operated fairly. This means:

- checking that a learner can be reasonably expected to perform better through a second submission, for example that the learner has not performed as expected
- making sure that giving a further opportunity can be done in such a way that it does not give an unfair advantage over other learners, for example through the opportunity to take account of feedback given to other learners
- checking that the assessor considers that the learner will be able to provide improved evidence without further guidance and that the original evidence submitted remains valid.

Once an assessment decision has been given to the learner, the resubmission opportunity must have a deadline within 15 working days in the same academic year.

A resubmission opportunity must not be provided where learners:

- have not completed the assignment by the deadline without the centre's agreement
- have submitted work that is not authentic.

Retake of internal assessment

A learner who has not achieved the level of performance required to pass the relevant learning aims after resubmission of an assignment may be offered a single retake opportunity using a new assignment. The retake may only be achieved at a pass.

The Lead Internal Verifier must only authorise a retake of an assignment in exceptional circumstances where they believe it is necessary, appropriate and fair to do so. For further information on offering a retake opportunity, you should refer to the *BTEC Centre Guide to Assessment*. We provide information on writing assignments for retakes on our website (www.btec.co.uk/keydocuments).

Planning and record keeping

For internal processes to be effective, an assessment team needs to be well organised and keep effective records. The centre will also work closely with us so that we can quality assure that national standards are being satisfied. This process gives stakeholders confidence in the assessment approach.

The Lead IV must have an assessment plan, produced as a spreadsheet or using myBTEC. When producing a plan, the assessment team may wish to consider:

- the time required for training and standardisation of the assessment team
- the time available to undertake teaching and carry out assessment, taking account of when learners may complete external assessments and when quality assurance will take place
- the completion dates for different assignments
- who is acting as IV for each assignment and the date by which the assignment needs to be verified
- setting an approach to sampling assessor decisions through internal verification that covers all assignments, assessors and a range of learners
- how to manage the assessment and verification of learners' work so that they can be given formal decisions promptly
- how resubmission opportunities can be scheduled.

The Lead IV will also maintain records of assessment undertaken. The key records are:

- verification of assignment briefs
- learner authentication declarations
- assessor decisions on assignments, with feedback given to learners
- verification of assessment decisions.

Examples of records and further information are given in the *Pearson Quality Assurance Handbook*.

7 Administrative arrangements

Introduction

This section focuses on the administrative requirements for delivering a BTEC qualification. It will be of value to Quality Nominees, Lead IVs, Programme Leaders and Examinations Officers.

Learner registration and entry

Shortly after learners start the programme of learning, you need to make sure that they are registered for the qualification and that appropriate arrangements are made for internal and external assessment. You need to refer to the *Information Manual* for information on making registrations for the qualification and entries for external assessments.

Learners can be formally assessed only for a qualification on which they are registered. If learners' intended qualifications change, for example if a learner decides to choose a different pathway specialism, then the centre must transfer the learner appropriately.

Access to assessment

Both internal and external assessments need to be administered carefully to ensure that all learners are treated fairly, and that results and certification are issued on time to allow learners to progress to chosen progression opportunities.

Our equality policy requires that all learners should have equal opportunity to access our qualifications and assessments, and that our qualifications are awarded in a way that is fair to every learner. We are committed to making sure that:

- learners with a protected characteristic are not, when they are undertaking one of our qualifications, disadvantaged in comparison to learners who do not share that characteristic
- all learners achieve the recognition they deserve for undertaking a qualification and that this achievement can be compared fairly to the achievement of their peers.

Further information on access arrangements can be found in the Joint Council for Qualifications (JCQ) document *Access Arrangements, Reasonable Adjustments and Special Consideration for General and Vocational Qualifications*.

Administrative arrangements for internal assessment

Records

You are required to retain records of assessment for each learner. Records should include assessments taken, decisions reached and any adjustments or appeals. Further information can be found in the *Information Manual*. We may ask to audit your records so they must be retained as specified.

