

Qualification Specification

GA Level 4 Certificate in Veterinary Laser Applications (610/5339/9)

This qualification is subject to the GA Centre Assessment and Standards Scrutiny and General Moderation policy.

This qualification is delivered in partnership with The Vet Laser Specialist, an approved GA centre.



Section 1: Qualifications Overview

1.1 Introduction: About this Qualification

Gatehouse Awards (GA) qualifications are designed to give learners the skills to be active in the modern labour market and progress in their career and/or into higher level study.

This specification covers the GA Level 4 Certificate in Veterinary Laser Applications 610/5339/9.

This document provides centre staff, learners and employers with an overview of the qualification content as well as the assessment and quality assurance requirements for this qualification.

This qualification is regulated by the Office of Qualifications and Examinations Regulations (Ofqual) in England and is part of the Regulated Qualifications Framework (RQF). All versions of this qualification are listed on the Register of Regulated Qualifications which is operated by Ofqual at http://register.ofqual.gov.uk.

This qualification is not designed to replace an existing qualification.

Upon award of this qualification, practitioners are entitled to use the post-nominals Level 4 CertALT (Certificate in Animal Laser Therapies)

Note that a more detailed version of this Qualification Specification is made available to approved GA centres.

1.2 Institute of Registered Veterinary Animal Physiotherapists (IRVAP)



"The Level 4 Certificate in Veterinary Laser Applications by Gatehouse Awards is a groundbreaking addition to the veterinary industry, setting new standards for excellence in therapeutic laser treatment. This pivotal qualification not only enhances professional expertise but also ensures that veterinary practitioners are equipped with cutting-edge knowledge and hands-on skills to deliver safe, effective, and evidence-based laser therapy. As demand for advanced, non-invasive treatment options grows, this certification provides a vital opportunity for veterinary professionals to expand their capabilities, improve patient outcomes, and stay at the forefront of modern veterinary care. IRVAP's commitment to



support high-quality education and industry advancement makes this award an invaluable asset for both practitioners and the animals they treat."

1.3 Qualification Title, Qualification Number and Important Dates

Qualification Title and Level	Qualification	Operational	Operational
	Number	Start Date	Review Date
GA Level 4 Certificate in Veterinary Laser Applications	610/5339/9	18/02/2025	Feb 2030

1.4 Qualification Aims and Objectives

In the GA Level 4 Certificate in Veterinary Laser Applications, learners will acquire essential skills in treating a variety of health conditions in animals, using contact and off-contact, point-to-point and scanning laser therapy. The learner will engage in reflective practice and gain the knowledge and skills to enhance their clinical reasoning within a professional clinical environment.

Learners will gain in-depth knowledge of photobiomodulation (PBM) and the mechanisms behind laser technology. They will develop clinical expertise in effectively treating a variety of conditions:

- musculoskeletal conditions
- thoracic conditions
- abdominal conditions
- wounds / dermatological conditions
- neurological conditions

Treatments may also include the use of acupuncture points.

All of the above exclude treatments within the periorbital rim).

Learners will understand the importance of professional development and working within their scope of practice while recognising the legal, ethical, and professional responsibilities associated with using veterinary laser therapy. Learners will also explore therapeutic handling techniques in clinical settings and study canine functional anatomy to optimise patient outcomes. The qualification will equip learners with skills for conducting clinical risk assessments, risk ratings, health monitoring, and documenting information to meet health and safety standards. Learners will also acquire the knowledge needed to be able to establish and compliantly manage their own laser therapy business.



1.5 Animal Species Scope

The primary expectation for learners undertaking this qualification in veterinary laser applications is that they will apply laser therapies primarily to canines. While learners may have opportunities to work with other small animals (rabbits, cats etc) during their training and practice, the core focus remains on dogs.

Please note that this qualification does not extend to equine applications - horses are specifically excluded from the scope of treatment.

All patients must be tolerant of being safely handled and must have veterinary referral documentation on file for the specific conditions being treated.

1.6 Qualification Structure and Overview: Units, GLH, TQT, Level and Credit Value

The structure of this qualification is as follows:

GA Level 4 Certificate in Veterinary Laser Applications (610/5339/9)				
Mandatory Units	Unit Reference	Credits	GLH*	GLH + Study Time**
1. The Core Principles of Photobiomodulation	R/651/4892	4	11	40
2. Clinical Indications for Photobiomodulation	T/651/4893	2	8	20
3. Physics and the Components of Laser	Y/651/4894	2	11	20
4. Laser Health and Safety	A/651/4895	3	10	30
5. Canine Functional Anatomy for Photobiomodulation	D/651/4896	5	20	50
6. Patient Preparation, Environment and Therapeutic Handling	F/651/4897	2	8	20
7. Practical Application of Photobiomodulation	H/651/4898	4	23	40
8. Professional Practice and Business Development in Veterinary Laser Therapy	J/651/4899	4	15	40
		Total Credits 26	Total GLH* 106	TQT** 260



*Guided Learning Hours (GLH): Definition

The activity of a learner in being taught or instructed by – or otherwise participating in education or training under the immediate guidance or supervision of – a lecturer, supervisor, tutor or other appropriate provider of education or training.

**Total Qualification Time (TQT): Definition

The number of Guided Learning Hours assigned, plus an estimate of the number of study hours a learner will reasonably be likely to spend in preparation, study or any other form of participation in education or training, including assessment, which takes place as directed by – but, unlike Guided Learning, not under the immediate guidance or supervision of a lecturer, supervisor, tutor or other appropriate provider of education or training.

The number of study hours a learner is expected to undertake in order to complete each unit is expressed in the **'Study Time'** above. This, including the GLH, provides the Total Qualification Time, or TQT, and represents an estimate of the total amount of time that could reasonably be expected to be required in order for a learner to achieve and demonstrate the achievement of the level of attainment necessary for the award of this qualification.

The estimates for Guided Learning Hours and Total Qualification Time above have been produced with due regard to information gathered from those with experience in education and training and is in line with guidance published by Ofqual on the allocation and expression of Total Qualification Time and Guided Learning Hours.