Reasonable adjustments to assessment

A reasonable adjustment is one that is made before a learner takes an assessment to ensure that they have fair access to demonstrate the requirements of the assessments. You are able to make adjustments to internal assessments to take account of the needs of individual learners. In most cases this can be achieved through a defined time extension or by adjusting the format of evidence. We can advise you if you are uncertain as to whether an adjustment is fair and reasonable. You need to plan for time to make adjustments if necessary.

Further details on how to make adjustments for learners with protected characteristics are given on our website in the document *Supplementary guidance for reasonable adjustment and special consideration in vocational internally-assessed units*.

Special consideration

Special consideration is given after an assessment has taken place for learners who have been affected by adverse circumstances, such as illness. You must operate special consideration in line with our policy (see previous paragraph). You can provide special consideration related to the period of time given for evidence to be provided or for the format of the assessment if it is equally valid. You may not substitute alternative forms of evidence to that required in a unit, or omit the application of any assessment criteria to judge attainment. Pearson can consider applications for special consideration in line with the policy.

Appeals against assessment

Your centre must have a policy for dealing with appeals from learners. These appeals may relate to assessment decisions being incorrect or assessment not being conducted fairly. The first step in such a policy could be a consideration of the evidence by a Lead IV or other member of the programme team. The assessment plan should allow time for potential appeals after assessment decisions have been given to learners. If there is an appeal by a learner, you must document the appeal and its resolution. Learners have a final right of appeal to Pearson but only if the procedures that you have put in place have not been followed. Further details are given in the document *Enquiries and appeals about Pearson vocational qualifications and end point assessment policy*.

Administrative arrangements for external assessment

Entries and resits

For information on the timing of assessment and entries, please refer to the annual examinations timetable on our website.

Access arrangements requests

Access arrangements are agreed with Pearson before an assessment. They allow students with special educational needs, disabilities or temporary injuries to:

- access the assessment
- show what they know and can do without changing the demands of the assessment.

Access arrangements should always be processed at the time of registration. Learners will then know what type of arrangements are available in place for them.

Granting reasonable adjustments

For external assessment, a reasonable adjustment is one that we agree to make for an individual learner. A reasonable adjustment is defined for the individual learner and informed by the list of available access arrangements.

Whether an adjustment will be considered reasonable will depend on a number of factors, to include:

- the needs of the learner with the disability
- the effectiveness of the adjustment
- the cost of the adjustment; and
- the likely impact of the adjustment on the learner with the disability and other learners.

Adjustment may be judged unreasonable and not approved if it involves unreasonable costs, timeframes or affects the integrity of the assessment.

Special consideration requests

Special consideration is an adjustment made to a student's mark or grade after an external assessment to reflect temporary injury, illness or other indisposition at the time of the assessment. An adjustment is made only if the impact on the learner is such that it is reasonably likely to have had a material effect on that learner being able to demonstrate attainment in the assessment.

Centres are required to notify us promptly of any learners who they believe have been adversely affected and request that we give special consideration. Further information can be found in the special requirements section on our website.

Conducting external assessments

Centres must make arrangements for the secure delivery of external assessments. External assessments for BTEC qualifications include examinations, set tasks and performance.

Each external assessment has a defined degree of control under which it must take place. Some external assessments may have more than one part and each part may have a different degree of control. We define degrees of control as follows.

High control

This is the completion of assessment in formal invigilated examination conditions.

Medium control

This is completion of assessment, usually over a longer period of time, which may include a period of controlled conditions. The controlled conditions may allow learners to access resources, prepared notes or the internet to help them complete the task.

Low control

These are activities completed without direct supervision. They may include research, preparation of materials and practice. The materials produced by learners under low control will not be directly assessed.

Further information on responsibilities for conducting external assessment is given in the document *Instructions for Conducting External Assessments*, available on our website.

Dealing with malpractice in assessment

Malpractice means acts that undermine the integrity and validity of assessment, the certification of qualifications, and/or that may damage the authority of those responsible for delivering the assessment and certification.

Pearson does not tolerate actions (or attempted actions) of malpractice by learners, centre staff or centres in connection with Pearson qualifications. Pearson may impose penalties and/or sanctions on learners, centre staff or centres where incidents (or attempted incidents) of malpractice have been proven.

Malpractice may arise or be suspected in relation to any unit or type of assessment within the qualification. For further details regarding malpractice and advice on preventing malpractice by learners, please see Pearson's *Centre guidance: Dealing with malpractice and maladministration in vocational qualifications*, available on our website.

The procedures we ask you to adopt vary between units that are internally-assessed and those that are externally assessed.

Internally-assessed units

Centres are required to take steps to prevent malpractice and to investigate instances of suspected malpractice. Learners must be given information that explains what malpractice is for internal assessment and how suspected incidents will be dealt with by the centre. The *Centre Guidance: Dealing with Malpractice* document gives full information on the actions we expect you to take.

Pearson may conduct investigations if we believe that a centre is failing to conduct internal assessment according to our policies. The above document gives further information, examples and details the penalties and sanctions that may be imposed.

In the interests of learners and centre staff, centres need to respond effectively and openly to all requests relating to an investigation into an incident of suspected malpractice.

Externally-assessed units

External assessment means all aspects of units that are designated as external in this specification, including preparation for tasks and performance. For these assessments centres must follow the JCQ procedures set out in the latest version of *JCQ Suspected Malpractice in Examinations and Assessments Policies and Procedures* (www.jcq.org.uk).

In the interests of learners and centre staff, centres need to respond effectively and openly to all requests relating to an investigation into an incident of suspected malpractice.

Learner malpractice

Heads of Centres are required to report incidents of any suspected learner malpractice that occur during Pearson external assessments. We ask that centres do so by completing a *JCQ Form M1* (available at www.jcq.org.uk/exams-office/malpractice) and emailing it and any accompanying documents (signed statements from the learner, invigilator, copies of evidence, etc.) to the Investigations Team at candidatemaalpractice@pearson.com. The responsibility for determining appropriate sanctions or penalties to be imposed on learners lies with Pearson.

Learners must be informed at the earliest opportunity of the specific allegation and the centre's malpractice policy, including the right of appeal. Learners found guilty of malpractice may be disqualified from the qualification for which they have been entered with Pearson.

Teacher/centre malpractice

Heads of Centres are required to inform Pearson's Investigations Team of any incident of suspected malpractice by centre staff, before any investigation is undertaken. Heads of centres are requested to inform the Investigations Team by submitting a *JCQ Form M2(a)* (available at www.jcq.org.uk/exams-office/malpractice) with supporting documentation to pqsmalpractice@pearson.com. Where Pearson receives allegations of malpractice from other sources (for example Pearson staff or anonymous informants), the Investigations Team will conduct the investigation directly or may ask the head of centre to assist.

Incidents of maladministration (accidental errors in the delivery of Pearson qualifications that may affect the assessment of learners) should also be reported to the Investigations Team using the same method.

Heads of Centres/Principals/Chief Executive Officers or their nominees are required to inform learners and centre staff suspected of malpractice of their responsibilities and rights; see Section 6.15 of the *JCQ Suspected Malpractice in Examinations and Assessments Policies and Procedures* document.

Pearson reserves the right in cases of suspected malpractice to withhold the issuing of results and/or certificates while an investigation is in progress. Depending on the outcome of the investigation results and/or certificates may be released or withheld.

You should be aware that Pearson may need to suspend certification when undertaking investigations, audits and quality assurances processes. You will be notified within a reasonable period of time if this occurs.

Sanctions and appeals

Where malpractice is proven we may impose sanctions or penalties.

Where learner malpractice is evidenced, penalties may be imposed such as:

- mark reduction for external assessments
- disqualification from the qualification
- being barred from registration for Pearson qualifications for a period of time.

If we are concerned about your centre's quality procedures we may impose sanctions such as:

- working with you to create an improvement action plan
- requiring staff members to receive further training
- placing temporary blocks on your certificates
- placing temporary blocks on registration of learners
- debarring staff members or the centre from delivering Pearson qualifications
- suspending or withdrawing centre approval status.

The centre will be notified if any of these apply.