Level

The qualifications within this specification are designated at Level 4 on the Regulated Qualification Framework (RQF) according to the Level Descriptors for knowledge and understanding, which build on those used within the Qualifications and Credit Framework (QCF) and the European Qualifications Framework (EQF). This means that this qualification is considered by GA to lead to the outcome as follows:

Achievement at Level 4 reflects the ability to identify and use relevant understanding, methods and skills to address problems that are well defined but complex and non-routine. It includes taking responsibility for overall courses of action as well as exercising autonomy and judgement within fairly broad parameters. It also reflects understanding of different perspectives or approaches within an area of study or work.



1.7 Rules of Combination

This qualification consists of 8 mandatory units. There are no optional units.

The mandatory units within the qualification are detailed in Section 1.4 above. Learners must successfully demonstrate their achievement of all the learning outcomes and assessment criteria within the mandatory units.

The learning outcomes and assessment criteria for the units are provided in Section 4 below.

There are no further rules of combination.

1.8 Intended Audience, Age and Entry Requirements

This qualification is ideal for learners from a variety of backgrounds. The GA Level 4 Certificate in Veterinary Laser Applications is specifically designed for individuals who already have experience in the veterinary field, including roles in veterinary, hydrotherapy, or physiotherapy clinics, whether through paid employment or voluntary work.

This qualification is intended for learners aged 18 and older.

Formal entry requirements include a qualification at Level 3 such as a Level 3 Diploma in Veterinary Nursing, a, Level 3 or 4 Certificate/Diploma in Canine Hydrotherapy or a Level 6 Diploma in Animal/Veterinary Physiotherapy.

Learners must also have at least one year of post-qualification experience in a clinical veterinary setting.

Given the nature of the qualification content, learners are required to have a proficient level of spoken and written English (e.g., GCSE Grade C / Grade 4 or above, or equivalent).

It is recommended that learners seek detailed advice and guidance from the training provider before beginning the programme to ensure the course and qualification align with their needs.

1.9 Recognition of Prior Learning and Transfer of Credits

Recognition of Prior Learning (RPL) is a method of assessing whether a learner's previous experience and achievements meet the standard requirements of a GA Unit or Units prior to the learner taking the assessment for the qualification, or part of the qualification, they are registered for.



Any prior learning must be relevant to the knowledge, skills and understanding which will be assessed as part of that qualification, and GA will subsequently amend the requirements which a learner must have satisfied before they are assessed as eligible to be awarded the qualification.

Where there is evidence that the learner's knowledge and skills are current, valid and sufficient the use of RPL may be acceptable for recognising achievement of assessment criteria, learning outcome or unit(s). The requirement for RPL in such instances must also include a consideration of the currency of the knowledge gained by the learner at the time they undertook the prior learning. RPL cannot be guaranteed in instances where industry practice or legislation has significantly changed in the time since the prior learning was undertaken / a previous award was issued.

All RPL decisions and processes are subject to External Quality Assurance (EQA) scrutiny and must be documented in line with GA's quality assurance requirements.

No transfer of credits is permitted.

1.10 Relationship to Other Qualifications & Progression Opportunities

The GA Level 4 Certificate in Veterinary Laser Applications provides a strong foundation for various career pathways for learners with a specific interest in laser therapies. The qualification enables practitioners to work in established clinics or set up their own business.

Successful learners may progress to a career working in specialist rehabilitation clinics, veterinary practices, sporting dog facilities, or animal therapy centres, all of which may have a special interest in laser therapy and/or other electrotherapies.

The knowledge and skills gained also support progression into related fields such as animal physiotherapy. Practitioners may choose to specialise in particular areas such as post-surgical rehabilitation, working dog fitness, or elderly care. The qualification also provides a platform for those interested in research or teaching within the field of animal rehabilitation.

1.11 Language of Assessment

This qualification is offered in English. Further information concerning the provision of qualification and assessment materials in other languages may be obtained from GA.



1.12 Grading

All learning outcomes and assessment requirements must be met before a learner can be considered having achieved this qualification.

This qualification is not graded on a scale. Learners are assessed as Pass or Fail.

Learners who aren't successful can resubmit work within the registration period.

1.13 Qualification Availability

This qualification is available via GA Approved Centres in the UK and internationally. If you would like further information on offering this qualification, please contact us.

Our contact details appear on our website: www.gatehouseawards.org



Section 2 - Qualification Delivery, Assessment Model and Certification

2.1 Teaching and Learning Requirements

Courses leading to this qualification may consist of e-learning courses or classroom-based courses, or a blended option.

Learners can therefore undertake learning and assessment on a flexible basis.

Learners must have suitable access to teaching and assessment staff as well as technical support. Specialist staff, high quality learning materials and access to assessment opportunities are essential for all centres.

Further details and guidance on the content of teaching and learning for each unit can be found in the Unit Specifications in Section 4 below.

2.2 Assessment and Quality Assurance Model

This qualification is delivered in-centre and in a workplace, where learners' work is internally assessed and internally moderated by centre staff to clearly show where learners have achieved the learning outcomes and qualification requirements. There is no requirement for external assessment.

Assessment, internal moderation and quality assurance activities are subject to external moderation and quality assurance conducted by GA. Centres delivering this qualification are subject to the GA Centre Assessment and Standards Scrutiny (CASS) and General Moderation Policy.

Detailed information about the order of delivery and components of assessment are contained in Section 3 below.

2.3 Registering Learners & Unique Learner Numbers

Learners must be registered through the Ark, the GA online Learner Management System.

Owing to the Total Qualification Time of this qualification, the validity period of registrations made will be 24 months. Should a learner not have achieved in the timescale, a new registration is required.



Each approved GA centre is provided with a user account to allow approved staff access to the online system.

Where the Unique Learner Number (ULN) of a learner is known, this should be provided at the point of registration in order for GA to issue updates to the Learner Record Service.

2.4 ID Requirements

It is the responsibility of the centre to have systems in place to confirm each learner's identity.

Learners are required to declare that all work submitted for assessment is their own work.

2.5 Record Keeping

Records of learner's details, their work and any records of Reasonable Adjustments, Special Considerations and records containing learners' personal details must be kept by the centre in line with the Data Protection Act 2018 (including GDPR and all relevant privacy regulations) for a minimum of 2 years.

The centre must operate a safe and effective system of care and comply with clinical and information governance requirements, with appropriate policies and procedures in place to maintain confidentiality related to clients, staff and learners.

All records must be easily retrievable and made available to GA or the Regulator upon request.

Portfolios must be retained until the following External Quality Assurance visit to allow them to be sampled. Following external moderation and the award of a qualification by GA, centres may return portfolios to learners.

Records of all internal quality assurance and moderation activity undertaken must be kept and made available to GA upon request.



Section 3 - Centre Requirements: Assessment & Quality Assurance

Course providers offering this GA qualification must ensure that they have the following resources in place.

3.1 Staff

The knowledge and experience of all staff involved in the teaching, assessment and internal quality assurance of this qualification will be considered during the approval and re-approval process and at External Quality Assurance Visits.

The course provider must ensure that they hold up-to-date and detailed information about the staff involved with the delivery and quality assurance of this qualification and must make records available to GA upon request. The information GA expects the course provider to hold for each member of staff includes, as a minimum:

- current up to date CV
- copies of relevant qualification certificates
- relevant and up to date CPD (Continuous Professional Development) records

The course provider must also ensure that they have the management and administrative arrangements in place which are suitable to support the registration of learners and the qualification delivery.

3.2 Assessment of Learners & Portfolio Requirements

Learners are expected to build a portfolio of evidence, clearly demonstrating where they have met the learning outcomes and qualification requirements.

To meet the assessment requirements, candidates must:

- follow a suitable programme of learning.
- maintain and submit a portfolio of all coursework including all materials related to assessment.

Various types of evidence may be used, for example:

- essays/assignments
- short questions and answers
- workbooks
- professional discussions



- observations of performance in the workplace
- product evidence
- reflective accounts
- expert witness testimony
- records of questioning

Evidence in the portfolio should be mapped against the learning outcomes and assessment criteria, reflect the type of evidence supplied and indicate its location within the portfolio. By using portfolio reference numbers, it will enable the learner, assessor, IQA and EQA to quickly locate the evidence submitted.

The Clinical Readiness Form (CRF), the Clinical Skills Logbook and Competency Record and records of the Summative Assessment must also be contained within the portfolio.

3.3 Components of Assessment

The table below indicated the methods and component of assessment for each of the units within this qualification:

Unit	Assessment Criteria	Assessment Method
1. The Core Principles of Photobiomodulation	ALL	Portfolio - Component 1
2. Clinical Indications for Photobiomodulation	ALL	Portfolio - Component 1
3. Physics and the Components of Laser	ALL	Portfolio- Component 1
4. Laser Health and Safety	ALL	Portfolio- Component 1
5. Canine Functional Anatomy for Photobiomodulation	ALL	Portfolio - Component 2 & Component 3
6. Patient Preparation, Environment and Therapeutic Handling	ALL	Portfolio - Component 2 & Component 3
7. Practical Application of Photobiomodulation	ALL	Portfolio - Component 2 & Component 3
8. Professional Practice and Business Development in Veterinary Laser Therapy	ALL	Portfolio – Component 4

Detailed instructions relating to each component of assessment is available to approved GA centres.



3.4 CRAVES Requirements

Assessors must ensure that all evidence within the learner's portfolio judged to meet GA's 'CRAVES' requirements is:

- **current:** the work is relevant at the time of the assessment
- reliable: the work is consistent with that produced by other learners
- authentic: the work is the learner's own work
- valid: the work is relevant and appropriate to the subject being assessed and is at the required level
- evaluated: where the learner has not been assessed as competent, the deficiencies have been clearly and accurately identified via feedback to the learner
- **sufficient:** the work covers the expected learning outcomes and any range statements as specified in the criteria or requirements in the assessment strategy.

3.5 Internal Moderation and Quality Assurance Arrangements

Internal Moderators (also known as Internal Quality Assurers or IQAs) ensure that Assessors are assessing to the same standards, i.e. consistently and reliably, and that assessment decisions are correct. IQA activities will include:

- ensuring Assessors are suitably experienced and qualified in line with the qualification requirements
- sampling assessments and assessment decisions
- ensuring that assessment decisions meet the GA 'CRAVES' requirements (Current, Reliable, Authentic, Valid, Evaluated and Sufficient)
- conducting standardisation and moderation of assessment decisions
- providing Assessors with clear and constructive feedback
- supporting Assessors and providing training and development where appropriate
- ensuring any stimulus or materials used for the purposes of assessment are fit for purpose.

Sampling of assessment will be planned and carried out in line with a clear IQA and moderation strategy, which incorporates the number of learners, number of Assessors, and the experience and competency of Assessors.

Centre IQAs may wish to refer to the guidance documents provided by GA to approved centres (available on the Ark) in order to formulate an appropriate Sampling Strategy. A Guide is provided in Appendix 1 of this Qualification Specification.



3.6 External Moderation and External Quality Assurance Arrangements

Assessment and internal moderation and quality assurance activities are subject to external moderation and wider scrutiny and centre controls as per GA's quality assurance arrangements for centre-assessed qualifications.

All GA Approved Centres are entitled to two EQA visits per year. Additional visits can be requested, for which there may be an additional charge.

EQA activities will focus on the centre's continuing adherence to and maintenance of the GA Centre Approval Criteria and the criteria and requirements for the specific qualifications for which it holds approval. These include:

- checking that the management of the centre and the management arrangements relating to the qualification are sufficient
- checking that resources to support the delivery of the qualifications, including physical resources and staffing, are in place and sufficient
- ensuring that the centre has appropriate policies and procedures in place relevant to the organisation and to the delivery and quality assurance of the qualifications
- the use of assessment materials and the arrangements in place to ensure that evidence for assessment is 'CRAVES' (Current, Reliable, Authentic, Valid, Evaluated and Sufficient)
- sampling assessment decisions against the qualification requirements across the range of levels, number of Assessors and assessment sites, according to the number of learners
- the internal moderation and quality assurance arrangements
- sampling internal moderation records against the qualification requirements across the range of levels, number of Assessors and assessment sites, according to the number of learners
- administrative arrangements
- ensuring that any actions from moderation and wider quality assurance activity have been carried out by the centre
- confirming any claims for RPL, reasonable adjustments or special considerations

Through discussions with centre staff, examining learner's work, moderation of assessment, talking to learners and reviewing documentation and systems, the GA EQA will provide the centre with full support, advice and guidance as necessary.