Pearson has established procedures for centres that are considering appeals against penalties and sanctions arising from malpractice. Appeals against a decision made by Pearson will normally be accepted only from Heads of Centres (on behalf of learners and/or members of staff) and from individual members (in respect of a decision taken against them personally). Further information on appeals can be found in our *Enquiries and appeals about Pearson vocational qualifications and end point assessment policy*, which is on our website. In the initial stage of any aspect of malpractice, please notify the Investigations Team by email via pqsmalpractice@pearson.com who will inform you of the next steps.

Certification and results

Once a learner has completed all the required components for a qualification, even if final results for external assessments have not been issued, then the centre can claim certification for the learner, provided that quality assurance has been successfully completed. For the relevant procedures please refer to our *Information Manual*. You can use the information provided on qualification grading to check overall qualification grades.

Results issue

After the external assessment session, learner results will be issued to centres. The result will be in the form of a grade. You should be prepared to discuss performance with learners, making use of the information we provide and post-results services.

Post-assessment services

Once results for external assessments are issued, you may find that the learner has failed to achieve the qualification or to attain an anticipated grade. It is possible to transfer or reopen registration in some circumstances. The *Information Manual* gives further information.

Changes to qualification requests

Where a learner who has taken a qualification wants to resit an externally-assessed unit to improve their qualification grade, you firstly need to decline their overall qualification grade. You may decline the grade before the certificate is issued. For a learner receiving their results in August, you should decline the grade by the end of September if the learner intends to resit an external assessment.

Additional documents to support centre administration

As an approved centre you must ensure that all staff delivering, assessing and administering the qualifications have access to this documentation. These documents are reviewed annually and are reissued if updates are required.

- *Pearson Quality Assurance Handbook*: this sets out how we will carry out quality assurance of standards and how you need to work with us to achieve successful outcomes.
- *Information Manual*: this gives procedures for registering learners for qualifications, transferring registrations, entering for external assessments and claiming certificates.
- *Lead Examiners' Reports*: these are produced after each series for each external assessment and give feedback on the overall performance of learners in response to tasks or questions set.
- *Instructions for Conducting External Assessments (ICEA)*: this explains our requirements for the effective administration of external assessments, such as invigilation and submission of materials.
- *Regulatory policies*: our regulatory policies are integral to our approach and explain how we meet internal and regulatory requirements. We review the regulated policies annually to ensure that they remain fit for purpose. Policies related to this qualification include:
 - adjustments for candidates with disabilities and learning difficulties, access arrangements and reasonable adjustments for general and vocational qualifications
 - age of learners
 - centre guidance for dealing with malpractice
 - recognition of prior learning and process.

This list is not exhaustive and a full list of our regulatory policies can be found on our website.

8 Quality assurance

Centre and qualification approval

As part of the approval process, your centre must make sure that the resource requirements listed below are in place before offering the qualification.

- Centres must have appropriate physical resources (for example, equipment, IT, learning materials, teaching rooms) to support the delivery and assessment of the qualification.
- Staff involved in the assessment process must have relevant expertise and/or occupational experience.
- There must be systems in place to ensure continuing professional development for staff delivering the qualification.
- Centres must have in place appropriate health and safety policies relating to the use of equipment by learners.
- Centres must deliver the qualification in accordance with current equality legislation.
- Centres should refer to the teacher guidance section in individual units to check for any specific resources required.

Continuing quality assurance and standards verification

On an annual basis, we produce the *Pearson Quality Assurance Handbook*. It contains detailed guidance on the quality processes required to underpin planning for delivery including appropriate employer involvement, and for robust assessment and internal verification.

The key principles of quality assurance are that:

- a centre delivering BTEC programmes must be an approved centre, and must have approval for the programmes or groups of programmes that it is delivering
- the centre agrees, as part of gaining approval, to abide by specific terms and conditions around the effective delivery and quality assurance of assessment; it must abide by these conditions throughout the period of delivery
- Pearson makes available to approved centres a range of materials and opportunities, through online standardisation, intended to exemplify the processes required for effective assessment, and examples of effective standards. Approved centres must use the materials and services to ensure that all staff delivering BTEC qualifications keep up to date with the guidance on assessment
- an approved centre must follow agreed protocols for standardisation of assessors and verifiers, for the planning, monitoring and recording of assessment processes, and for dealing with special circumstances, appeals and malpractice.

The approach of quality-assured assessment is through a partnership between an approved centre and Pearson. We will make sure that each centre follows best practice and employs appropriate technology to support quality-assurance processes, where practicable. We work to support centres and seek to make sure that our quality-assurance processes do not place undue bureaucratic processes on centres. We monitor and support centres in the effective operation of assessment and quality assurance.

We monitor and support centres in the effective operation of assessment and quality assurance.

The methods we use to do this for BTEC Level 3 include:

- making sure that all centres complete appropriate declarations at the time of approval
- undertaking approval visits to centres
- making sure that centres have effective teams of assessors and verifiers who are trained to undertake assessment
- assessment sampling and verification, through requested samples of assessments, completed assessed learner work and associated documentation
- an overarching review and assessment of a centre's strategy for delivering and quality assuring its BTEC programmes, for example making sure that synoptic units are placed appropriately in the order of delivery of the programme.

Centres that do not fully address and maintain rigorous approaches to delivering, assessing and quality assurance cannot seek certification for individual programmes or for all BTEC Level 3 programmes. An approved centre must make certification claims only when authorised by us and strictly in accordance with requirements for reporting.

Centres that do not comply with remedial action plans may have their approval to deliver qualifications removed.

9 Understanding the qualification grade

Awarding and reporting for the qualification

This section explains the rules that we apply in awarding a qualification and in providing an overall qualification grade for each learner. It shows how all the qualifications in this sector are graded.

The awarding and certification of these qualifications will comply with regulatory requirements.

Eligibility for an award

In order to be awarded a qualification, a learner must complete all units, achieve a Near Pass (N) or above in all external units and a pass or above in all mandatory units unless otherwise specified. Refer to the structure in *Section 2*.

To achieve any qualification grade, learners must:

- complete and **have an outcome** (D, M, P, N or U) for all units within a valid combination
- achieve the **required units at pass or above** shown in *Section 2*, and for the Diploma achieve a minimum of 600 GLH and Extended Diploma achieve a minimum 900 GLH at Pass or above (or N or above in external units)
- achieve the **minimum number of points** at a grade threshold.

It is the responsibility of a centre to ensure that a correct unit combination is adhered to. Learners who do not achieve the required minimum grade (N or P) in units shown in the structure will not achieve a qualification.

Learners who do not achieve sufficient points for a qualification or who do not achieve all the required units may be eligible to achieve a smaller qualification in the same suite provided they have completed and achieved the correct combination of units and met the appropriate qualification grade points threshold.

Calculation of the qualification grade

The final grade awarded for a qualification represents an aggregation of a learner's performance across the qualification. As the qualification grade is an aggregate of the total performance, there is some element of compensation in that a higher performance in some units may be balanced by a lower outcome in others.

In the event that a learner achieves more than the required number of optional units, the mandatory units along with the optional units with the highest grades will be used to calculate the overall result, subject to the eligibility requirements for that particular qualification title.

BTEC Nationals are Level 3 qualifications and are awarded at the grade ranges shown in the table below.

Qualification	Available grade range
Certificate, Extended Certificate, Foundation Diploma	P to D*
Diploma	PP to D*D*
Extended Diploma	PPP to D*D*D*

The *Calculation of qualification grade* table, shown further on in this section, shows the minimum thresholds for calculating these grades. The table will be kept under review over the lifetime of the qualification. The most up to date table will be issued on our website.

Pearson will monitor the qualification standard and reserves the right to make appropriate adjustments.

Learners who do not meet the minimum requirements for a qualification grade to be awarded will be recorded as Unclassified (U) and will not be certificated. They may receive a Notification of Performance for individual units. The *Information Manual* gives full information.

Points available for internal units

The table below shows the number of **points** available for internal units. For each internal unit, points are allocated depending on the grade awarded.