3.7 Venue and Equipment Requirements

When training premises are used in the delivery of teaching and assessment of this qualification, centres should, wherever possible, provide suitable access in line with Disability Discrimination, Diversity & Equality law and regulations and any other regulations which apply.



Centres must ensure that all products and equipment used in the delivery and assessment of this qualification must be authorised by GA and confirmed as fit for purpose and compliant with current Health and Safety legislation and any other relevant regulations. This will be considered at approval and during the on-going monitoring of centres.

Where specific products and equipment are required for the delivery and assessment of a GA qualification, the suitability of the products and equipment at the centre will be considered during the centre and qualification approval process and at External Quality Assurance Visits.

For this qualification, suitable venue arrangements may include the learner having access to:

- Personal Protective Equipment (PPE) appropriate for the laser device being used
- Appropriate therapeutic veterinary laser that can demonstrate contact, off-contact, scanning and point-to-point methods.
- Correct laser safety signage
- Non-slip flooring
- First Aid kit for canines and humans
- Emergency evacuation procedures
- All appropriate health and safety policies and procedures
- Risk assessment complete for all activities carried out on site
- Fire safety
 - o signs
 - o appropriate fire extinguisher(s)
 - o fire procedure

The clinical setting must meet the minimum equipment requirements specified above and must maintain appropriate insurance cover for their facility.

3.8 Teaching and Learning Resources

GA does not prescribe the use of set course books, workbooks or other materials but expects that centres providing such courses should use relevant and up-to-date, high-quality teaching and learning materials which allow learners to adequately prepare for assessment.

All delivery and assessment resources should be inclusive of the principles of equality and diversity and the safeguarding of learners.

Please note, any references to books, journals, websites or other third-party materials and publications made by GA does not infer that GA's accepts responsibility for the content of such materials or any opinions expressed within them.



3.9 Marking, Re-Submission of Work and Re-Sit Summative Assessments

The use of artificial intelligence ('Al') to mark learner work is strictly prohibited.

The decision regarding whether to permit a candidate to resubmit work and/or attempt an assessment again will be based on an evaluation of how closely their previous attempts met the passing criteria. This evaluation will consider the extent to which the candidate's work demonstrated progress towards meeting the required standards.

If a learner must retake any assessment, the centre is expected to offer additional training or support to address areas needing improvement. It is essential that the centre maintains regular contact hours with learners to identify any challenges and implement necessary support or access arrangements.

Any re-submissions of work or re-sits of the practical assessment must be completed within the qualification registration period.

Re-submissions of work or re-sits of the practical assessment must be assessed with the same rigour and adherence to the qualification standards.

If a candidate does not pass after three attempts, the centre must assess whether, despite supportive measures and multiple attempts, the candidate's progress is not indicative that they will meet the qualification requirements. They may be issued with a final 'Fail' grade or withdraw from the programme.

The centre must ensure that their policies and procedures regarding candidate dismissal or failure are communicated clearly to candidates to maintain fairness and transparency.

3.10 Results

Centres may make claims for certification via the Ark when learners complete and the Assessor and Internal Moderator have confirmed achievement. Such claims for certification are subject to successful external moderation (EQA).

Following the External Moderator's confirmation of a learner's achievement, GA will authorise claims for the certification of learners, details of which will be visible to the centre in the centre's Ark account. Certificates are usually issued within 10 working days of the award of the qualification.

3.11 Certificates

The qualification certificate will indicate both the title and the level at which the qualification is achieved.



Certificates will only be issued to learners who have achieved sufficient credits and met the rules of combination for the qualification they are registered for. If a learner has not achieved sufficient credits or failed to meet the rules of combination, the qualification certificate will not be issued.

Replacement certificates are available upon request.

Amendments to certificates are available upon request but may require the centre to provide evidence of the need for any amendment (e.g. learner proof of identification) and will involve the return of the original certificate. Replacements and amendments may incur an additional charge.

3.12 Direct Claims Status (DCS)

Direct Claims Status is not available for this qualification.

3.13 Appeals and Enquiries

GA has an appeals procedure in accordance with the arrangements for regulated qualifications.

General enquiries can be made at any time and should be directed to a GA Centre Administrator.

3.14 Ongoing Support

There are a number of documents on the GA website that centres and learners may find useful: www.gatehouseawards.org

The website is updated regularly with news, information about all GA qualifications, sample materials, updates on regulations and other important notices.

Within the centre, a named Examinations Officer is responsible for ensuring that all information and documents provided to centre staff and learners are correct and up to date.

GA must be kept up to date with contact details of all changes of personnel so centres can be provided with the best level of support and guidance.

At the time of approval, centres are assigned a designated Centre Administrator who is their primary point of contact for all aspects of service or support.



Learners should always speak to a member of staff at the centre for information relating to GA and our qualifications prior to approaching GA directly.

Contact details for GA can be found on the GA website www.gatehouseawards.org.

Section 4: Unit Specifications

4.1 GA Level 4 Certificate in Veterinary Laser Applications (610/5339/9)

Mandatory Unit		GLH	Credits	Unit Reference
1	The Core Principles of Photobiomodulation	11	4	R/651/4892

In this unit, learners will develop an understanding of the process of photobiomodulation. Knowledge and understanding of the components of the cell that are critical to treatment success, through to how photons induce chemical changes, will enable the learner to understand how laser works in a range of clinical applications.