	Unit size	
	60 GLH	90 GLH
U	0	0
Pass	6	9
Merit	10	15
Distinction	16	24

Points available for external units

Raw marks from the external units will be awarded **points** based on performance in the assessment. The table below shows the **minimum number of points** available for each grade in the external units.

	Unit size	
	90 GLH	120 GLH
U	0	0
Near Pass	6	8
Pass	9	12
Merit	15	20
Distinction	24	32

Pearson will automatically calculate the points for each external unit once the external assessment has been marked and grade boundaries have been set. For more details about how we set grade boundaries in the external assessment please go to our website.

Claiming the qualification grade

Subject to eligibility, Pearson will automatically calculate the qualification grade for your learners when the internal unit grades are submitted and the qualification claim is made. Learners will be awarded qualification grades for achieving the sufficient number of points within the ranges shown in the relevant *Calculation of qualification grade* table for the cohort.

Calculation of qualification grade

Applicable for registration from 1 September 2016.

Extended Certificate		Foundation Diploma		Diploma		Extended Diploma	
360 GLH		540 GLH		720 GLH		1080 GLH	
Grade	Points threshold	Grade	Points threshold	Grade	Points threshold	Grade	Points threshold
U	0	U	0	U	0	U	0
Pass	36	P	54	PP	72	PPP	108
				MP	88	MPP	124
						MMP	140
Merit	52	M	78	MM	104	MMM	156
				DM	124	DMM	176
						DDM	196
Distinction	74	D	108	DD	144	DDD	216
				D*D	162	D*DD	234
						D*D*D	252
Distinction*	90	D*	138	D*D*	180	D*D*D*	270

The table is subject to review over the lifetime of the qualification. The most up-to-date version will be issued on our website.

Examples of grade calculations based on table applicable to registrations from September 2016

Example 1: Achievement of an Extended Certificate with a P grade

	GLH	Type (Int/Ext)	Grade	Unit points
Unit 3	120	Ext	Pass	12
Unit 4	60	Int	Pass	6
Unit 5	60	Int	Merit	10
Unit 6	60	Int	Unclassified	0
Unit 7	60	Int	Merit	10
Totals	360		P	38

The learner has achieved N or higher in Unit 3, and P or higher in Unit 4.

The learner has sufficient points for a P grade

Example 2: Achievement of an Extended Certificate with a M grade

	GLH	Type (Int/Ext)	Grade	Unit points
Unit 3	120	Ext	Near Pass	8
Unit 4	60	Int	Merit	10
Unit 5	60	Int	Distinction	16
Unit 6	60	Int	Distinction	16
Unit 7	60	Int	Distinction	16
Totals	360		M	66

The learner has sufficient points for a M grade

Example 3: An Unclassified Result for an Extended Certificate

	GLH	Type (Int/Ext)	Grade	Unit points
Unit 3	120	Ext	Distinction	32
Unit 4	60	Int	Unclassified	0
Unit 5	60	Int	Distinction	16
Unit 6	60	Int	Merit	10
Unit 7	60	Int	Distinction	16
Totals	360		U	74

The learner has a U in Unit 4.

The learner has sufficient points for a D grade but has not met the minimum requirement for a Pass in Units 3 and 4.

10 Resources and support

Our aim is to give you a wealth of resources and support to enable you to deliver BTEC National qualifications with confidence. On our website you will find a list of resources to support teaching and learning, and professional development.

Support for setting up your course and preparing to teach

Specification

This **specification** (for teaching from September 2016) includes details on the administration of qualifications and information on all the units for the qualification.

Delivery Guide

This free guide gives you important advice on how to choose the right course for your learners and how to ensure you are fully prepared to deliver the course. It explains the key features of BTEC Nationals (for example employer involvement and employability skills). It also covers guidance on assessment (internal and external) and quality assurance. The guide tells you where you can find further support and gives detailed unit-by-unit delivery guidance. It includes teaching tips and ideas, assessment preparation and suggestions for further resources.

Schemes of work

Free sample schemes of work are provided for each mandatory unit. These are available in Word™ format for ease of customisation.