Assessment Requirements & Indicative Content

Learning Outcomes The learner will be able to	Assessment Criteria The learner can
THE TEAM OF THE EAST OF	1.1 State the components in a cell
	1.2 Describe what a chromophore is
1. Understand the composition of cells	1.3 Describe the role of mitochondria in the cell
	1.4 Explain the role of cytochrome C oxidase
	1.5 Explain the relationship between chromophores and light absorption
	2.1 Describe the sequence of events from photon absorption to cellular response in photobiomodulation



	2.2 Describe what Adenosine Triphosphate (ATP) is and what effect photobiomodulation has on it
2. Understand the process of	2.3 Describe what Reactive Oxygen Species (ROS) is and what effect photobiomodulation has on it.
photobiomodulation	2.4 Describe nitric oxide and what effect photons have on nitric oxide
	2.5 Define a range of biological effects of photobiomodulation.
	3.1 Describe the key types of pain
3. Understand how	3.2 Explain the process of the pain pathway
photobiomodulation reduces pain & inflammation	3.3 Describe how ATP, ROS and nitric oxide influence the pain signalling pathway
IIIIIaIIIIIauoii	3.4 Describe how ATP, ROS and nitric oxide affect inflammation responses
	effect photobiomodulation has on it 2.3 Describe what Reactive Oxygen Species (ROS) is and what effect photobiomodulation has on it. 2.4 Describe nitric oxide and what effect photons have on nitric oxide 2.5 Define a range of biological effects of photobiomodulation 3.1 Describe the key types of pain 3.2 Explain the process of the pain pathway 3.3 Describe how ATP, ROS and nitric oxide influence the pasignalling pathway 3.4 Describe how ATP, ROS and nitric oxide affect inflammation responses 3.5 Evaluate clinical evidence for photobiomodulation in pain management 4.1 State the four stages of tissue repair 4.2 Evaluate how photobiomodulation impacts tissue regeneration
	4.1 State the four stages of tissue repair
4. Understand how photobiomodulation affects tissue repair	· ·
	4.3 Evaluate clinical evidence for photobiomodulation in tissue repair



Mandatory Unit		GLH	Credits	Unit Reference
2	Clinical Indications for Photobiomodulation	8	2	T/651/4893

In this unit, the learner will explore the clinical applications of photobiomodulation therapy across various conditions and pathologies. Building on a knowledge of cellular mechanisms, this unit covers common indications, specific treatment approaches for musculoskeletal, neurological, and acute conditions, and essential aspects of treatment planning.

The learner will also consider dosing calculations, understand vital safety considerations including contraindications, and examine applications in sports performance and thoracic conditions. Throughout the unit, emphasis is placed on evidence-based practice and on the safe and effective application of photobiomodulation treatments.

Assessment Requirements & Indicative Content

Learning Outcomes The learner will be able to	Assessment Criteria The learner can
	1.1. Define common indications for photobiomodulation
Understand common indications for photobiomodulation treatment	1.2 Evaluate evidence for different treatment indications
u catment	1.3 Explain how to identify patient conditions for photobiomodulation therapy
2. Understand how	2.1 Define common musculoskeletal and neurological conditions suitable for treatment
photobiomodulation is used for common musculoskeletal and	2.2 Evaluate the use of photobiomodulation to treat different conditions
neurological conditions	2.3 Analyse clinical evidence on the use of photobiomodulation



	2.4 Describe the expected outcomes and timeframes of the use of photobiomodulation for different conditions
3. Understand how	3.1 Define appropriate common acute conditions for treatment
photobiomodulation affects common acute conditions	3.2 Evaluate the use of photobiomodulation in treating acute conditions
	3.3 Analyse clinical evidence on the use of photobiomodulation for acute conditions
	4.1 Explain how to calculate dose for photobiomodulation
	4.2 Explain how to document dosing calculations
4. Understand the	4.3 Evaluate the differences in dose rates for scanning versus point-to-point methods
mechanics of dosing	4.4 State the recommended dose rates for chronic conditions
	4.5 State the recommended dose rates for acute conditions
	4.6 Explain the importance of patient characteristics in calculating dose
	5.1 Describe the key contraindications for laser treatment
5. Understand	5.2 Explain special considerations for laser treatment
contraindications for photobiomodulation	5.3 Analyse the risks and considerations when considering treating patients with neoplasia
	5.4 Analyse the risks and considerations for treating pregnant patients



	5.5 Analyse the risks and considerations when considering treating patients with active bleeds
	5.6 Explain the importance of not treating near the eyes
6. Understand other uses	6.1 Describe how photobiomodulation helps with performance for athletes
for photobiomodulation	6.2 Describe the use of photobiomodulation in thoracic conditions



Mandatory Unit		GLH	Credits	Unit Reference
3	Physics and the Components of Laser	11	2	Y/651/4894

In this unit, the learner will explore physics and technical aspects of laser therapy systems used in photobiomodulation. Starting with core laser components and their functions, the unit progresses through crucial concepts including laser classification, power settings, and the electromagnetic spectrum.

The learner will master key principles of irradiance and beam delivery, developing their knowledge and understanding of how different parameters affect treatment outcomes. The learner will also consider therapeutic wavelengths, emission mechanisms, and evidence-based parameter selection, providing the learner with the technical knowledge essential for the safe and effective clinical application of photobiomodulation therapy.

Assessment Requirements & Indicative Content

Learning Outcomes The learner will be able to	Assessment Criteria The learner can
	1.1 Identify the key components of a laser
1. Understand laser components, system	1.2 Explain the function of each laser component
operation, and safety requirements	1.3 Describe the process by which a laser produces light
	1.4 Describe the safety features of laser systems
2. Understand the classifications of lasers	2.1 Describe what classification means in relation to lasers



	2.2 Analyse the relationship between laser classifications and wattage
	2.3 Explain how power can impact treatment outcomes
	2.4 Explain safety requirements for different laser classifications
	3.1 Explain the concept of the 'therapeutic window' within the electromagnetic spectrum
3. Understand the	3.2 Explain the concept of incidental absorbers
electromagnetic spectrum and therapeutic wavelengths	3.3 State the wavelengths used for photobiomodulation
	3.4 Compare wavelength absorption rates of different chromophores
	3.5 Evaluate the clinical effectiveness of different wavelengths
	4.1 Describe irradiance
4. Understand the	4.2 Describe the measurements used to calculate irradiance
importance of irradiance	4.3 Explain how irradiance effects the success of photobiomodulation
	4.4 Explain the principle of power-time reciprocity in photobiomodulation treatment delivery
5. Understand emission	5.1 Describe the types of emission
and delivery mechanisms	5.2 Describe the differences between continuous, pulsed and super-pulsed waves