Curriculum models

These show how the BTECs in the suite fit into a 16–19 study programme, depending on their size and purpose. The models also show where other parts of the programme, such as work experience, maths and English, tutorial time and wider study, fit alongside the programme.

Study skills activities

A range of case studies and activities is provided; they are designed to help learners develop the study skills they need to successfully complete their BTEC course. The case studies and activities are provided in Word™ format for easy customisation.

myBTEC

myBTEC is a free, online toolkit that lets you plan and manage your BTEC provision from one place. It supports the delivery, assessment and quality assurance of BTECs in centres and supports teachers with the following activities:

- checking that a programme is using a valid combination of units
- creating and verifying assignment briefs (including access to a bank of authorised assignment briefs that can be customised)
- creating assessment plans and recording assessment decisions
- tracking the progress of every learner throughout their programme.

To find out more about myBTEC, visit the myBTEC page on the support services section of our website. We will add the new BTEC National specifications to myBTEC as soon possible.

Support for teaching and learning

Pearson Learning Services provides a range of engaging resources to support BTEC Nationals, including:

- textbooks in e-book and print formats
- revision guides and revision workbooks in e-book and print formats
- teaching and assessment packs, including e-learning materials via the Active Learn Digital Service.

Teaching and learning resources are also available from a number of other publishers. Details of Pearson's own resources and of all endorsed resources can be found on our website.

Support for assessment

Sample assessment materials for externally-assessed units

Sample assessments are available for the Pearson-set units. One copy of each of these assessments can be downloaded from the website/available in print. For each suite an additional sample for one of the Pearson-set units is also available, allowing your learners further opportunities for practice.

Further sample assessments will be made available through our website on an ongoing basis.

Sample assessment materials for internally-assessed units

We do not prescribe the assessments for the internally-assessed units. Rather, we allow you to set your own, according to your learners' preferences and to link with your local employment profile.

We do provide a service in the form of Authorised Assignment Briefs, which are approved by Pearson Standards Verifiers. They are available via our website or free on myBTEC.

Sample marked learner work

To support you in understanding the expectation of the standard at each grade, examples of marked learner work at PM/MD grades are linked to the Authorised Assignment Briefs.

Training and support from Pearson

People to talk to

There are many people who are available to support you and provide advice and guidance on delivery of your BTEC Nationals. These include:

- Subject Advisors – available for all sectors. They understand all Pearson qualifications in their sector and so can answer sector-specific queries on planning, teaching, learning and assessment
- Standards Verifiers – they can support you with preparing your assignments, ensuring that your assessment plan is set up correctly, and support you in preparing learner work and providing quality assurance through sampling
- Curriculum Development Managers (CDMs) – they are regionally based and have a full overview of the BTEC qualifications and of the support and resources that Pearson provides. CDMs often run network events
- Customer Services – the ‘Support for You’ section of our website gives the different ways in which you can contact us for general queries. For specific queries, our service operators can direct you to the relevant person or department.

Training and professional development

Pearson provides a range of training and professional development events to support the introduction, delivery, assessment and administration of BTEC National qualifications. These sector-specific events, developed and delivered by specialists, are available both face to face and online.

‘Getting Ready to Teach’

These events are designed to get teachers ready for delivery of the BTEC Nationals. They include an overview of the qualifications’ structures, planning and preparation for internal and external assessment, and quality assurance.

Teaching and learning

Beyond the ‘Getting Ready to Teach’ professional development events, there are opportunities for teachers to attend sector- and role-specific events. These events are designed to connect practice to theory; they provide teacher support and networking opportunities with delivery, learning and assessment methodology.

Details of our training and professional development programme can be found on our website.

Appendix 1 Links to industry standards

BTEC Nationals have been developed in consultation with industry and appropriate sector bodies to ensure that the qualification content and approach to assessment aligns closely to the needs of employers. Where they exist, and are appropriate, National Occupational Standards (NOS) and professional body standards have been used to establish unit content.

In the animal management sector, the mandatory content aligns closely to the needs of employers, who have been consulted throughout the development of this qualification.