	5.3 Compare continuous and pulsed waves
	5.4 Compare different delivery mechanisms
	5.5 Explain why contact delivery is the most effective for deep tissue treatment
	5.6 Explain when off-contact methods of delivery can be beneficial
	5.7 Analyse the impact of different delivery methods on treatment outcomes
6. Understand the application of research evidence in laser parameters	6.1 Analyse findings from a significant research study on laser parameters
	6.2 Describe current developments in laser parameter optimisation
	6.3 Suggest ways to apply research findings to clinical practice



Mandatory Unit		GLH	Credits	Unit Reference
4	Laser Health & Safety	10	3	A/651/4895

In this unit, the learner will develop a comprehensive understanding of health and safety requirements essential for operating laser therapy systems in clinical settings. They will cover crucial aspects of regulatory compliance, environmental risk management, and safety protocols necessary to protect both patients and practitioners. Learners will master key documentation requirements, including standard operating procedures and local rules, while developing their knowledge of risk assessment, protective measures, and emergency procedures.

Throughout this unit, emphasis is placed on the importance of maintaining a safe clinical environment through proper procedures, documentation, and ongoing staff competency. This provides the learner with the knowledge and understanding required for safe and compliant laser therapy practice.

Assessment Requirements & Indicative Content

Learning Outcomes The learner will be able to	Assessment Criteria The learner can
1. Understand regulatory requirements and safety principles for laser therapy	1.1 Explain the key principles associated with laser health and safety
	1.2 Describe the role of a laser safety officer within the clinic
	1.3 Explain infection prevention and control measures for laser therapy clinics
2. Understand environmental risk	2.1 Explain environmental hazards in laser therapy settings
management in laser therapy settings	2.2 Describe control measures to address environmental risks



	2.3 Describe correct room setup for laser therapy	
3. Understand safety protocols and protective measures for patients and clinicians	3.1 Explain the potential effects on patients and clinicians from exposure to laser-related hazards	
	3.2 Explain personal protective equipment requirements for patients and clinicians	
	3.3 Explain emergency procedures and protocols	
	3.4 Explain incident reporting procedures	
4. Understand documentation requirements and standard operating procedures for laser therapy clinics	4.1 State key documentation to be in place in the laser therapy clinic	
	4.2 Describe what Nominal Ocular Hazard Distance is and the importance of this	
	4.3 Create a standard operating procedure document for use of a laser therapy device in a clinic setting	
chickapy chines	4.4 Explain incident reporting and investigation procedures	



	Mandatory Unit	GLH	Credits	Unit Reference
5	Canine Functional Anatomy for Photobiomodulation	20	5	D/651/4896

In this unit, the learner will explore the essential functional anatomy relevant to photobiomodulation therapy in canine patients. Beginning with the nervous system and its role in body awareness and movement, the learner will develop their knowledge of the muscular system's physiology and key functional muscle groups.

Learners will also consider the fascial and lymphatic systems, which play crucial roles in tissue health and recovery. Understanding these anatomical structures and their relationships will enable effective photobiomodulation treatment planning and delivery and enable practitioners to target treatments appropriately and understand tissue responses to photobiomodulation therapy.

Assessment Requirements & Indicative Content

Learning Outcomes The learner will be able to	Assessment Criteria The learner can	
	1.1 Describe the functional anatomy of the nervous system	
1. Understand the functional anatomy of the canine nervous system	1.2 Explain the functions of the major peripheral nerves in canines	
	1.3 Analyse the role of the proprioceptive system in maintaining body awareness and movement	
2. Understand the physiology of the canine muscular system	2.1. Describe the physiology of the skeletal muscles	
	2.2 Identify the key muscles essential for functional movement	



3. Understand the structure and function of the canine fascial and lymphatic systems

- 3.1 Analyse the structure and functions of the canine lymphatic system
- 3.2 Describe the structure and functions of the canine fascial system



	Mandatory Unit	GLH	Credits	Unit Reference
6	Patient Preparation, Enrichment and Therapeutic Handling	8	2	F/651/4897

In this unit, the learner will develop their knowledge and understanding of canine behaviour in clinical settings and develop therapeutic handling techniques essential for successful photobiomodulation treatment. The learner will explore how dogs communicate and respond in clinical environments, with particular focus on stress recognition and management. Learners will develop their practical skills in therapeutic handling and enrichment techniques, understanding how to adapt these for different patients and conditions.

The unit emphasises the relationship between handling techniques, patient compliance, and treatment outcomes. This knowledge will prepare the learner to create a positive clinical experience that optimises treatment effectiveness while prioritising patient welfare.

Assessment Requirements and Indicative Content

Assessment Evidence for Learning Outcome 3: Assessment evidence for this learning outcome should be contained within:

- The Clinical Skills Logbook and Competency Record
- Summative Assessment Records

Learning Outcomes The learner will be able to	Assessment Criteria The learner can
1. Understand common patterns of behaviour observed in canines in a clinical setting	1.1 Describe communication and feedback signals in a clinical setting and how this may differ from normal behaviour
	1.2 Explain positive and negative influences on canine behaviour patterns in the clinical setting
Cilinear Setting	1.3 Discuss complex behaviours and how it impacts treatment



	1.4 Analyse how stress can affect treatment outcomes	
	1.5 Explain methods for behavioural assessment in the clinical setting	
2. Understand therapeutic	2.1 Explain a range of clinical enrichment techniques to positively impact the canine's behaviour in the clinic	
handling techniques and enrichment techniques	2.2 Explain a range of therapeutic handling techniques to positively influence the canine's behaviour in the clinic	
3. Be able to apply therapeutic handling	3.1 Demonstrate different therapeutic handling techniques for clinical practice.	
techniques and enrichment	3.2. Demonstrate strategies and techniques to reduce stress and positively engage canines in the clinical environment	
4. Understand the effects of therapeutic handling	4.1 Evaluate the behavioural impact of clinical enrichment and therapeutic handling.	
and enrichment practices during a clinical session	4.2 Evaluate the impact of clinical enrichment and therapeutic handling on treatment outcomes	



Mandatory Unit		GLH	Credits	Unit Reference
7	Practical Application of Photobiomodulation	23	4	H/651/4898

In this unit, the learner will develop the practical skills required to safely and effectively deliver laser therapy treatments to animals. Learners will demonstrate their ability to conduct thorough consultations, develop appropriate treatment plans, and deliver treatments while maintaining professional standards and accountability throughout the process.