Appendix 2 Glossary of terms used for internally-assessed units

This is a summary of the key terms used to define the requirements in the units.

Term	Definition
Analyse	<p>Learners present the outcome of methodical and detailed examination, either:</p> <ul style="list-style-type: none"> • breaking down a theme, topic or situation in order to interpret and study the interrelationships between the parts and/or • of information or data to interpret and study key trends and interrelationships. <p>Analysis can be through performance, practice, written or, less commonly, verbal presentation.</p>
Assess	<p>Learners present a careful consideration of varied factors or events that apply to a specific situation or, to identify those which are the most important or relevant and arrive at a conclusion.</p>
Compare	<p>Learners identify the main factors relating to two or more items/situations or aspects of a subject that is extended to explain the similarities, differences, advantages and disadvantages.</p> <p>This is used to show depth of knowledge through selection and isolation of characteristics.</p>
Demonstrate	<p>Learners' work, performance or practice evidences the ability to carry out and apply knowledge, understanding and/or skills in a practical situation.</p>
Examine	<p>Knowledge with application where learners are expected to select and apply to less familiar contexts.</p>
Explain	<p>The learner work shows clear details and gives reasons and/or evidence to support an opinion, view or argument. It could show how conclusions are drawn (arrived at). The learner is able to show that they comprehend the origins, functions and objectives of a subject, and its suitability for purpose</p>
Explore	<p>Skills and/or knowledge, involving practical testing or trialling.</p>

Term	Definition
Evaluate	<p>Learners' work draws on varied information, themes or concepts to consider aspects such as:</p> <ul style="list-style-type: none"> • strengths or weaknesses • advantages or disadvantages • alternative actions • relevance or significance. <p>The learner inquiry should lead to a supported judgement showing relationship to its context. This will often be in a conclusion.</p> <p>Evidence will often be written but could be through presentation, performance or practice.</p>
Investigate	Knowledge based on personal research and development.
Justify	<p>Learners give reasons or evidence to:</p> <ul style="list-style-type: none"> • support an opinion • prove something right or reasonable.
Perform	Learners carry out or execute what has to be done to complete a given activity.
Plan	Learners create a way of doing a task or series of tasks to achieve specific requirements or objectives showing progress from start to finish.
Reflect	On own skills and development and make suggestions for own development.
Review	<p>Learners make a formal assessment of work produced.</p> <p>The assessment allows learners to appraise existing information or prior events, and reconsider information with the intention of making changes, if necessary.</p>
Select	Learners choose the best or most suitable option whether this is of materials, techniques, equipment or processes. The options and choices should be based on specific criteria.
Understand	Learners demonstrate knowledge related to defined situations.
Undertake/carry out/develop	Learners demonstrate skills through practical activities.

This is a key summary of the types of evidence used for BTEC Nationals.

Type of evidence	Definition and purpose
Case study	A specific example to which all learners must select and apply knowledge. Used to show application to a realistic context where direct experience cannot be gained.
Development log	A record kept by learners to show the process of development. Used to show method, self-management and skill development.
Individual project	A self-directed, large-scale activity requiring, planning, research, exploration, outcome and review. Used to show self-management, project management and/or deep learning, including synopticity.
Log	A record made by learners of how a process of development was carried out, including experimental stages, testing, selection and rejection of alternatives, practice or development steps.
Plan	Learners produce a plan as an outcome related to a given or limited task.
Presentation	To show presentation skills, including communication. To direct to a given audience and goal. To extract and summarise information.
Project	A large-scale activity requiring planning, research, exploration, outcome and review. Used to show self-management, project management and/or deep learning including synopticity.
Portfolio	Digital or physical showing a selection of work which contributes towards a project or for a specific purpose.
Practical task (artefact/outcome)	Learners carry out a defined or self-defined task to produce an outcome.
Research	An analysis of substantive research organised by learners from secondary and, if applicable, primary sources.

Pearson BTEC Level 3 Nationals in Animal Management

Extended Certificate in Animal Management

Foundation Diploma in Animal Management

Diploma in Animal Management

Extended Diploma in Animal Management

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