Through this unit, the learner will develop competence in treatment planning and the safe application of laser therapy. They will apply consideration of contraindications, select appropriate treatment parameters, and monitor treatment responses while maintaining detailed clinical records.

Throughout this unit, there is an emphasis on working within professional boundaries and maintaining high standards of animal welfare and client care. Successful completion of this unit will enable learners to work as a competent practitioner in animal laser therapy, equipped with the practical skills required to deliver safe and effective treatments.

Assessment Requirements & Indicative Content

Range: Conditions to be Treated

	Range Statement
а	musculoskeletal conditions
b	thoracic conditions
С	abdominal conditions
d	wounds / dermatological conditions
е	neurological conditions



Number of Patients: a minimum of five treatments to be carried out on a minimum of three different animals.

Assessment Evidence: Assessment evidence for this unit should be contained within:

- The Clinical Skills Logbook and Competency Record
- Summative Assessment Records

Learning Outcomes The learner will be able to	Assessment Criteria The learner can	
1. Carry out consultation	1.1. Review and interpret veterinary referral documentation	
	1.2 Gather relevant patient history and medical information	
	1.3 Perform appropriate physical assessment of the animal	
	1.4 Identify contraindications and precautions for laser therapy	
2. Agree a treatment plan	2.1 Explain proposed treatment options to the client	
	2.2 Discuss expected outcomes and timeframes	
	2.3 Address client questions and concerns	
	2.4 Obtain informed consent	
	2.5 Document agreed treatment plan and client consent	
	3.1 Check equipment safety and functionality	
	3.2 Prepare treatment area appropriately	
3. Prepare to carry out a treatment	3.3 Select correct laser parameters for the condition	
	3.4 Position animal safely and comfortably	
	3.5 Apply appropriate safety measures for self and animal	



4. Carry out treatments	4.1 Follow the treatment protocol	
	4.2 Monitor animal's response throughout treatment	
	4.3 Adjust treatment parameters if needed	
	4.4 Maintain appropriate safety measures throughout	
	4.5 Document treatment delivery accurately	
5. Carry out post- treatment procedures	5.1 Assess immediate treatment response	
	5.2 Provide aftercare instructions to client	
	5.3 Schedule follow-up appointments	
	5.4 Complete treatment documentation	
	5.5 Clean, store and dispose of products and equipment hygienically	
6. Maintain professional role and professional accountability	6.1 Work within scope of practice	
	6.2 Follow health and safety regulations	
	6.3 Communicate professionally with clients and colleagues	
	6.4 Maintain accurate and complete records	
	6.5 Demonstrate understanding of legal and ethical requirements	



Mandatory Unit		GLH	Credits	Unit Reference
8	Professional Practice and Business Development in Veterinary Laser Therapy	15	4	J/651/4899

In this unit, the learner will develop the knowledge and understanding required for professional practice and business management in animal laser therapy. They will consider the legal, ethical, and professional frameworks that govern practice, including responsibilities within a multidisciplinary team and requirements for valid consent and client communication.

Learners will examine key aspects of business planning and practice management, from creating viable business strategies to developing effective marketing approaches, including how to establish and grow a sustainable practice while maintaining professional standards. Learners will also explore continuous professional development and reflective practice, enabling them to maintain and enhance their expertise throughout their career, preparing them to operate professionally in the field of animal laser therapy.

By completing this unit, the learner will develop the knowledge needed to establish and manage an ethical, compliant, and successful laser therapy practice.

Assessment Requirements & Indicative Content

Learning Outcomes The learner will be able to	Assessment Criteria The learner can
1. Understand legal and ethical responsibilities of in laser therapy practice	1.1 Explain the therapist's responsibilities under duty of care.
	1.2 Analyse the legal restrictions for patient treatment
	1.3 Evaluate the requirements for different types of professional insurance



	1.4 Explain ethical considerations in laser equipment selection and use
2. Understand professional responsibilities within the multidisciplinary team	2.1 Explain the limitations and responsibilities within the therapist's scope of practice
	2.2 Describe the roles and collaborative responsibilities of the Multidisciplinary Team (MDT)
	2.3 Evaluate the requirements for professional documentation and record keeping
	2.4 Analyse protocols for professional communication within the MDT
3. Understand consent and client communication	3.1 Describe the legal requirements for obtaining valid consent.
	3.2 Describe the process for obtaining and recording informed consent
	3.3 Evaluate methods for communicating treatment plans and expectations
	3.4 Analyse procedures for managing client concerns and complaints
	4.1 Create a business plan for a laser therapy practice
4. Understand business planning and development	4.2 Evaluate different pricing strategies and their impact on business viability
	4.3 Analyse different market segments and their specific needs
	4.4 Develop an implementation plan including marketing and service delivery
5. Understand practice management and growth	5.1 Evaluate different marketing and advertising strategies



	5.2 Analyse methods for building and maintaining a client base	
	5.3 Explain strategies for sustainable practice development	
	5.4 Evaluate methods for measuring business success and client satisfaction	
6. Understand professional development and reflective practice	6.1 Explain the importance of continuing professional development (CPD) and reflective practice	
	6.2 Evaluate methods for maintaining and documenting current knowledge and skills	
	6.3 Describe processes for self-reflection and practice improvement	
	6.4 Apply reflective practice techniques to clinical cases	
	6.5 Create a suitable CPD plan based on current developmental needs	



Appendix 1: Internal Moderation and Quality Assurance Regulations and Guidance

1.1 Introduction to Internal Moderation

Internal Moderation is a centre's internal system that ensures learner evidence is complete and genuinely meets all the required criteria by which the learner is judged to have met in order to be awarded a qualification. The process involves regularly sampling and evaluating the centre's assessment practices and decisions, and it is the Internal Moderator's responsibility to act on their findings to ensure consistency and fairness.

Ensuring quality standards are maintained and are consistent within and across a centre's provision is the responsibility of the head of centre, who must ensure that suitable staff are in place to act as Internal Moderator(s) and provide full support and standards scrutiny of the centre's Assessment decisions.

1.2 Internal Moderation Processes

Internal Moderation involves three key processes: co-ordination of the assessment process, standardisation of assessment practice, and sampling of assessed work. These processes are conducted by one Internal Moderator or, if there is more than one, a team of Internal Moderators who are under the direction of a Lead Internal Moderator. Information about the experience and qualification requirements for Internal Moderators is provided in the *Qualification Specification*.

1.3. Co-ordination of the Assessment Process

Prior to delivery commencing, it is the Internal Moderator who will confirm that assessment tasks are appropriate. This may involve checking that proposed assessment activities, plans for practical assessments, or the briefs of any assignments or reports are fit for purpose. It may also include checking that internal tests or examination materials are fit for purpose.

In order to ensure that the planned assessment activities and materials are fit for purpose, the Internal Moderator will consider and judge whether the activities and materials provide inclusive opportunities for all learners to meet the assessment objectives and generate evidence which is current, reliable, authentic, valid, able to be evaluated and sufficient to meet the requirements of the qualification.

During delivery of assessment, Internal Moderators will work with the Assessment team, ensuring that assessment practices are being carried out correctly. This may involve observing assessment taking place.



1.4 Standardisation of Assessment

The standardisation process helps to ensure that all centre staff involved in the delivery, assessment and quality assurance are consistent and fair to all learners and interpret and follow the requirements of the qualification in the same way.

Internal Moderators are expected to ensure high levels of consistency across Assessors and centre delivery sites through sharing good practice and providing feedback and support, doing so accurately and in good time. The internal Moderator may highlight areas for further CPD or additional training as necessary.

1.5. Sampling Process

When planning and carrying out internal moderation activities, it is important that the Internal Moderator works to a sound sampling strategy to ensure that standardisation of assessment decisions can take place.

A centre's sampling strategy involves reviewing the quality of Assessor's judgements, which will include reviewing learner work.

The learner work may be sampled before the learner has completed the full qualification, for example by sampling one or two assignments, topic areas or units, as the learner completes them.

The Internal Moderator should check that planning and reviewing has taken place and feedback is given to learners by the Assessor. The Internal Moderator will also check and confirm the accuracy of the application of any mark schemes, guidance and overall assessment decisions.

The Internal Moderator will therefore be able to evaluate the quality and consistency of the Assessor's assessment decisions and be able to identify any problems at an early stage. It will highlight individual Assessor training and development needs, which in turn can inform the programme of CPD for the assessment team as a whole.

The Internal Moderator must plan their sampling activities as outlined below.

1.6 Establishing a Sampling Strategy

Sampling should enable the Internal Moderator to evaluate how Assessors have reached their decisions. They must be able to follow documentation which clearly shows that Assessors have checked that the evidence presented meets the rules of evidence.



Evidence must be confirmed by Assessors as 'CRAVES'

- Current: the work is relevant at the time of the assessment
- Reliable: the work is consistent with that produced by other learners
- Authentic: the work is the learner's own work
- Valid: the work is relevant and appropriate to the subject being assessed and is at the required level
- Evaluated: where the learner has not been assessed as competent, the deficiencies have been clearly and accurately identified via feedback to the learner resulting in improvements in knowledge or competency leading to the award
- **Sufficient**: the work covers the expected learning outcomes and any range statements as specified in the criteria or requirements in the assessment strategy.

1.7 Planning Sampling Activities

The Internal Moderator should consider the following when considering the volume of work that they should sample:

- the learners' ethnic origin, age and gender to ensure a representative range of learners are sampled
- the Assessors' experience and qualifications, workload and their occupational competence. For example, if Assessors are qualified and experienced it may not be necessary to look at everything in a learner's portfolio. If Assessors have less than 12 months' experience, are new to the centre or a particular qualification, or perhaps have not assessed for a length of time, the Internal Moderator will need to sample substantially more of their decisions for the first 6 12 months
- the full range of assessment methods used for any one qualification, for example observation, witness testimony, professional discussion, reflective accounts, questioning, assignments, products, RPL, simulation, etc and ensure a good, representative range of assessment evidence is sampled
- previous feedback to Assessors regarding good practice and/or involved highlighting development needs, for example If the Internal Moderator has a particular concern regarding the assessment decisions of a particular Assessor they should focus on increasing the volume of work from that Assessor to continue increased monitoring and evaluation of risk
- whether any changes have been implemented relating to the assessment of the qualification or its units, for example if there have been amendments to the qualification specification, or instances where industry practice or legislation has changed
- the range of locations where assessments have taken place
- the sampling process must not be determined by any rule of thumb such as '10%.'



1.8 Producing a Sampling Plan

The Internal Moderator must develop a sampling plan at the beginning of the learner's (or cohort's) programme and record, on the plan, which topic areas/assessment methods they plan to sample, and when.

Copies of sampling plans should be made available to other Internal Moderators and the assessment team, and sampling carried out according to the plan.

Where variations are made, these should be recorded on the plan.

1.9 Completing a Sample Record

The Internal Moderator should record the quality assurance sampling activities on a Sample Record. As a minimum, this record must indicate the Assessor's decision, the content of the sample, the Internal Moderator's decision and relevant feedback to the Assessor.

Where the Internal Moderator agrees with the assessment decisions, certification claims can go ahead.

Where the Internal Moderator does not agree with the assessment decisions, full feedback must be given to the Assessor, with action points agreed which relate to the Assessor's areas for improvement and instructions for how the learner can be supported to produce the required evidence of knowledge and skills.

Sampling must take place before any certification claims are made by the centre and all records, including those of standardisation meetings, feedback to Assessors and CPD activity should be made available to the GA-appointed External Moderator (also referred to as the EQA) upon request.



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